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Federal State Budgetary Educational Institution of Higher Education "North Ossetian State Medical Academy" of the Ministry of Health of the Russian Federation
(FGBOU VO SOGMA of the Ministry of Health of Russia)

Department of Internal Diseases №1

METHODOLOGICAL MATERIALS

According to the educational practice "Introductory practice (Care for patients with a therapeutic profile"
the main professional educational program of higher education
- Specialist's programs in the specialty 31.05.01 General Medicine, approved on 12/25/2020.

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Methodological materials are intended for teaching 1st year students (1 semester) of the Faculty of Medicine of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia in the educational practice "Introductory practice (Care for patients with a therapeutic profile)"

Compiled by:

- Head of the Department of Internal Diseases No. 1, Doctor of Medical Sciences TOTROV IGOR NIKOLAEVICH
- Associate Professor, Candidate of Medical Sciences ANTONIADI ILONA VLADIMIROVNA
- professor, doctor of medical sciences ENALDIEVA ROZA VIKTOROVNA

Reviewers:

Astakhova Z.T. Head of the Department of Internal Medicine No. 4 of the North Ossetian State Medical Academy of the Ministry of Health of Russia, Doctor of Medical Sciences, Professor.

Burduli N.M. Head of the Department of Internal Diseases №5 FSBEI HE "North Ossetian state medical Academy» of the Ministry of Health of Russia, Doctor of Medical Sciences, Professor.

MANAGEMENT

In our country, much attention is paid to the need for a wider introduction of practical training of specialists into the educational process. Such training naturally consists of theoretical mastery of the subject and mastery of practical skills.

The study of the basics of general nursing is of paramount importance for the training of physicians of any specialty. This is due to the fact that patient care is a therapeutic event and it is impossible to distinguish between the two concepts of “treatment” and “care”, since they are closely interconnected, complement each other and are aimed at achieving a single goal - the recovery of the patient. Patient care is of particular importance in the work of medical institutions in connection with the introduction of two-level care into healthcare practice, in which the direct care of patients and their treatment is carried out by a doctor and a nurse. In the process of learning general patient care, the student must theoretically master the meaning of patient care, the nature of the work of medical personnel in medical institutions, the types of devices of the latter, their equipment, as well as medical and sanitary regimes. Familiarization with the work of the admission department, wards, hospital, functional and auxiliary treatment rooms is carried out. The student must know the rights and obligations of a nurse, as well as the regimen and principles of patient care in the therapeutic department, the rules for maintaining hygiene in the ward and bed, the daily routine, and maintaining medical records. Great importance is attached to knowledge of the general rules and requirements of medical ethics and deontology. The main method of teaching in clinics is the work of students at the patient's bedside as junior medical personnel under the supervision of a teacher and senior nurses of the department, admission department, and intensive care units. General nursing classes are a necessary element in the training of highly qualified medical personnel.

The methodological manual is intended for teachers of departments of propaedeutics of internal diseases, who teach general patient care to second-year students of the medical, pediatric, medical and preventive faculties. Instructions have been revised according to the curriculum. Methodological developments for each topic of practical classes are presented taking into account a single methodological system: defining the purpose of the lesson in terms of what the student should know and be able to do; determination of the educational goal, taking into account deontological aspects, clarification of the initial level of knowledge of students on each topic, tests or situational tasks of the final control of the level of knowledge; assignments for self-training and self-control; as a final control, the control of mastering practical skills is usually used. The proposed allowance, of course,

Independent work of students is included in class hours and provides for the development of practical skills in general patient care. The guidelines for students and teachers provide for the consolidation of practical skills acquired earlier, in subsequent classes, for example, in caring for patients with respiratory diseases, skills in personal hygiene of the patient are consolidated. The last lesson is held in the form of attestation of students in practical skills in general care for patients in accordance with the regulation on attestation of students.

GOALS AND TASKS OF THE DISCIPLINE:

1. Teach students the basic principles of medical ethics and deontology.
2. To acquaint with the work of junior and secondary medical personnel in medical institutions, with the sanitary regime, the maintenance of medical records and the principles of the protective regime.
3. Teach students how to care for the sick, how to sanitize.
4. To teach how to use medical equipment and instruments, to clearly follow medical prescriptions.
5. To teach the peculiarities of caring for patients with impaired function of the respiratory organs, the cardiovascular system, and the digestive organs.
6. To acquaint students with the features of caring for patients with impaired renal and urinary system functions.
7. To teach students how to care for the seriously ill, those who are dying, how to declare death and how to deal with a corpse.
8. Form a medical worker of high professional culture.

The general nursing program for students of medical universities, carried out at the departments of propaedeutics of internal diseases, aims to teach students skilled nursing, the basic principles of medical ethics and deontology, as well as the ability to use medical equipment and tools.

The student must know:

- principles of organization of work of medical institutions;
- arrangement and equipment of medical departments of the hospital;
- organization of work of junior and middle medical personnel;
- types of sanitization of patients;
- ways of transporting patients;
- principles of therapeutic nutrition on dietary tables;
- types of fevers;
- the mechanism of action of the simplest physiotherapeutic procedures;
- principles of the use of medicines;
- features of observation and care of patients with diseases of various body systems;
- features of observation and care for elderly and senile patients;
- pre-medical emergencies.

The student must be able to:

- work with medical records;
- to carry out sanitary processing of medical and diagnostic premises of a medical institution;
- to carry out anthropometry of patients;
- carry out transportation of patients;
- to carry out feeding of seriously ill patients with the help of probes, through the fistula of the stomach, parenterally;
- measure the temperature and record it in the temperature sheet;
- own the simplest methods of physical influence on the patient's body;
- use different methods of administering drugs;
- provide individual care for patients with respiratory diseases, conduct oxygen therapy;
- monitor hemodynamic and respiratory parameters;
- learn how to collect sputum for various types of research: for general analysis, atypical cells, mycobacterium tuberculosis, for sputum culture for determining microflora and

sensitivity to antibiotics;
- master the technique of caring for patients with dysfunction of the cardiovascular system (determination of pulse, blood pressure). To get acquainted with the organization of the work of medical personnel in the cardiology department and the intensive care unit;
- master the general care of patients with impaired function of the digestive organs (own the technique of gastric and intestinal lavage, gastric and duodenal intubation, administration of medicinal, siphon, nutritional enemas);
- be able to provide first aid for bleeding (nasal, pulmonary, gastrointestinal, etc.);
- be able to prepare the patient for x-ray, gastroscopic and colonoscopic examination;
- master the methodology of providing first aid for food poisoning;
- learn how to care for patients with impaired renal and urinary tract function. Get acquainted with the method of bladder catheterization, measure daily diuresis;
- to master the method of collecting urine for examination for general analysis, glucosuric profile, for sugar and acetone in daily urine;
- know the features of the work of medical staff in intensive care units;
- own the features of caring for seriously ill and agonizing patients;
- be able to ascertain biological death and handle the corpse;
- provide first aid in case of emergency;

Basic knowledge necessary to study the discipline:

- human anatomy;
- bioethics;
- normal physiology;
- general chemistry.

TOPIC 1: ORGANIZATION OF THE WORK OF MEDICAL INSTITUTIONS: DEVICE, EQUIPMENT AND MODE OF THE FOSTER AND THERAPEUTIC DEPARTMENTS OF THE HOSPITAL, SANITATION TREATMENT OF THE PATIENT (FULL AND PARTIAL) TREATMENT OF THE PATIENT IN THE DETECTION OF PEDICULOSIS. TRANSPORTATION OF PATIENTS.

educational goal: Acquaintance with the basics of medical ethics and deontology.

Lesson equipment: medical equipment of the admissions department, therapeutic departments, general care workshop, stadiometer, medical scales, centimeter tape, tables and charts on the topic.

The student must know:

1. Importance of nursing.
2. The role of medical personnel in the treatment, care of the sick.
3. Responsibilities and tasks of a nurse.
4. Moral character and legal responsibility of a medical worker.
5. Personal hygiene of medical personnel (hand treatment, appearance, individual wardrobes).
6. Outpatient and hospital types of medical institutions. Their tasks, device, equipment.
7. Reception department. Reception of the patient and his registration. Medical history, filling in the passport part. Anthropometry.
8. Sanitary treatment of the patient upon admission (cutting hair, nails, holding a hygienic bath)
9. Transportation of the patient to the ward.
10. Arrangement and equipment of wards, utility rooms.
11. General and sanitary regime of the therapeutic department.
12. Wet cleaning of wards and other premises. Current and final disinfection.
13. Air purity and ventilation in the wards. Temperature regime.
14. Internal order. Organization of patient visits.

The student must be able to:

1. Measure height, chest volume, weigh patients.
2. Transport the patient.
3. Carry out wet cleaning of the wards with the preparation of 0.5 and 1% bleach solution.
4. Control (sanitary condition of bedside tables.)

Plan and organizational structure of the lesson.

1. Greetings.
2. Monitoring student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

    1. The main types of medical institutions.
    2. Organization of their work: device and equipment
    3. Structure and functions of the admission department.
    4. Reception of the patient and his registration.

5. Sanitary treatment of the patient (full and partial) upon admission (cutting hair, nails, holding a hygienic bath).
6. Treatment of the patient in the detection of pediculosis.
7. Anthropometry.
8. Transportation of the patient to the ward. Types of transportation.
9. Organization of work of the therapeutic department.
10. General and sanitary regime of the therapeutic department of the hospital and its significance.
11. Wet cleaning of wards and other premises.
12. Internal order. Organization of patient visits.
eleven.Acquaintance with the SOGMA Clinical Hospital.

6. Control and correction of the final level of assimilation of educational material (solution of situational problems).

Questions to control the initial level of knowledge.

1. What is General Nursing?
2. The value of general care as a therapeutic factor.
3. What are the main objectives and principles of general patient care?
4. What are the main types of medical institutions? Their structure and tasks?
5. The device and equipment of the therapeutic department of the hospital.
6. Which includes the mode of the therapeutic department of the hospital.
7. What are the main tasks of the medical-protective regime?
8. What types of individual patient regimen do you know?

DUTIES AND TASKS OF MEDICAL PERSONNEL.

Patient care is an integral part of the healing process. Timely recognition of diseases, proper treatment and good care ensure the recovery of the patient. In her work, the nurse is obliged to follow the prescriptions and instructions of the doctors under whose guidance she works.

In her daily work, the ward nurse has the following responsibilities:

1) upon admission of the patient to the department, checks the quality of the sanitization of the patient, proves to the admitted patient his ward and bed, and, if necessary, participates in transferring him from the stretcher to the bed or accompanies him to bed;
2) acquaints the admitted patients with the internal regulations and the mode of the department, monitors their observance;
3) monitors the sanitary condition in the wards, the regularity of their ventilation (at 7-8 hours, 14-15 hours, 21-22 hours) and air temperature (not lower than 18-20 ° C);
4) monitors the patient's compliance with the rules of personal hygiene and the regularity of changing bed and underwear;
5) measures the body temperature of patients and enters the measurement data into the temperature sheet; counts the pulse rate and respiration, the daily amount of urine and sputum; performs anthropometry of the patient;
6) participates in doctor's rounds, informs him about the condition of patients and their compliance with the regimen;
7) fixes the doctor's instructions in the prescription sheets and strictly fulfills them (distributes medicines, performs injections, puts cans, mustard plasters, enemas, leeches, etc.);
8) collects biological material to be sent to the laboratory (urine, sputum, feces, etc.);
9) prepares patients for various studies and transports them to diagnostic rooms

binettes;
10) monitors compliance with therapeutic nutrition of patients, monitors products;
11) monitors the proper maintenance of medical equipment and furniture;
12) maintains on-site medical documentation: draws up a portion requirement, makes a selection of medical prescriptions from the medical history, draws up a requirement for medicines, draws up a summary of the condition of patients, fills out a bed inventory sheet, a register of medicines on list A and B, a register of prescriptions and transfers on duty;
13) in emergency cases, provides pre-medical emergency assistance;
14) conducts sanitary-educational work among patients.

A nurse helps a ward nurse in caring for the sick, duties
her following:
1) change of bed linen for the incoming patient and providing him with an individual glass and spoon;
2) providing patients who are on bed rest with a vessel or a backing circle;
3) regular change of underwear and bed linen (at least 1 time per week) in patients with a general regimen and daily re-laying of the bed in seriously ill patients, and in case of contamination of linen with feces in such patients, replacing it with a clean one;
4) washing, wiping or bathing seriously ill patients under the supervision of a guard nurse; care of skin, hair, nails in patients in serious condition;
5) daily cleaning of the sanitary unit, bathroom, corridor and stairwells of the department;
6) delivery of the studied biological material (feces, urine, sputum, etc.) to the laboratory.

OUTPATIENT AND HOSPITAL TYPES OF HOSPITALS

There is a wide network of various types, profiles, categories and capacities of health care institutions, which, according to their functions, are divided mainly into 2 groups: outpatient and inpatient.

Remember!There are two groups of medical institutions: outpatient (polyclinic, outpatient clinic, medical unit, dispensaries, ambulance station, women's consultation) and inpatient (hospitals, clinics, sanatoriums, hospitals).

Polyclinic -outpatient medical institution, which includes medical offices for the main clinical profiles: therapy, surgery, gynecology, neurology, eye diseases, and in some polyclinics and narrow profiles: endocrinology, orthopedics, urology, etc. The polyclinic has main diagnostic rooms: x-ray, functional diagnostics, etc. There are also numerous rooms and departments for performing medical procedures and doctor's prescriptions: physiotherapy department, exercise therapy room, treatment rooms for injections, applying blood-sucking cups, etc. The polyclinic also has a reception desk, office rooms and a number of utility rooms.

Ambulatory -a non-hospital medical institution with 1-3 (no more than 5) doctors, which serves to provide assistance to the population of a small urban-type settlement, a small industrial enterprise or a rural area. In addition to the doctor, the outpatient clinic includes a paramedic, midwife, nurses and nurses.

Medical and sanitary part -a medical and prophylactic institution organized at industrial enterprises for the medical care of workers. The medical and sanitary part is a complex medical and preventive institution, which, in addition to a polyclinic, may include a hospital, as well as a health center and a dispensary.

Dispensaries—special specialized outpatient institutions that carry out all work according to the dispensary method (service to patients
with certain types of diseases—tuberculosis, skin and venereal diseases, etc.). Along with treatment and prevention, the dispensary conducts patronage of patients. According to the specifics of work, dispensaries are divided into anti-tuberculosis, oncological, dermatovenerological, neuropsychiatric, etc.

*Ambulance stations*provide the population with medical care in cases of urgent need. Specialized medical care is provided by a team led by a doctor, and a paramedic assists him in providing medical care and transporting patients.

Women's consultation -medical and preventive institution, which provides treatment and prevention of gynecological diseases, as well as monitoring of pregnant women.
*Hospital*is a hospital for the treatment of military personnel or war invalids.
Clinic -a medical institution in which, in addition to inpatient treatment of patients, teaching and research work is carried out.
Sanatorium -hospital where patients are cared for. Usually sanatoriums are located in areas with a favorable climate, where there are healing mineral waters or mud.
Hospital -a medical institution for patients in need of constant treatment and care.

According to the nature and capacity of hospitals are divided into a number of groups.

Profile: 1.single-profile (psychiatric, infectious, etc.);
2.multidisciplinary: the hospital has departments - therapeutic, surgical, gynecological and others.

By tasks:1. district;
2. urban;
3. edge;
4. regional;
five. republican;

By bed capacity. Hospitals are categorized according to the number of beds. The main structural units of the hospital are: admission department; hospital with specialized departments or wards; auxiliary departments (X-ray, pathoanatomical, laboratories, etc.); pharmacy; kitchen; administrative and other premises.

STRUCTURE AND FUNCTIONS OF THE RECEPTION DEPARTMENT. PAPERWORK. SANITATION AND TRANSPORTATION OF PATIENTS. ANTHROPOMETRY

The patient enters the hospital through the admission department, where the reception, registration, examination, hygienic treatment and transportation of patients are carried out. Sick

can be received in a planned manner (as directed by polyclinics) or delivered by ambulances.

The reception area consists ofa number of rooms, taking into account the reception and discharge of patients:
1) vestibule - waiting room for patients and their relatives. This is where the cloakroom, reception and information desk of the hospital are located;
2) viewing rooms - boxed or simply isolated from each other;
3) sanitary checkpoint, consisting of a dressing room, a shower-bath, a dressing room;
4) an isolation room for placing patients with an unidentified diagnosis;
5) chambers for storing clothes;
6) treatment rooms, surgical dressing room for medical manipulations;
7) x-ray room and laboratory;
8) doctor's office;
9) lavatory with wash basin.

In large hospitals in the emergency room, in addition to the above, there may be the following rooms: diagnostic wards, anti-shock ward, ward for patients with myocardial infarction, trauma center. in the waiting roomat rest, the nurse registers patients; fills in the title page of the medical history (form 003y) for each incoming patient, enters information about the patient in the register of admission of patients (form 001y) and the alphabetical journal (for information service), which indicates the last name, first name, patronymic, year of birth, date of admission to the department. The actions of a doctor and a nurse in relation to patients are strictly differentiated depending on the nature of the disease and the patient's condition. If the patient was admitted in an unconscious state, information about him is obtained from relatives or accompanying persons. In the absence of documents and the impossibility of obtaining information about the patient who is in an unconscious state, his admission is recorded in a journal with a description of the main external signs, and data about him are immediately reported to the police. If the patient is in serious condition and needs emergency care, the latter should be provided in full in the emergency room; if necessary, the patient should be transferred to the intensive care unit as soon as possible. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives.

After registration, the patient is sent to an examination room, where he is examined by a doctor, and, if necessary, instrumental and laboratory methods of research (X-ray, electrocardiography, blood, urine, etc.) are performed. If it is impossible to establish a diagnosis, the patient is isolated and consultations with specialist doctors are organized. If, after examination and observation of the patient by a doctor, data for hospitalization is not established, the patient is allowed to go home, which is recorded in the hospitalization refusal log. In some cases (if an infectious disease is suspected), a nurse takes a swab from the pharynx or nose as prescribed by a doctor.

To take a swab from the throat, the nurse prepares a test tube with a sterile swab and a spatula, then asks the patient to open his mouth and presses the root of the tongue with a spatula, and runs the swab over the arches and tonsils, without touching the oral mucosa. Carefully, without touching the outer surface of the test tube, lowers the swab into it. When taking a swab from the nose, the nurse tilts the patient's head back slightly, then lifts the tip of the patient's nose with her left hand, and with her right hand inserts a sterile swab with a slight rotational movement into the lower nasal

passage from one side, then from the other, after which she also places the swab in a test tube. The latter is sent with the correction to the laboratory.

After examination and diagnosis, the patient undergoes sanitary treatment.

Sanitary treatment of the patient.

The student should know that the sanitary and hygienic treatment of patients in the admission department is carried out taking into account the severity of the disease and depending on which system in this admission department is single or double-flow. In hospitals with a small number of beds, there is one
a precise sanitization system where women are washed in turn, and then men, in other hospitals - a two-stream system, which provides parallel and simultaneous sanitization of both men and women, which reduces the length of their stay in the emergency department.

There is an examination room in the sanitary checkpoint, where the patient is undressed and prepared for taking a hygienic bath. It has a couch, cabinets for clean linen and bins for dirty clothes, a table with the necessary items for shaving, hair cutting, soap, two pots with the inscriptions "clean" and "dirty" washcloths. After each patient, washcloths are put in a saucepan and boiled. For washing the bathtub, special washcloths and brushes are used, which are used to wash the bathtub after each patient. The air temperature must be at least 25°C. In the examination room, the patient is undressed and an inventory of property is made in two copies: one is placed in the Medical History, the other is attached to things. If nits or lice are found in the scalp, the head is well lathered with soap K, rubbing it into the skin and put on a scarf for 15-20 minutes. Then the patient is seated in the bath, wash the head well with warm water and rinse with a 6% solution of vinegar. To destroy nits, table vinegar heated to 27-30 ° C is used, a cotton swab is impregnated with it, hair is moistened with it and the head is tied with a scarf for 15-20 minutes. If there are lice in the laundry, it is placed in an oilcloth moistened with one of the available pest control agents (4). DDT emulsion, hexochloran, 0.5% solution of karbofos, 1% solution of acetophos or metaphos and sent to the pest control chamber. You can also destroy lice in linen by ironing them with a hot iron from both sides through a moistened cloth. It must be remembered that the average duration of a hygienic bath is 20-30 minutes at a temperature of 35-36°C. During washing, it is necessary to monitor the patient's condition, if you feel unwell, call a doctor. If a hygienic bath is prohibited for a patient for health reasons, a shower is prescribed. To do this, a bench is placed under the shower, on which the patient sits. Patients in a state of moderate severity wipe the body with a damp towel moistened with one of the disinfectant solutions (camphor alcohol, cologne, vodka), paying attention to the skin folds in the groin, armpits and under the mammary glands in women. The time that the patient spends in the admission department should be reduced to a minimum, after sanitizing the patient, he is sent to the hospital department corresponding to his disease. The path to the ward should be straight and short. In an extremely serious condition of a patient without sanitization, they are sent to the intensive care unit for urgent medical care. on which the patient sits. Patients in a state of moderate severity wipe the body with a damp towel moistened with one of the disinfectant solutions (camphor alcohol, cologne, vodka), paying attention to the skin folds in the groin, armpits and under the mammary glands in women. The time that the patient spends in the admission department should be reduced to a minimum, after sanitizing the patient, he is sent to the hospital department corresponding to his disease. The path to the ward should be straight and short. In an extremely serious condition of a patient without sanitization, they are sent to the intensive care unit for urgent medical care. on which the patient sits. Patients in a state of moderate severity wipe the body with a damp towel moistened with one of the disinfectant solutions (camphor alcohol, cologne, vodka), paying attention to the skin folds in the groin, armpits and under the mammary glands in women. The time that the patient spends in the admission department should be reduced to a minimum, after sanitizing the patient, he is sent to the hospital department corresponding to his disease. The path to the ward should be straight and short. In an extremely serious condition of a patient without sanitization, they are sent to the intensive care unit for urgent medical care. paying attention to the skin folds in the groin, armpits and under the mammary glands in women. The time that the patient spends in the admission department should be reduced to a minimum, after sanitizing the patient, he is sent to the hospital department corresponding to his disease. The path to the ward should be straight and short. In an extremely serious condition of a patient without sanitization, they are sent

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Transportation of patients.

Transportation of the patient in the department can be carried out in several ways. The type of transportation is determined by the doctor. Patients in a satisfactory condition are sent to the ward accompanied by a medical worker. In some cases, it is advisable to take the patient to the department on a wheelchair. Seriously ill patients are transported to the department on a stretcher mounted on a special gurney. Each gurney should be filled with clean sheets and blankets, depending on the season. Linen is changed after each patient. In the absence of an elevator, seriously ill patients are lifted on a stretcher by two or four people, the patient is carried head first and the lower foot end of the stretcher is lifted. Seriously ill patients who cannot even move are shifted from the stretcher to the bed with great care, observing certain rules: the stretcher is placed with the foot end to the head

end of the bed

Monitoring patient visits and transfers.

Material equipment: an instruction indicating the products that are allowed and prohibited for transfer to patients, a portioner.

Food products for patients should be taken from visitors under the supervision of the department nurse, who has a list of patients indicating the number of the dietary table received by each of them. In places of rest for patients, in the admissions department and in places where parcels are received, instructions are posted indicating products that are allowed and prohibited for transfers to patients. In each department, proper storage conditions for products, especially perishable ones, should be organized. The nurse should systematically check the cabinets and refrigerators in which the products of patients are stored. It is strictly forbidden to store perishable food in the wards.

Control over the sanitary condition of bedside tables.

Students should know that every day the nurse prepares a portion for the sick, which she gives to the head nurse of the department, and she, in turn, sums up the number of diets and sends the portion to the kitchen. Food is prepared on the basis of these portioners in the kitchen. Buckets and pots for food should always be kept clean and have lids. Dishes are placed on special movable heated tables and brought warm to the ward. Considering that the majority of patients have no appetite, it is necessary to give the dishes a beautiful, appetizing appearance. The atmosphere in the dining room should be calm. For hospitals, at least four meals a day have been established, and for some groups of patients, 5-6 meals a day.

Bedside tables must be kept clean. They should be treated daily with a weak solution of bleach. It is not allowed to store perishable food and clothes of patients in bedside tables.

Wet cleaning of wards, offices, operating rooms, corridors and common areas use.

Material equipment: rags; container, 0.5% bleach solution, 1% chloramine solution.

Students should know that wet cleaning and washing of floors in wards and corridors is carried out with a soap and soda solution. Separate rags and labeled containers should be allocated for mopping and wet cleaning. It is strictly forbidden to use equipment and cleaning rags for other purposes. Cleaning equipment should be stored in the place designated for it. Sanitary facilities should be washed with a 0.5% bleach solution (0.5 liter jar of 10% bleach solution per 1 bucket of water). It is not allowed to take cleaning equipment out of the bathroom. Rags, after washing the bathroom, must be rinsed in tap water, and then in a 0.5% solution of clarified lime, soaked for 30 minutes. To wash toilet bowls and vessels, you need to have kvachas and store them in a 0.5% solution of clarified bleach. Particular attention should be paid to the handling and storage of vessels. Toilet bowls are washed with a solution of clarified bleach.

In the bathroom, after each use, the bathtub is washed with a soap and soda solution, and then with a clarified bleach solution, and finally rinsed with hot water. Washcloth, for washing the bath, should be contained in a solution of clarified bleach and after use, boil for at least 15 minutes from the moment of boiling. Oilcloths and couches for examinations are wiped twice with rags moistened with 1% chloramine solution and 0.5% bleach solution. Door handles, tables and other items are separately wiped daily with the above disinfectant solutions.

Therapeutic and protective regime

Therapeutic and protective regime provides sick physical and mental

peace. The main component of the medical and protective regimen is strict observance of the daily routine and complete mutual understanding between the patient and the medical staff. A properly constructed regimen presupposes good rest, regular nutrition, medical supervision, timely performance of diagnostic and therapeutic procedures.

Each patient, depending on his condition, is prescribed one or another individual regimen.

*Remember!*There are four types of individual patient regimen: strict bed, bed, semi-bed and general.

With strict bed rest, the patient is not allowed to actively move in bed, he performs all physiological functions in bed, and the nurse takes care of, feeds the patient and makes sure that he does not get up.

During bed rest, the patient is allowed to freely turn around in the bed, but not leave it.

With half-bed rest, the patient is allowed to go to the toilet. With a general regimen, the patient is allowed to walk around the department.

Patients are required to comply with the regimen of separation, stay in the ward during the doctor's rounds, that is, after breakfast and before lunch, strictly follow the recommendations given by the doctor. During a quiet hour, patients should be in bed, after lights out, keep silence in the ward and department. Patients should be warned not to bring unlawful foods, especially alcoholic beverages.

For violation of the regimen, patients are discharged from the hospital.

In the summer, walking patients, with the permission of a doctor, can go out into the courtyard of the hospital. You can not leave the hospital without the permission of a doctor.

Tests-tasks for the final control.

1. List the responsibilities of nursing staff.

*Answer:*1. Quickly and clearly follow the orders of the nurse, doctor.

2. Clean rooms in a timely manner.

3. To monitor observance of the internal schedule to lay down. institutions.

4. Observe the rules of personal hygiene of patients.

5. Observe the principles of deontology (attentively, tactfully treat patients, each other, medical personnel, keep professional secrets).

6. Deliver the biological material under study (feces, urine, sputum, etc.) to the laboratory.

2. Name the main types of medical institutions.

*Answer:*1. Polyclinic. 2. Ambulatory. 3. Medical and sanitary part.

4. Dispensary. 5. Women's consultation. 6. Health center. 7. Ambulance station. 8. Hospital. 9. Hospital. 10. Clinic. 11. Sanatorium.

3. What is the sanitary treatment of the patient upon admission.

*Answer:*1. Examination of the patient's body and, above all, the scalp to detect pediculosis

2. Haircut and nails.

3. Shaving.

4. Showering or hygienic bath.

4. Types of transportation of patients from the emergency department to the ward.1,2,3,4.

*Answer:*1. In a satisfactory condition on foot.

2. Lying on a stretcher.

3. Sitting on a wheelchair.

4. Lying on a wheelchair.

5. The technique of laying the patient on a stretcher, climbing and descending stairs, shifting

transferring the patient from the stretcher to the bed.

*Answer:*1. The stretchers are placed perpendicular to the couch, their head end approached the foot end of the couch. Shift 3 or 2 (rarely) orderlies. The patient is raised simultaneously with coordinated movements, together with him they turn 90º towards the stretcher and put the patient on the stretcher. In the absence of an elevator, seriously ill patients are lifted on a stretcher by 2 or 4 people walking out of step. Up the stairs, the patient is carried head first and the stretcher is lifted from behind. When descending, the patient is carried feet first, lifting the foot end of the stretcher. When shifting from a stretcher to a bed, the stretcher is placed either perpendicularly to bed, either parallel or close to the bed.

6. What is meant by the regime of a medical institution?

*Answer:*This is a certain procedure established in a medical institution of an outpatient and inpatient type in order to create the best conditions for the recovery of patients.

7. What is the regimen of a medical institution?

*Answer:*1. From the temperature regime, lighting and ventilation.
2. sanitary regime.
3. Personal hygiene of patients and medical personnel.
4. Rules of internal order.

8. What should be the optimal room temperature?

*Answer:*20°C.

9. What should be the cleaning of the premises?

*Answer:*regular, wet

10. How should wet cleaning be done?

*Answer:*1. Warm water and soap.
2. Disinfectants.

11. What disinfectants should be used for wet cleaning?

*Answer:*1. Clarified bleach solution 10%, 1%, 0.5%.
2. 1% chloramine solution.
3. 3% Lysol solution.
4. Ammonia solution (rare).

THEME 2. ORGANIZATION OF THE WORK OF THE POST OF A NURSE.

educational goal: Acquaintance with the basics of medical ethics and deontology.

Lesson equipment:medical inventory of the therapeutic department, medical documentation, medical history, stands, tables on the topic.

The student must know:

1. Importance of nursing.
2. The role of medical personnel in the treatment and care of patients.
3. Responsibilities and tasks of a nurse.
4. The moral character and legal responsibility of a medical worker.
5. Personal hygiene of medical personnel (hand treatment, appearance, individual wardrobes).
6. What is medical ethics and deontology?
7. Basic requirements for the personal hygiene of a nurse.
8. On the arrangement and equipment of the nursing post in the department.
9. Sanitary and hygienic requirements for the post of a nurse?

10. The main types of medical documentation in the therapeutic department.

The student must be able to:

- work with medical records;
- to carry out sanitary processing of medical and diagnostic premises of a medical institution;
- to carry out anthropometry of patients;
- carry out transportation of patients;

Plan and organizational structure of the lesson.

1. Greetings.
2. Monitoring student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

    1. Importance of nursing.
    2. Deontological aspects of care.
    3. The role of medical personnel in the treatment and care of patients.
    4. Duties and tasks of medical workers.
    5. Moral and legal responsibility of medical personnel. Code of Conduct.
    6. Personal hygiene of physicians (hand treatment, appearance).
    7. Organization of the nurse's office.
    8. Equipment and organization of the treatment room.
6. Control and correction of the final level of assimilation of educational material (solution of situational problems).

PATIENT CARE AS A HEALING FACTOR. THE ROLE OF HEALTH STAFF IN TREATMENT AND CARE

Patient care is an integral part of the healing process. It includes the fulfillment of medical appointments, the hygienic maintenance of the patient and the premises where he is (ward, room), keeping the bed clean, providing assistance during meals, physiological administration, preparing for the implementation of medical and diagnostic procedures, organizing the patient's leisure.

Most of the diseases are accompanied by a limitation of physical activity and therefore patients often need outside care. Nursing staff shares a place with the doctor at the bedside of the patient, and if the doctor treats, then the sister nurses. There are cases when nurses nursed seemingly hopeless patients due to the precise implementation of the doctor's instructions (injections, distribution of drugs, enemas, etc.), strict adherence to dietary, drinking and hygiene regimens, creation of favorable physical and psychological conditions. The well-known gynecologist V. F. Snegirev in the conference room of the clinic, next to the portraits of outstanding scientists N. I. Pirogov, Ch. Darwin, hung a portrait of nanny Makarova with an inscription that she left a thousand operated patients. At the same time, bad care a careless attitude of a nurse to her direct duties can not only delay the recovery of the patient, but also lead to serious complications. The famous surgeon N. I. Pirogov argued that a nanny should be chosen from among women who carry in their souls the fire of selfless love for their work and for those people for whom it is done.

It should be emphasized that in the second year students come to the clinic for the first time and come into direct contact with patients. And right away, from the first step to the medical

In this field, students need to master the very complex and important science of relationships with patients, the purpose of which is the recovery of the patient. This is not only a science, but also a medical talent, a medical flair.

The student must know the science of the relationship between the doctor and the patient, the duty and obligations of the doctor, the purpose of medical deontology (from the Greek deos - due, logos - teaching).

*"The profession of a doctor is a feat. It requires selflessness, purity of soul and purity of thoughts. Not everyone is capable of this,*wrote A.P. Chekhov. The success of treatment is largely determined by the authority of the doctor, which is based not only on personal selfless work, but also on deep knowledge; an authoritative doctor is first of all a knowledgeable doctor. Hippocrates emphasized that only serious training is the basis for the successful activity of a doctor and "here it is also necessary to add many years of diligence so that the teaching, having taken root firmly and deeply, bears ripe fruits."

The authority of the doctor in the eyes of the patient is largely based on his attitude towards the patient, sensitivity, participation in suffering. When starting work in the clinic, students should remember that the first impression on the patient is made by the appearance of the doctor. In a conversation with patients or colleagues at the patient's bedside, the doctor should avoid using words and medical terms that are incomprehensible to the patient, which can be misinterpreted by him in a negative way.

Medical deontologyincludes the need to maintain medical secrecy, but this requirement does not include, however, cases where the maintenance of medical secrecy may cause harm to people around him (for example, if a person is sick with an infectious disease).

Questions of medical deontology are also closely related to professional ethics. In our country, there are all conditions for the relations between doctors to be truly comradely, based on mutual support and assistance for the benefit of the patient.

ORGANIZATION OF THE WORK OF THE NURSING POST. TYPES OF MEDICAL DOCUMENTATION

There is a nursing post for every 25-30 beds in the department. The post of the nurse should be located close to the wards served by her. The post is equipped with a table for storing medical records, a chair for a sister, a cabinet for medicines and medical instruments, a safe for storing medicines on list A and B, a refrigerator for storing perishable medicines, a mobile table for dispensing medicines, a table to prepare for various manipulations. The nurse's station is equipped with an alarm board from the wards, a telephone, a table lamp and a sink with a tap for washing hands. If the department does not have a separate treatment room for injections, then the post should have a table for preparing for injections, bixes with sterile material and a set of tools for performing injections.

Depending on the schedule of the hospital regime, the work of the nursing post is built.

One of the important moments in the work of a nurse is the transfer of duty. She has no right to leave her post if there is no change. The nurse who came to replace, together with the sister who finished work, go around the wards, check the sanitary condition of the department, pay special attention to the seriously ill. The nurse on duty reports changes in the condition of these patients over the past duty, sets out the volume of prescribed and completed medical appointments, as well as appointments that still need to be completed on the upcoming duty.

The nurse handing over the duty transmits to the nurse starting the duty:

1) medical instruments (syringes, thermometers) and medicines;

2) keys to the safe with medicines of list A and B;

3) a log of accounting and spending narcotic drugs, where both nurses sign for the delivery and intake of narcotic drugs;
4) a journal of appointments, in which the manipulations, injections, laboratory and instrumental studies prescribed by them are written out from the medical history of patients;
5) register of poisonous and potent drugs;
6) a log of reception and transfer of duties, which indicates the total number of patients, their movements, the number of seriously ill and febrile patients; urgent appointments; quantity and technical condition of medical instruments and care items. In this journal, both nurses put their signatures on the acceptance and surrender of duty.

In the morning before handing over the duty, the nurse fills out a sheet of records of the movement of patients and hospital beds (form 007u), the head nurse duplicates these data in the log of admission and discharge of patients, in which the patient's passport data, diagnosis, number of bed-days spent in hospital, medical history and sick leave number.

In the morning, the nurse writes out, on the basis of medical prescriptions, a requirement for the nutrition of patients, that is, a portioner (form 1-84), in two copies: for the catering department and the pantry. The portioner contains an indication of the number of patients for each diet and, in addition, the names of the patients and the name of the products issued additionally or on a fasting day. Each department maintains journals with a list of patients who need to conduct laboratory or instrumental research methods, as well as those who need advice from various specialists.
(neurologist, urologist, psychiatrist, etc.).

In the hospital, a medical history is made for each patient.

It consists of: a) passport part; b) patient complaints, anamnesis of illness and life; c) objective data; d) diaries; e) epicrisis; At the end of inpatient treatment, the patient is given an extract from the medical history. The medical history includes measurements of body temperature, pulse, respiratory rate, blood pressure and diuresis, and all these data are graphically depicted in the temperature sheet attached to the medical history. The results of laboratory, X-ray, electrocardiographic and other studies should be pasted into the medical history by the nurse in chronological order. The medical history is kept at the post. It is strictly forbidden to give the patient his medical history, to report data on the results of laboratory tests.

Remember!The main types of nursing medical documentation: the title page of the medical history, the list of medical prescriptions, procedural and temperature sheets, portions, the journals “Accounting and spending narcotic drugs” and “Acceptance and delivery of duty”

ORGANIZATION OF WORK, EQUIPMENT, MEDICAL DOCUMENTATION OF THE PROCEDURE ROOM.

The treatment room is a special room for a number of medical procedures that require compliance with the rules of sterility. In the treatment room, venipuncture for blood sampling, injections, transfusions, some medical manipulations (pleural puncture, paracentesis), as well as determination of the blood group and Rh factor are performed.

The treatment room is available both in hospitals (hospitals, clinics, hospitals) and outpatient clinics (polyclinic, medical unit). Under the treatment room allocate a bright room, well lit and ventilated, equipped with cold and hot water. The walls and floor of the treatment room should be suitable for mechanical cleaning. Each treatment room, regardless of its size, should have a sink equipped with cold and hot water faucets. The sink is placed closer to

entrance door. A basin is placed next to the sink for soaking used tools and a glass jar with gloves placed in an antiseptic solution. In the treatment room, daily wet cleaning is carried out twice - before starting work and at the end of the working day, and, if necessary, routine cleaning. Once a week, a general cleaning of the treatment room is carried out with washing of walls, floors, and equipment.

In the treatment room, you must have the following equipment: a cabinet or table for storing tools and medicines; sterilization boxes (bixes) with sterile dressings (bandages, cotton wool, etc.), syringes, needles and systems for intravenous infusions, with a set of ready-made sterile instruments for paracentesis, pleural puncture; disinfection boiler for instruments and syringes; distiller; desktop centrifuge; bactericidal lamp; racks for long-term infusions; racks for clean test tubes used for blood sampling; a set for determining the blood group; refrigerator for storage of serums, blood and medicines; stools or helical chairs; table for medical documentation; aprons made of plastic to protect the clothes of medical personnel; basins enameled for locking dirty tools and processing hands; buckets for dirty material with pedal and lid; wooden coasters-benches; a table for intravenous injections and a couch covered with oilcloth; electric pump.

The working day of the procedural sister begins with an inspection and wet cleaning of the procedural room. The procedural nurse checks whether the staff on duty used the office at night. She throws used and contaminated dressing material into buckets for dirty material, and she washes used medical instruments, syringes, droppers. Then he makes a wet cleaning of the room. After that, the procedural sister puts on a sterile gown, carefully hides her hair under a cap and cleans her hands. Then he looks through the list of patients who need to take blood that day, make intravenous injections, put in drops and sets their order.

First, it is necessary to take blood from patients for biochemical studies, if necessary, determine the blood type, Rh factor, etc. for intravenous infusions with the necessary drugs and installs it on a tripod) and only after that puts droppers on patients. Seriously ill patients are served first.

If necessary, the procedural sister prepares medical instruments for thoracocentesis or paracentesis, assists the doctor during these medical manipulations and monitors the patient's condition. Replenishes the stock of medicines in the treatment room from the older sister.

At the end of the working day, the treatment room is wet cleaned. At the end of the work, the procedural sister turns on the bactericidal lamps and leaves, locking the procedural room with a key. The keys to the treatment room should be kept by the duty nurse of the department. This is how the procedure room works.

The treatment room has the following medical documentation:

1) control log of registration of blood group and Rh factor;
2) register of blood transfusion, plasma;
3) register of blood substitutes and protein preparations;
4) a register of blood sampling for biochemical studies;
5) logbook of intravenous infusions;
6) register of intravenous drip infusions;
7) a register of blood sampling for the Wasserman reaction;
8) register of syringes, needles and systems for intravenous injections;
9) a notebook for recording drugs used in anaphylactic shock;

10) instructions for providing first aid in case of anaphylactic shock and for sanitizing the treatment room;
11) table of antidotes used in acute poisoning;
12) journal of registration of general cleaning of the treatment room.
The procedural nurse is selected from among the most experienced nurses, she must be fluent in the technique of medical manipulations, strictly observe the rules of personal hygiene and maintain the sanitary and hygienic condition of the treatment room at the proper level.

Questions for the final control of knowledge.

1. What is General Nursing?
2. The value of general care as a therapeutic factor.
3. What is medical ethics and deontology?
4. What are the main responsibilities of medical personnel?
5. List the basic requirements for the personal hygiene of a nurse.
6. List the basic requirements for the work clothes of a nurse
7. What are the main responsibilities of nursing staff?
8. Tell us about the arrangement and equipment of the nursing station in the department.
9. What are the sanitary and hygienic requirements for a nurse's post?
10. List the main types of medical records.
11. Tell us about the mode of operation of the nursing post in the department.
12. Name the rules of work and maintenance of medical records.
13. By whom and how is the reception and delivery of duty?
14. List the manipulations performed in the treatment room.
15. What makes up the mode of operation in the treatment room?
16. What are the sanitary and hygienic requirements for the treatment room and the personal hygiene of the nurse working in it?
17. List the treatment room equipment.
18. What types of treatment room documentation do you know?

TEST CONTROL.

1. What is the relationship between the terms “care” and “treatment”?
a) care and treatment are different concepts; treatment is carried out by a doctor; care is provided by middle and junior medical personnel;
b) care and treatment are identical concepts, since both treatment and care aim at achieving the patient's recovery;
c) care is an integral part of treatment.

2. What does the term "special care" mean?
a) care that is carried out with particular care; b) care that is carried out in special conditions;
c) care that requires the presence of certain specialists; d) care that involves additional activities,
disease-specific.

3. Who should take care of the sick? a) relatives of the patient;
b) middle and junior medical personnel;
c) all medical workers, as well as relatives of the patient, and each of them has its own specific functions for organizing care.

4. A patient came to the emergency department without referral medical documents, suddenly felt ill.

What will be your tactics?

a) examine the patient, provide him with the necessary assistance and decide on further treatment tactics;

b) call an ambulance;

c) send the patient for referral medical documents

4. A patient was admitted to the emergency department with complaints of abdominal pain.

The general condition of the patient is satisfactory. Can he take a hygienic bath?

Can i; b) it is impossible; c) it is possible after the exclusion of acute surgical disease.

5. A patient with suspected gastrointestinal bleeding was delivered to the emergency department (3 hours ago there was vomiting with contents like "coffee grounds"). Feels subjectively satisfactory, can move independently.

How to transport the patient to the department?

a) on foot, accompanied by a nurse; b) in a wheelchair;

c) only on a kayak.

THEME 3. MEDICAL DOCUMENTATION IN THE THERAPEUTIC DEPARTMENT AND RECEPTION ROOM.

educational goal: Acquaintance with the basics of medical ethics and deontology.

Lesson equipment: medical inventory of the therapeutic department, medical documentation, medical history, stands, tables on the topic.

The student must know:

1. Importance of nursing.
2. The role of medical personnel in the treatment and care of patients.
3. The moral character and legal responsibility of a medical worker.
5. Organization of work of the therapeutic department.
6. The main types of medical documentation in the therapeutic department.
7. Reception department. Reception of the patient and his registration.
8. The main types of medical documentation in the admissions department.
9. Working hours of the treatment room.
10. Types of documentation of the treatment room.

The student must be able to:

- work with medical records;
- to carry out sanitary processing of medical and diagnostic premises of a medical institution;
- to carry out anthropometry of patients;
- carry out transportation of patients;

Plan and organizational structure of the lesson.

1. Greetings.
2. Monitoring student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

    1. Moral and legal responsibility of medical personnel. Code of Conduct.
    2. Organization of work of the therapeutic department.
    3. Types of medical documentation.
    4. Documentation at the front desk.
    5. Reception of the patient and his registration.
    6. Medical documentation of the treatment room.

6. Control and correction of the final level of assimilation of educational material (solution of situational problems).

ISSUES OF DEONTOLOGY AND MEDICAL ETHICS IN DOCTOR TRAINING

Human life and health is the highest value on earth, because all other values are nothing if a person does not live on it.

Healing at all times was based on an alloy of special knowledge, skills and ethical principles. The latter side, starting approximately from the beginning of the 19th century, was designated by the concept of “doctor's deontology” or “physician's ethics and deontology”. The term "deontology" comes from the Greek words "deon" - due and "logos" - teaching and was introduced into use at the beginning of the 19th century. by the English philosopher Bentham as the name of the doctrine of the professional behavior of a person.

Medical or medical deontology was part of this doctrine, and perhaps the most developed, most fully developed and actively researched.

In the literature, one can find a variety of definitions of the goals of medical deontology. Usually, medical deontology was defined as the doctrine of the principles of behavior of medical personnel aimed at increasing the usefulness of treatment in every possible way and eliminating the harmful consequences of inferior medical knowledge, actions, etc.

The main issues of deontology were: the relationship between the doctor and the patient, iatrogenics, or diseases associated with healing, the ethics of managing severe and hopeless patients, including euthanasia, healing in the age of the scientific and technological revolution, medical secrecy, self-improvement and collegiality of doctors. Professional medical ethics is a specific manifestation of the general ethics of a person in the special conditions of medical activity, sensitivity of character, attention, knowledge, education, culture, collegiality.

In the second half of the 20th century there were qualitative changes in medicine. It was invaded by high technologies, which led to great achievements in biology and genetics. Medicine has risen to a higher level. What was previously inaccessible became available to medicine. Her power has grown. It became possible to “repair” a person as a machine, as a mechanical creation. As a result, there was a threat of losing the morality, mercy, and compassion for the patient, accumulated over the centuries. The relationship between the doctor and the patient has become more and more like the relationship of business people. There is a person offering his services - a doctor - and there is a consumer of these services - a sick person. And if this is the case, there is a need for legal regulation of their relationship. An independent

area of law - medical law. A number of relationships between the doctor and the patient began to be regulated by laws.

In connection with all this, deontology is currently giving way to a doctrine that reflects the legal and other relationships between the doctor and the patient and is called bioethics or biomedical ethics. Bioethics has not completely replaced the doctor's deontology. Many sections of deontology have been preserved in it, although others, qualitatively new ones, have also appeared.

To date, there is no complete agreement among scientists about what are the main issues of bioethics. Nevertheless, the main of them, apparently, can be considered the following: the doctor and the rights of the patient, (the relationship between the doctor and the patient), the doctor's protection of the patient's private life (including in the form of maintaining medical secrecy), the patient's informed consent to examination and treatment , death and dying (including euthanasia), problems of reproductive technology, care for children and the mentally ill, and a number of others.

The relationship between doctor and patient is deeply peculiar.

In many countries of the world, the doctor-patient relationship is preferred to be built on a legal basis.

At the present stage of development of society and medicine, there are several models of relationships:

I. *paternalistic*(from the word "father" - pater) paternal care of the doctor about the patient; the relationship of father to son (American philosophers), where the patient completely entrusts himself to the doctor.

A sick person is qualitatively different from a healthy person in many respects. Attitudes towards life, work, the environment and even relatives are changing, etc. A serious illness leads to major shifts in the human psyche. It causes deep feelings, excitement and fear for one's fate.

Hence, a doctor of any specialty must remember that he is dealing, first of all, with a suffering person, who is ill not only physically, but also mentally.

In many cases, the doctor's word is no less healing than medicine.

Conducting a round, a conversation in the ward, and in any communication with patients, the doctor must always remember the second side of the impact of the word on the sick person - the possibility of negative consequences of a carelessly spoken word. The word is not only a healing factor, but also a sharp weapon that can seriously injure the patient's psyche and worsen the course of his illness.

All the consequences of the negative impact of the doctor on the patient are called iatrogenic. *niei.*

Unfortunately, in a number of cases, iatrogeny arises on the basis of the callousness of the doctor,

sufficient of his general culture, indifferent attitude to the performance of his medical duty.

II. **Modern engineering model of relationship**- the disease is considered as a breakdown of a mechanism, a mechanical engineer who repairs the breakdown (a new generation of doctors), where the school of clinical thinking disappears, the doctor does not know how to clinically generalize observations. According to I. A. Kassirsky, doctors are also “militant instrumentalists”. Nowadays, the engineering model has a solid scientific basis. It owes its appearance to the unprecedented achievements of medicine and high technologies in the last years of the 20th century (tomography, ultrasound, organ transplantation, etc.). But this model is fraught with the danger of the doctor's actions more for his own, corporate purposes than in the interests of the patient. These are proposals for selfish purposes of expensive examinations, medicines, expensive and not very indicated operations, and many others.

Such collisions require consideration of another aspect of modern bioethics - the so-called principle of informed consent. The model of the doctor-patient relationship, collegiate model. According to this model, it is proposed to build the relationship between a doctor and a patient according to the type of relationship of colleagues to each other, which is why this model is called collegial, the doctor and the patient act as equal individuals.

The collegiate model requires the physician to ensure that all examination and treatment questions are

were resolved only on the basis of providing the patient with detailed information about these methods, and his consent to their implementation.

Today, our legislation is trying to legalize the relationship between the doctor and the patient, and the law advocates the obligatory nature of all provisions of informed consent.

Article 31*"Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens"*called

*"The right of citizens to information about the state of health"*and states: "Every citizen has the right, in a form accessible to him, to receive available information about his state of health, including information about the results of the examination, the presence of the disease, its diagnosis and prognosis, methods of treatment, the risk associated with them, possible options for medical intervention, their consequences and the results of the treatment.

Article 32is called "Consent to medical intervention" and it says: "A necessary precondition for medical intervention is the informed voluntary consent of the citizen." Thus, now relationships such as informed consent are prescribed for Russian doctors by law.

At the same time, it is assumed that informing the patient about his illness is aimed at attracting the patient to an active fight against the disease. In addition, informed consent allegedly shares the burden of responsibility for the procedural aspects of examination and treatment between the doctor and the patient.

In this regard, a number of scientists in the press express the opinion that the patient should give consent in writing. It is believed that it is also largely important for the doctor - it increases his legal security, protects against the possibility of dishonest actions of the patient in the event of complications.

However, in a moral aspect, written consent cannot be considered the best. It is precisely the stone against which the trusting relationship between the doctor and the patient is broken. In addition, a simple written consent that is not certified by a notary is not a legal document at all and cannot protect anyone in court.

One of the principles of the consent model is the requirement to tell a sick person the absolute truth about his illness and possible immediate tragic outcome. The law requires that the patient be given truthful information about his diagnosis and prognosis, no matter how severe they are. The Council of Europe Convention (Article 5) and Russian laws (Article 30, paragraph 7, Article 31, paragraph 3 of the Fundamentals of the Legislation of the Russian Federation ....), require that the patient be provided with truthful information about the diagnosis and prognosis of the disease, no matter how tragic it is was.

But is the requirement to tell the patient the whole truth, no matter how bitter it may be, so merciful? The entire centuries-old medical experience suggests that in many cases it is not permissible for a doctor to tell the patient the truth about the possible severe outcome of his illness, that the patient is many times more worthy of the "darkness of low truths" than his "comforting deceit".

Of course, one cannot simply dismiss the principle of informed consent. Many modern methods of diagnostics and treatment are highly aggressive and can lead to a number of undesirable consequences. And their necessity, first of all, must be seriously substantiated and explained to the patient. The informed consent model is also a legal protection for the doctor in case of any surprises during the examination and treatment, when the patient goes to court, which is often observed today and will be observed more often in the future.

One of the central problems of the ethics and deontology of the doctor, and now bioethics, is the so-called euthanasia.

Euthanasia -this is a doctrine of moral, ethical and legal issues of medical work in the most difficult situation - on the verge of life and death.

Until recent years, the answer to this question in the former Soviet Union and post-Soviet Russia was negative. No, the doctor has no right to meet the request of the patient and help him die easily. The doctor is not an assistant to death, but a fighter for life. Recorded in the "Oath-

ve" Hippocrates: "I will not give anyone a lethal agent asked of me and will not show the way for such a plan." However, the issue was not so simple. A number of scientists in our country are in favor of allowing active euthanasia, while passive euthanasia is practiced all the time. When a doctor recommends taking a seriously ill patient out of the hospital, this is real passive euthanasia. In addition, government agencies in a number of countries are enacting laws to allow euthanasia. In Norway, active euthanasia was legally allowed in 2001. In many states of America, passive euthanasia is allowed at the request of the patient.

How to be a doctor in this situation? Euthanasia conflicts with the moral convictions of many doctors, their upbringing in the value system of life, the Hippocratic Oath, finally. In addition, the wide admission of euthanasia, its legislative consolidation, may affect the deepest moral and legal institutions of mankind (dishonest relatives, large fortunes, the emergence of a wealthy stratum in Russian society).

In our country, any form of euthanasia is prohibited by law and, therefore, doctors must adhere to this law.

In general, the problem of euthanasia gives rise to a whole tangle of legal and ethical issues that cannot yet be considered resolved.

One of the important issues of doctor's deontology, and now bioethics, is medical secrecy. This concept has come to us from time immemorial. Recognition of the disease largely depends on the information that the doctor receives from the patient.

Often, among the information entrusted to a doctor, there are those that a person would not tell anyone in other conditions. And all this the patient believes the doctor, because, as the ancient Indian philosophers taught: “You can not trust your father, mother, friend, but you should not feel fear of the doctor.”

And so it should be, because this information can help the doctor in recognizing the disease, and, therefore, they will be useful in its treatment. The doctor is obliged to justify the trust of the patient and keep his secrets secret. This is what doctors have done at all times, as evidenced by the oldest document - the Hippocratic Oath.

Thus, medical secrecy should be understood as an ethical (and legal) prohibition of disclosure of information about the disease, intimate and family life of the patient, which are trusted by the doctor by the patient himself or his relatives, come from other sources, etc. In fact, the need to respect medical secrecy is part of the bioethical concept of "protection of the patient's privacy."

In recent years, the range of information included in the concept of medical secrecy has been replenished with a number of new concepts related to the introduction of high technologies into medicine, the development of new areas of healing. These are data on donors and recipients in organ transplants, sperm and egg donors in IVF operations, information on the biological parents of children born using reproductive technologies, and much, much more.

The possession of many of these information makes the doctor, as it were, the closest person to the patient and allows him to invade private life. And this opportunity carries not only positive, but also possible negative consequences. In this regard, there is a need to regulate the actions of a doctor, both moral, ethical and legal provisions.

In Russia, the provision on the need to maintain medical secrecy is recommended by moral and ethical provisions and is enshrined in the law “Fundamentals of the legislation of the Russian Federation ...” Article 30, section I, states “When applying for medical care and receiving it, the patient has the right to: ... Keeping confidential information about the fact of applying for medical help, about the state of health, diagnosis and other information obtained during examination and treatment. Article 31; there is also a clause regarding medical secrecy: “Information reflected in the medical documents of a citizen constitutes a medical secret and can be provided without the consent of the citizen only on the grounds provided for in Article

61 real Fundamentals.

Article 61“Information about the fact of applying for medical help, the state of health of a citizen, the diagnosis of his disease and other information obtained during his examination and treatment constitute a medical secret.

Persons who, in accordance with the procedure established by law, are provided with information constituting a medical secret, bear disciplinary, administrative or criminal liability for the disclosure of medical secrets in accordance with the legislation of the Russian Federation, the republics within the Russian Federation.

In addition, Article 14, Section IV "Fundamentals ..." refers to the prohibition of disclosing the secrets of the donor and recipient during organ transplantation operations.

But we teach our students the need to observe medical secrecy starting from the 2nd year. Apparently, a well-known principle operates here - what is said is forgotten, what is seen is remembered for a long time. And our young doctors probably see around them a continuous unmotivated rejection of medical secrecy, an absolutely unpunished violation of the law on medical secrecy.

Article 131- according to which the infliction of moral harm is a cognizable act. If the disclosure of the secret led to serious consequences, the victim has the right to judicial protection, and the perpetrators can be held criminally liable.

One of the hotly contested issues in bioethics is the issue of abortion. This problem is considered as a medical side of the problem (the negative impact of abortion on a woman's body), but the issue of the rights of the fetus is especially discussed. A number of opponents of abortion, as well as most religious denominations, believe that the fetus, the fetus, at any stage of its development, has all legal rights, and abortion is considered murder.

The fact that all these people seem to appeal to mercy, stand up for human life, for human rights, should be considered a strong point. All confessional supporters of the ban on abortion argue their positions with the inadmissibility of interference in this God-approved human law.

Article 36*"Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens";*called *"Artificial termination of pregnancy"*and it states: “Every woman has the right to decide for herself the question of motherhood. Artificial termination of pregnancy is carried out at the request of a woman, with a gestational age of up to 12 weeks, according to social indications - with a gestational age of up to 22 weeks.

One of the acute problems of bioethics is currently the so-called reproductive technologies. Reproductive technologies are the use of the results of high scientific and technological achievements to solve the problems of reproduction of offspring. We are talking about the use of high technologies to obtain offspring in cases where this is naturally impossible - male and female infertility, the desire to have a consanguineous child without marriage, the desire of homosexuals, monks and nuns to have children, etc.

One of the most important sections of reproductive technologies is the artificial fertilization of an egg in a woman's body or outside it "in vitro", called in vitro fertilization (IVF). One of the IVF options is surrogacy, in which “spouses-customers” who want to have children, but cannot have them themselves, enter into an agreement with a woman who agrees to bear for them a child conceived from their donor material or completely alien (ovum and sperm) material.

All reproductive technology procedures entail a number of ethical and legal issues. Russian legislation quite reasonably solves the legal side of the problem. Article 35 of Section VII, “Fundamentals of the Russian Legislation on the Protection of Citizens' Health” states: “Every adult woman of childbearing age has the right to artificial insemination and implantation of an embryo.

Information about the artificial insemination and implantation of the embryo, as well as the identity of the donor, is a medical secret.

However, reproductive technologies raise many different ethical and legal issues. Here are some of them: the problem of the health of the donor (male or female), the problem of the nationality or skin color of the unborn child.

One young donor may turn out to be the father of 100 (apparently, in the case of a man and many more) children. How to deal with it? What will be the consequences of such paternity or motherhood?

There is a real opportunity to give birth to a child from a father who has long been dead. What will be the position of such a child in the moral and legal aspect?

There is an equally real possibility of having a child from a father who has been sentenced to life and is in prison.

Surrogate motherhood causes a lot of controversy and problems. For example, there are cases when a woman who agreed to become a surrogate mother becomes so close to the child during pregnancy that she then refuses to give it to “customers”. They are trying to solve this issue legislatively, but this does not at all remove many problems.

Cloning is one of the most controversial reproductive technologies. In the last years of the outgoing XX century, the whole world was excited and shocked by the news of the cloning of animals - Dolly the sheep in England, then other animals in various countries. What is this - cloning?

An egg is taken from a woman, the nucleus is removed from it, then the nucleus is implanted from her own somatic cell. After that, the gamete thus formed is awakened to division and again transplanted into the woman's uterus. Having brought such a fruit, a woman will give birth to “herself”. A gamete can be created from the somatic cells of her children, then she will give birth to copies of them, etc.

In connection with all this, there was a fierce debate around the world on the admissibility and inadmissibility of human cloning. By the end of 2000, 27 States had adopted tough laws prohibiting human cloning. Nevertheless, there are scientists in the world who do not agree with these laws and continue to conduct research.

The medical experiment also now appears as a necessary section of bioethics. The progress of medical science is directly related to the need to test new methods, treatments, new medicines, vaccines, etc. The introduction of all this into practice is unthinkable without a medical experiment.

One of the newest and most important ethical documents of this plan is the Declaration of Helsinki of the World Medical Association, adopted in a new edition in 2000, which is called

"New Standards for Medical Research".

1. most preventive, diagnostic and therapeutic procedures involve risks and burdens.
2. medical research involving a human may only be conducted if the importance of the purpose of the research outweighs the risks and burdens associated with it for the subject. If there is a reasonable likelihood of benefiting from its results.
3. voluntariness and awareness of the participants of the research project.

The same provision is written in Article 2 of the Council of Europe Convention on Human Rights in Biomedicine.

These positions are also reflected in the Russian Fundamentals of Legislation on the Protection of the Health of Citizens. Article 43: “Not permitted for use, but being considered in the prescribed manner, methods of diagnosis, treatment and medicines can be used in the interests of curing a patient only after obtaining his voluntary written consent. A citizen cannot be forced to participate in a medical research.

Academician Yuri Lopukhin notes the versatility of the ethical problems of medical

experiment, research work and that the control of the conduct of a medical experiment should be provided by ethical committees working at medical institutions, in the Russian Academy of Medical Sciences, the Ministry of Health of the Russian Federation. I think that committees and commissions should be independent, qualified and authoritative. They must evaluate all punctures and the degree of risk to the patient, act as a guarantor of the conduct of studies in accordance with the above recommendations of the Declaration of Helsinki.

Here it is impossible not to touch upon the issues of medical experimentation on animals. In recent decades, ethical rules for conducting such experiments have been developed in many countries. These rules require a convincing justification for the expediency of conducting such an experiment, the involvement of a minimum number of animals in the experiment, and careful treatment of animals both during the experiment and, especially, when they are slaughtered. Animals can be slaughtered only after anesthesia. Cruel experiments on animals (burning the skin of animals, immersing a part of the body in boiling water, blinding animals, etc.) are considered absolutely unacceptable.

Thus, it can be seen that, at present, when conducting medical experiments, it is necessary to comply with a number of ethical and legal provisions that humanize the impact on humans and animals.

The rapidly developing scientific and practical direction of medicine, transplantology, carries with it very big ethical problems.

In the United States, experts believe that it is impossible to decide the question on the basis of “who waits for how long”. First of all, transplantation should be performed for those patients whose life expectancy without transplantation is measured in weeks.

The fact is that transplantations in our country are concentrated in a few centers. Now the possibility of getting into these centers for a patient living outside the territories of their location is virtually zero. You can only do transplants on a commercial basis. Kidney transplantation in this case costs 5-6 thousand dollars and more, heart, for example, and the Institute of Transplantology of the Russian Federation - 90 thousand dollars (Vrach, 1999, No. 6). Insurance funds do not pay for such operations, and the ministries of health of the regions do not have such money. Therefore, the possibility of getting a transplant for a person living outside the regions where the centers are located is negligible.

The figures of financial costs cannot but raise another serious ethical and legal issue of bioethics. This question can be formulated as follows: "How moral is the expenditure of such funds for transplantation?". This problem is formulated differently as follows: “The problem of equitable distribution of resources in medicine”.

Throughout the world, many bioethical issues are handled through National Bioethics Committees. We need to take the first steps in this direction - to create a commission - an ethics committee, which is obliged to deal with these issues, and if it works in full force, all interested persons will be able to receive assistance from it.

It is necessary to deepen our knowledge and knowledge of students in matters of bioethics. Apparently, the curricula should include issues of medical ethics, bioethics, moreover, according to a cross-cutting program.

A number of relationships began to be regulated by the law of the Russian Federation, which should be mandatory for all medical workers. It will be easier to comply with the law if the doctor also remembers medical traditions, ethics, and the doctor's deontology. But we must remember that law and law will not replace morality in healing.

LEGISLATION AND REGULATORY DOCUMENTS

1. International Code of Medical Ethics (morality, ethics), (the importance of saving human life).
2. Document of the World Medical Assembly (1975) (morality, ethics).
3. Ethical Statements of the American Medical Association (1964) (Ministry of Man

- with full respect for human dignity).

4. Document of the World Medical Assembly (1975).
5. Council of Europe Convention (Spain, 1997). On the protection of human rights and dignity in connection with the application of achievements in biology and medicine, inviolability of the individual and other rights, priority of the individual, equal access to medical care, professional standards, privacy, genome, scientific research, removal of organs and tissues prohibition, violation of the provisions of the convention.
6. Declaration of Helsinki by the World Medical Association, New Standards for Medical Research (2000).
7. Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens (1998).

In the emergency room, the nurse registers patients; fills in the title page of the medical history (form 003y) for each incoming patient, enters information about the patient in the register of admission of patients (form 001y) and the alphabetical journal (for the reference service), where it indicates the last name, first name, patronymic, year of birth, date of admission to the department. The actions of a doctor and a nurse in relation to patients are strictly differentiated depending on the nature of the disease and the patient's condition. If the patient was admitted in an unconscious state, information about him is obtained from relatives or accompanying persons. In the absence of documents and the impossibility of obtaining information about the patient who is in an unconscious state, his admission is recorded in a journal with a description of the main external signs, and data about him are immediately reported to the police. If the patient is in serious condition and needs emergency care, the latter should be provided in full in the emergency room; if necessary, the patient should be transferred to the intensive care unit as soon as possible. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives. The emergency room should have everything you need for emergency and emergency medical care. In cases where a child under the age of 16 is admitted unaccompanied or the patient is delivered by ambulance due to an injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify the relatives.

After registration, the patient is sent to the examination room, where he is examined by a doctor, and, if necessary, instrumental and laboratory methods of research (fluoroscopy, electrocardiography, blood, urine, etc.) are performed. If it is impossible to establish a diagnosis, the patient is isolated and consultations with specialist doctors are organized. If, after examination and observation of the patient by a doctor, data for hospitalization is not established, the patient is allowed to go home, which is recorded in the hospitalization refusal log.

The treatment room has the following medical documentation:

1) control log of registration of blood group and Rh factor;
2) register of blood transfusion, plasma;
3) register of blood substitutes and protein preparations;
4) a register of blood sampling for biochemical studies;
5) logbook of intravenous infusions;
6) register of intravenous drip infusions;
7) a register of blood sampling for the Wasserman reaction;
8) register of syringes, needles and systems for intravenous injections;
9) a notebook for recording drugs used in anaphylactic shock;
10) instructions for providing first aid in case of anaphylactic shock and for sanitizing the treatment room;
11) table of antidotes used in acute poisoning;

12) journal of registration of general cleaning of the treatment room.

The procedural nurse is selected from among the most experienced nurses, she must be fluent in the technique of medical manipulations, strictly observe the rules of personal hygiene and maintain the sanitary and hygienic condition of the treatment room at the proper level.

TEST CONTROL

1. What does medical deontology study?
a) the relationship between the doctor and the patient;
b) a wide range of issues of duty, morality and professional ethics of medical workers;
c) iatrogenic diseases.

2. The patient was diagnosed with a malignant tumor of the stomach, and at the stage when it can be radically removed by surgery. The patient categorically refuses the operation.
Your tactics:
a) tell the patient the true diagnosis
b) discharge the patient, hiding the true diagnosis from him;
c) tell the patient about the presence of another disease (peptic ulcer, stomach polyp), for which, however, it is necessary to operate, try to convince the patient of the need for surgery.

3. What are the responsibilities of the Head Nurse?
a) performance of the most responsible nursing manipulations;
b) monitoring the work of ward nurses, issuing requirements for medicines;
c) control over the provision of the department with hard and soft equipment, bed linen.

4. What manipulations are carried out in the treatment room?
a) injections;
b) puncture of the pleural cavity; c) setting cans, mustard plasters; d) taking therapeutic baths;
e) determination of blood groups.

5.What medical records are kept by ward nurses? a) duty transfer log;
b) sick leave certificate;
c) a notebook of medical appointments; d) portions;
e) a card of a person who left the hospital.

6. Body lice were found in the admission department of a patient referred for hospitalization. Your actions?
a) refuse to hospitalize the patient;
b) re-wash the patient with soap in the bath, send the patient's clothes and underwear to the pest control chamber;
c) sanitize, including cutting the hair of the head (if possible), lubricating the hair with a mixture of kerosene and sunflower oil, followed by washing the head with a hot 10% solution of table vinegar.

7. The patient experienced severe pain in the epigastric region, nausea and vomiting. Medical workers regarded this condition as a manifestation of food poisoning and sent the patient to the infectious diseases hospital, where, after a more thorough examination, the diagnosis of an abdominal (gastralgic) form of myocardial infarction was established. How do you assess the initial actions of medical workers?

a) absolutely correct;
b) as a manifestation of a medical error; c)
careless, negligent.

8. The nurse, having confused outwardly similar vials, injected the patient with a large dose of insulin instead of heparin, which quickly lowers blood sugar levels, resulting in a sharp deterioration in the patient's condition (hypoglycemic coma). How can you evaluate the actions of a nurse?
a) medical offense (negligence, negligence); b) medical error;
c) an accident.

9. A young woman's father died of a myocardial infarction a few months ago. His death took him very hard. I soon learned from special literature that there may be a hereditary predisposition to myocardial infarction. She began to notice unpleasant sensations in the left half of her chest, there was a fear of dying from a heart disease. Asked for medical help. What disease can be assumed in the patient?
a) iatrogenic disease;
b) most likely, an iatrogenic disease with elements of neurosis (cardiophobia), but the patient needs further examination;
c) severe heart disease.

THEME 4. PERSONAL HYGIENE OF PATIENTS.

educational goal: to teach students polite, attentive treatment of patients according to the principles of medical ethics and deontology.

Lesson equipment: specialized workshop, functional bed, sets of underwear, bed linen, a vessel, urinals, rubber circles, phantoms of the gluteal areas, pipettes, spatulas, jugs, scissors, bandages, cotton wool, forceps, tables, stands on the topic.

The student must know:

1. Functional bed.
2. Bed preparation. Change of underwear and bed linen in seriously ill patients.
3. Oral care, ears, eyes, nose, hair.
4. Skin care and pressure sore prevention.
5. Washing the sick. Douching.
6. The use of a rubber circle, vessel, urinal.
7. Skin care in the presence of bedsores.

The student must be able to:

1. Carry out a change of underwear and bed linen, prepare a bed for the patient.
2. Take care of the hair, ears, eyes, oral cavity of seriously ill patients.
3. Sanitize patients (haircut, nails, hygienic bath).
4. Use a functional bed and other devices to create a comfortable position for the patient.
5. Carry out skin care, daily toilet (washing, rubbing the skin with one of

disinfectant solutions).
6. Wash the sick.
7. Serve vessels, urinals, disinfect them.
8. Transfer patients.
9. Prevent bedsores.
10. To treat the oral cavity of seriously ill patients.

Plan and organizational structure of the lesson.

1. Greetings.
2. Monitoring student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

    1. The position of the patient in bed.
    2. Functional bed. Various devices for creating a comfortable position for the patient.
    3. Bed preparation. Change of underwear and bed linen.
    4. Oral care, ears, eyes, nose.
    5. Hair care. How to wash your hair in bed.
    6. Skin care, daily toilet. Washing. Douching.
    7. Prevention of bedsores.
    8. The use of the vessel, urinal. Disinfect them.

6. Control and correction of the final level of assimilation of educational material.

Task tests for initial knowledge control

1. How often should bed linen be changed for sick people?
*Answer:*Once a week.
2. How often should bed linen be changed for a seriously ill person?
*Answer:*As it gets dirty.
3. Name the ways of changing sheets in seriously ill patients.
*Answer:*1. By the method of rolling the patient from side to side. At the same time, dirty and clean sheets roll in the longitudinal direction.
2. Consistently raising the head, chest, torso, legs, roll up the dirty sheet in the transverse direction while straightening the clean one.
3. They make the bed, putting the patient on a gurney.
4. Name the ways of carrying the weak and seriously ill from the stretcher to the bed and back.
*Answer:*1. One orderly, holding the patient with his right hand under the hips, and with his left hand clasping his chest at the level of the shoulder blades.
2. Two nurses. One supports the head, neck and upper chest with his right hand, the other brings his hands under the lower back and hips.
3. Three nurses. One holds the head, neck and upper chest of the patient, the second brings his hands under the lower back and upper thighs, the third supports the hips and shins.
5. Name the ways to install the stretcher in relation to the bed when shifting a seriously ill patient.
*Answer:*1. Right angle.
2. Parallel.
3. Consistently.
6. What is the sequence of changing a shirt in a seriously ill patient?

*Answer:*1. Slightly raising the upper body, collect the shirt from the back to the neck.
2. Raising the hands of the patient, they remove the shirt over the head.
3. Free from the sleeves of the hand, and first of all healthy. 4. Put on a clean shirt in the reverse order: on a sore arm,
then on a healthy one, then through the head and then spread on the body.

7. List the methods of skin care for patients in the hospital.
*Answer:*1. Hygienic bath. 2. Shower. 3. Rubbing. 4. Washing.
8. What is the frequency of rubbing and washing in seriously ill patients?
*Answer:*Daily 1 - 2 times.
9. What is the frequency of taking a hygienic bath or shower by patients in a hospital?
*Answer:*Once a week, if condition permits.
10. Specify the places of formation of bedsores.
*Answer:*1. The sacrum. 2. Shoulder area 3. Heels 4. Nape
5. Elbows 6. Area of ischial tubercles.
11. What are the reasons for the formation of bedsores?
*Answer:*1. Poor nursing.
2. General exhaustion.
3. Disease of the cardiovascular system with circulatory failure.
4. Disease of the central nervous system.
5. Diabetes.
12. List the early signs of pressure sores.
*Answer:*Redness of the skin.
13. Specify measures to prevent bedsores.
*Answer:*1. Regular examination of the patient's body.
2. Monitor the cleanliness of the patient's skin: wipe the whole body daily, wash the areas contaminated with urine and feces with soap and water, wiping with camphor alcohol.
3.Monitor the cleanliness of bed and underwear, it should not have folds, for this it is necessary to re-lay the bed of the patient 2-times a day.
4. Use of a rubber band.
5. Changing the position of the patient's body in bed during the day.
6. If the patient's skin turns red, lubricate it 2 times a day with 5 or 10% potassium permanganate solution.

PERSONAL HYGIENE OF THE PATIENT AND HIS POSITION IN BED

Compliance with the rules of personal hygiene, keeping the ward and bed clean create conditions for the speedy recovery of patients and prevent the development of many complications. The role of proper patient care is great. Adequate care has been and is the key to the success of the treatment of seriously ill patients. The more severe the patient, the more difficult it is to take care of him, the more difficult it is to perform any manipulations to care for the oral cavity, ears, eyes, nose, etc. It is necessary to clearly know the procedure of manipulations, to master their implementation.
*Remember!*Proper care of the seriously ill is the shortest path to their recovery.

Preparing the patient's bed.

*Material equipment:*bed, mattress, mattress cover, sheet, duvet cover, flannelette blanket.

Due to the fact that the patient is in bed most of the time, it is important that it is comfortable and tidy, the mesh is well stretched with a flat surface. A mattress without bumps and depressions is placed on top of the mesh. For patient care, a mattress consisting of separate sections is very convenient. The mattress cover should be cleaned more often and ventilated in order to

remove unpleasant odors and, if necessary, disinfect. A clean sheet is placed on the mattress pad, the edges of which are tucked under the mattress so that they do not roll down and do not gather into folds.

The patient is given a blanket with a duvet cover, preferably a flannelette, as it is well ventilated and disinfected.

The legs of the bed are equipped with a stretcher for ease of movement.

The use of a functional bed and other devices to create a comfortable position for the patient.

*Material equipment:*functional bed, headrests, mattress pad, mattress.

Due to the fact that the patient is in bed for a long time, the organization of a comfortable bed and keeping it clean plays an important role.

The bed should be made of iron to make it easier to wash and disinfect. Currently, nickel-plated and oil-painted beds are used for the convenience of wiping and disinfecting them.

For seriously ill patients who need an elevated position, head restraints are used.

There are so-called functional beds, which consist of three movable sections, which, by means of handles, smoothly and silently give the patient a comfortable position in bed.

The mesh on the bed should be well stretched, have a flat surface. On top of it, they put a mattress pad without bumps and depressions. For patient care, a mattress consisting of separate parts is very convenient. A bedside table is placed next to the bed. It is level with the bed so that the patient can easily use it.

Severely ill patients use mobile bedside tables that can be used while eating.

Monitoring the appearance and condition of the patient.

*Material equipment:*thermometer, scissors, soap.

Students should know that the ward nurse takes care of the sick and their sanitary and hygienic condition. It measures temperature in the morning and evening, counts pulse and respiration, measures the daily amount of urine and sputum, and records all these data in history.
illness.

The nurse monitors the cleanliness, silence and order in the wards, the observance of the rules of personal hygiene by the patients (care of the skin, oral cavity, cutting hair and nails); take care of the timely supply of patients with the necessary care and treatment, monitor the timely intake of hygienic baths, change underwear and bed linen, take part in the conduct of sanitary and educational work among patients. It provides a thorough examination of weak patients, assists them in washing, feeding, gives them a drink, rinses their eyes, mouth, ears as needed, and prevents the formation of bedsores.

Skin care, daily toilet.

*Material equipment:*disinfectant solution (camphor alcohol, cotton wool, clothing
colon)

An important place in the care of the sick, especially the seriously ill, has skin care in
Due to the fact that it performs a protective role, it participates in thermoregulation and metabolism.

The nurse should maintain a schedule for conducting a hygienic bath for walking patients with a simultaneous change of bed and underwear. Washing the patient is entrusted to the junior nurse, who prepares the bath, fills it with water and lays down.

puts the patient into it so that 2/3 of the body is covered with water, the heart area is not covered with water. The nurse is present during washing, monitors the general condition of the patient.

Walking patients take a hygienic bath once a week.

Patients who are on bed rest should daily wipe the skin with a disinfectant solution (camphor alcohol or other solution: 0.5 liters of water - 1-2 tablespoons of vinegar, cologne or alcohol).

Skin Wiping Technique: Moisten one end of the towel with a disinfectant solution, squeeze lightly and wipe the neck, behind the ears, back, front of the chest and armpits. Particular attention is paid to the folds under the mammary glands, where diaper rash can form in obese women and very sweaty ones. Then the skin is wiped dry in the same order. The patient's feet are washed once or twice a week, and, if necessary, the nails are cut short.

With poor skin care and a sharp weakening of the body in places with a small amount of subcutaneous adipose tissue with prolonged bed pressure, violations of the integrity of the skin appear on the skin, the so-called bedsores. Places for bedsores are: the area of the sacrum, shoulder blades, greater trochanter, nails. The first signs of bedsores are

pallor of the skin, followed by redness, swelling and flaking of the epidermis, in severe cases, not only the entire thickness of the soft tissues to the bones, but also the periosteum, as well as the surface layers of the bone substance, can be subjected to necrosis. Attachment of infection sometimes leads to sepsis and is the cause of death of patients.

Hair care, ears, eyes, oral cavity.

*Material equipment:*scissors, comb, Janet syringe, tray, spatula for using eye ointment, 3% solutions of hydrogen peroxide and boric acid, a weak solution of potassium permanganate, 0.1% solution of furacilin.

Hair care.

Students should know that all patients need to wash their hair with soap or shampoo once every 7-10 days. Sick men who are in the hospital for a long time should often cut their hair short and wash it after 7-10 days in bed. It is more difficult to keep hair clean in women with long hair. Such patients need to comb their hair daily with a thick comb, which should be individual for each patient. A thick comb dipped in a solution of vinegar combs out dandruff and dirt well.

How to wash your hair in bed.

The basin is placed at the head end of the bed, the patient's head is thrown back at neck level and an elevation is placed. While lathering, warm the skin under the hair well. Then they are well rinsed and wiped dry, after which they are carefully combed. After washing the head, especially for women with long hair, the nurse puts a towel or scarf on her head to prevent the patient from hypothermia.

Ear care.

Walking patients wash their ears daily during the morning toilet. For patients who are in bed for a long time, the nurse periodically cleans the ears so that sulfur does not accumulate, which can cause hearing loss.

If a sulfur plug has formed, it is removed as follows: a few drops of a 3% hydrogen peroxide solution are instilled into the ear, and then the plug is removed with a cotton turunda. When a large number of sulfur plugs accumulate, the ear is douched with a large syringe (Janet syringe with a capacity of up to 150 ml) or a rubber balloon. The patient is seated sideways in front of him so that the light source illuminates the ear. In the hands of pain

they give a tray to the patient, which he presses to the neck under the auricle, then the nurse pulls the auricle backward and upward with the left hand, and inserts the syringe into the external auditory canal with the right hand, directs a stream of solution along its upper back wall under great pressure.

To instill drops in the ear, the patient's head is bent to the healthy side. The patient's earlobe is slightly pulled with the left hand, and the pipette is held with the right hand and the drops entering the ear canal are counted. After that, a small cotton swab is placed in the ear for several minutes.

Eye care.

Washing the eyes is done in cases where there is a discharge that sticks together the eyelashes. The eye is washed with a sterile gauze pad soaked in a warm solution of 3% boric acid. For eye diseases, drops are instilled and eye ointments are rubbed. Drops must be sterile, since the introduction of non-sterile solutions can lead to infection of the eye. For instillation into the eyes, there is a special pipette, which is boiled before use. The hands of the nurse should be thoroughly washed, wiped with alcohol.

*Instillation technique:*slightly pull the lower eyelid with the left hand and, inviting the patient to look in the opposite direction, slowly release one drop closer to the nose, then, after waiting a little, let in the second drop and ask the patient to close his eyes.

After use, the eye dropper is washed with warm water and placed in a special eye dropper. Eye ointments are applied to the eyelids with a special eye spatula. The eyelids are pulled down, the ointment is applied and rubbed over the mucous membrane with soft finger movements.

Oral care.

Walking patients brush their teeth daily in the morning and evening and perform hygienic rinsing of the oral cavity with lightly salted water (1/4 teaspoon of table salt per glass of water) or a weak solution of potassium permanganate after meals. Severely ill patients cannot brush their own teeth, so after each meal the nurse must wipe the patient's mouth. To do this, take a cotton ball with tweezers, moisten it in a 5% solution of boric acid or a 2% solution of bicarbonate or simply in warm boiled water and wipe the patient's tongue and teeth. After that, the patient's mouth is rinsed well, sometimes in seriously ill patients there are inflammatory changes in the oral mucosa - stomatitis. In such cases, a drug effect on the mucous membrane is necessary in the form of an application or irrigation.

The application consists in applying gauze napkins soaked in some kind of disinfectant solution (2% chloramine solution, or 0.1% furatsilina solution).

Irrigation is done using Esmarch's mug, Janet's syringe or rubber pear. A kidney-shaped bowl is given to the hands, which is brought to the chin to drain the washing fluid. The nurse pulls the left and right cheeks alternately with a spatula, inserts the tip and irrigates the oral cavity. With the pressure of the jet, mechanical washing out of food particles, pus, etc. occurs. Esmarch's mug should be 1 m above the head. The tip is boiled before the procedure, and then washed with running water and stored in a 2% solution of chloramine and in a solution of furacilin 1:5000.

Washing the sick.

*Material equipment:*jug, forceps, Esmarch mug, sterile cotton balls, a vessel, a weak solution of potassium permanganate.

It is necessary to know that patients who are in bed for a long time, do not take hygienic baths every week, and also suffer from urinary and fecal incontinence,

it is necessary to wash it several times a day, since the accumulation of urine and feces in the area of the inguinal folds can lead to the formation of bedsores.

Washing is done with a weak solution of manganese or another disinfectant solution. The solution should be warm (30-32°C). For washing, you need to have a jug, forceps and sterile cotton balls. Most often, women are washed away.

When washing under the buttocks, a vessel is placed. The patient should lie on her back, bending her legs at the knee joints and slightly apart at the hips. A jug with a warm disinfectant solution is taken in the left hand and poured over the external genitalia, and a cotton swab, clamped in a forceps, is directed from the genitals to the anus (top to bottom) only 1 time, after which the skin is wiped with a dry cotton swab in the same direction and throw away the swab so as not to bring infection from the anus to the bladder. Washing should be done from Esmarch's mug, equipped with a rubber tube, a clamp and a vaginal tip, directing a stream of water or a weak solution of potassium permanganate to the perineum.

Men are washed away much easier. The position is the same.

Delivery of the vessel, urinal, their disinfection.

*Material equipment:*bedpan, 2% chloramine solution or 0.5% clarified lime solution, urinal ("duck").

Patients who are in bed for a long time, it is necessary to bring a vessel to bed to empty the bladder and intestines. Bedpans are enameled, rubber, faience, they have an elongated or round shape and are equipped with lids. Clean, disinfected bedpans are stored in toilet rooms in sterile nests. Before serving the patient, the vessel is rinsed with hot water. The junior nurse lifts the sacrum of the patient with one hand, and gently brings the vessel under the buttocks with the other.

After defecation, the bedpan is carefully removed from under the patient so as not to spill the contents, covered with oilcloth or newspaper and taken out to the toilet room. The patient is washed away and the area of the anus is wiped dry with cotton wool. The contents of the vessel are poured into the toilet. The vessel is well washed with hot water with Hygiene powder or "News". After that, the vessel is disinfected with a 2% solution of chloramine or a 0.5% solution of clarified bleach.

Weak patients with a small subcutaneous fat layer, with a tendency to form bedsores, as well as with fecal incontinence, should be given inflatable rubber bedpans, which, due to their elasticity, exert the least pressure on the sacrum and at the same time protect them from contact with secretions, which is prevention of bedsores. The rubber vessel should not be placed directly on the sheet, but an oilcloth should be placed under it. It should not be tightly inflated. Between the buttocks, the sacrum and the inflatable ring, it is necessary to lay a litter.

In the weakened and seriously ill, when the sphincter of the bladder relaxes, urinary incontinence occurs: it flows out in a small amount or drop by drop. The patient cannot regulate the act of urination. If the patient is in bed, they put a rubber vessel on him) give a urinal (glass or enamel). The urinal for men has a tube raised upwards (“duck”), and for women it ends with a funnel, somewhat lowered downwards. For walking patients suffering from urinary incontinence, there are light urinals, which is a light reservoir attached to the body with tapes.

Urine bags should be washed daily with hot soapy water and rinsed with a weak solution of hydrochloric acid or potassium permanganate to eliminate the smell of urine.

Prevention of bedsores.

*Material equipment:*disinfectant solutions, cotton swabs. Students should know the following rules for preventing pressure ulcers:

1. It is necessary to turn the patient on his side several times a day, if his condition allows.
2. Shake the sheet several times a day to prevent crumbs in the bed.
3. On bedding and underwear there should not be - folds and patches.
4. Patients who are in bed for a long time on their backs need to put an inflatable rubber circle, put on a pillowcase, so that the sacrum is under its opening.
5. Wipe the skin daily with one of the disinfectant solutions; camphor mixture, camphor alcohol, 40% ethyl alcohol solution, cologne, vinegar solution, (1 tablespoon per 300 ml of water), and if not, wipe the skin with a towel moistened with warm water, then wipe it dry, lightly rubbing.
6. When hyperemia of the skin appears, it is good to rub the skin with a dry towel to improve local blood circulation, quartz the skin in places of maceration, you can wash it with cold water and soap and wipe it with alcohol, then powder it.

*Treatment:*when blisters appear, they are smeared with an alcohol solution of brilliant green, then a dry bandage is applied. If necrosis is limited, dead tissue is removed and the wound is closed with a sterile drape moistened with 1% potassium permanganate solution.

Care of patients with urinary and fecal incontinence.

*Lesson equipment:*rubber bedpan, glass urinal, permanent urinals for walking patients (rubber bags of various shapes), catheters (soft-rubber and hard metal), disinfectant solutions for washing the bladder).

Urinary incontinence: Patients with urinary incontinence contaminate bedding and underwear and it begins to smell like urine, which negatively affects the rest of the patients in the ward. Patients suffering from urinary incontinence should be treated with particular care, as they develop bedsores and skin ulcers very quickly. Bedridden patients should

Always use rubber bedpans that need to be emptied periodically. The patient should make a toilet several times a day and wipe the perineal area dry, often change his bedding and underwear. They need to limit their fluid intake. Walking patients suffering from urinary incontinence should use permanent urinals, which are rubber bags of various shapes. They are attached to the external genitalia and attached to the belt. The accumulated urine is periodically poured out, the urinal is thoroughly washed and reattached. Particular attention should be paid to timely urination in patients with spinal injury, since paralysis of the pelvic organs manifests itself in a violation of independent urination.

Patients with involuntary defecation are placed in a separate room. The nutrition of such patients should be high-calorie and easily digestible. Having provided the needs of the body, such food provides a minimum of residues for the formation of feces. Every morning they empty their bowels by means of an enema.

Such patients periodically lie on a rubber vessel or on a specially equipped bed. Such patients require frequent washing, wiping, changing linen.

Change of underwear and bed linen.

*Material equipment:*a set of clean underwear and bed linen. It is necessary to show students on a doll (dummy) how to change linen,

the students get to work, knowing that the change of underwear and bed linen is

Ditsya regularly, at least once a week, after a hygienic bath. In some cases, linen is changed additionally as needed. In no case should clothes be dried on central heating radiators and again given to the patient. Dirty linen is collected in oilcloth bags and immediately taken out of the ward. Prior to being sent to the laundry, linen should be kept in a specially designated room in bins or chests. Changing bedding, especially for seriously ill patients, should be done by a nurse with the help of a junior nurse.

Depending on the condition of the patient, there are various ways to change bed linen. If the patient is allowed to walk, he can change bedding himself with the help of a junior nurse. When the patient is allowed to sit, he is transferred from bed to a chair, the junior nurse makes the bed for him. More complicated is the method of changing bed linen for lying patients. To do this, a dirty sheet is rolled up with a roller from the side of the head and legs and carefully removed. A clean sheet, rolled up like a bandage on both sides with rollers, is carefully brought under the sacrum.
sick and. then, straighten in the direction of the head and legs. The sheet should not have scars, patches, folds.

Another way: the patient is moved to the edge of the bed, the dirty sheet is rolled up along the length in the form of a bandage, in its place a clean one is straightened, on which the patient is shifted, and on the other side the dirty one is removed and the clean one is straightened.
The change of bed linen for seriously ill patients must be done with great care and skill.

When changing underwear for seriously ill patients, the nurse should bring her hands under the sacrum of the patient, grab the edges of the shirt and carefully bring it to the head, then raise both hands of the patient and transfer the rolled shirt at the neck over the patient's head. After that, the patient's hands are released. The patient is dressed in the opposite direction: first they put on the sleeves of the shirt, then throw it over the head and, finally, straighten it under the patient. For seriously ill patients, for example, for patients with myocardial infarction, there are special shirts (undershirts) that are easy to put on and take off. If the patient's arm is injured, first remove the shirt from the healthy arm, and then from the patient. Put on a shirt on a sore hand, and then on a healthy one.

test questions

1. List the basic requirements for personal hygiene of the patient.
2. What are the features of caring for the seriously ill?
3. How is the patient's morning toilet performed?
4. What is daily skin care?
List the steps you need to take to prevent bed sores.
5. How can bed and underwear be changed for a seriously ill person?
6. What is the care of the patient's hair? How to wash the patient's head in bed?
7. What is the daily toilet of the mouth, ears, nose and eyes in seriously ill patients?
8. What measures should be taken when pressure sores appear in seriously ill patients?

Final controlis carried out by students performing the learned skills on each other or phantoms under the control and correction of the teacher.

TEST CONTROL

1.What contributes to the spread of nosocomial infections? a) violation of the rules of asepsis and antisepsis in the hospital;
b) the appearance of bedbugs and cockroaches in the department;
c) the appearance in the department of patients with pediculosis.

2. What disinfectant solutions are used for wet cleaning? a) 0.5% bleach solution;
b) 10% bleach solution; c) 1% solution of chloramine;
d) 3% hydrogen peroxide solution;
e) potassium permanganate solution.

3. How often should rooms be wet cleaned? a) daily;
b) as needed;
c) as needed, but at least twice a day.

4. What contributes to the appearance of cockroaches in hospital departments?
a) untimely disposal of food waste and poor cleaning of the catering facilities; b) cracks in walls and baseboards;
c) nosocomial infections;
d) insufficient sanitation of patients.

5. For what purpose are patients with diseases of the cardiovascular system suffering from severe shortness of breath recommended to take a semi-sitting position in bed?
a) in this position it is more convenient to feed;
b) blood stasis in the pulmonary circulation decreases; c) the risk of bedsores is reduced.

6. What is the main purpose of a functional bed?
a) allows you to give the patient the most advantageous and comfortable position for him; b) it can be easily and quickly moved;
c) makes it easier for medical staff to perform their functions of treatment and care

7. How often should underwear and bed linen be changed? a) 1 time in 10 days;
b) weekly, after taking a bath or shower;
c) as it gets dirty, but at least once every 10 days.

8. Can bedsores occur when patients are forced to sit?
a) they cannot, since bedsores are formed only when the patient is positioned on the back, on the stomach or on the side;
b) can, in the area of the ischial tuberosities;
c) they cannot, because in a sitting position, a large layer of subcutaneous fat and muscle tissue remains between the bone protrusions and the mattress.

9.Why can't the backing pad be inflated too much? a) it will quickly fail;
b) it will be difficult for him to give a stable position in bed; c) he must change his shape with the movements of the patient.

10. What should be done in the initial stage of the formation of bedsores?
a) strengthen all preventive measures (maintenance of the bed, changing the position of the patient, careful dressing of the skin);
b) use various biologically active ointments;

c) perform surgical treatment;
d) assign physiotherapy to the affected area (UHF, UFO)
e) treat the affected areas with a 1% solution of brilliant green, a strong solution of potassium permanganate, 5-10% iodine solution.

11. A seriously ill patient has increased brittleness and slight hair loss. Does he need to brush his hair?
a) always and as often as possible;
b) try not to comb your hair at all;
c) comb as usual, but use a rare comb.

12. A patient with pneumonia receiving penicillin developed white patches on the oral mucosa. What needs to be done?
a) strengthen oral care;
b) take a smear from the oral mucosa for bacteriological examination; c) recommend the patient to brush their teeth more often;
d) recommend to the patient to remove dentures;
e) prescribe antifungal drugs (for example, nystatin).

13. Why is it inappropriate to instill more than 1-2 drops of medicinal solutions into the eyes? a) eye drops contain potent substances;
b) more than 1 drop of the solution is not retained in the conjunctival cavity;
c) a large amount of fluid adversely affects the condition of the conjunctiva.

14. Is it necessary to recommend the patient to tilt his head back with nosebleeds?
a) yes, because this will stop the bleeding faster;
b) should be recommended only for very severe nosebleeds;
c) not necessary, as the bleeding will not stop; blood will drain along the back wall of the nasopharynx, which makes it difficult to correctly assess the dynamics of bleeding.

TOPIC 5: NUTRITION OF PATIENTS.

educational goal: to teach students a tactful attitude towards patients when cleaning wards, utility rooms, when feeding seriously ill patients.

Lesson equipment: drinkers, probes for clinical nutrition, microclysters, medical equipment of the therapeutic department, stands, tables on the topic.

The student must know:
1. Arrangement and equipment of chambers.
2. General and sanitary regime of the therapeutic department.
3. Internal order. Organization of patient visits.
4. Types of medical nutrition.
5. Artificial nutrition of patients: with the help of probes, through the fistula of the stomach, parenterally.
6. Organization of the nurse's office.

The student must be able to:
1. To carry out wet cleaning fell, t with the preparation of 0.5 and 1% solution of bleach.
2. Monitor the sanitary condition of the bedside tables.

3. To carry out feeding of seriously ill patients and giving drink from a sippy cup.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. Goals and objectives of diet therapy.
Dietology is the study of rational nutrition of a healthy and sick person.
2. Basic principles of clinical nutrition.
3. Types of medical nutrition. 4.
Characteristics of dietary tables.
5.Organization of food.
6. Distribution of food to the sick.
7. Monitoring patient visits and transfers. Control over the sanitary condition of bedside tables.
8. Feeding the seriously ill.
9. Types of feeding patients: a) active
b) passive
c) artificial
10. artificial food. Indications for its use. Types: a) enteral (probe) b) parenteral
11. Ways of artificial feeding of patients: a) through a probe
b) through the fistula of the stomach c) nutrient enema
d) intravenous administration of medicinal substances e) s/c administration of medicinal substances
12. Feeding patients with nutritional enemas.

6. Acquaintance with the therapeutic department, distributing food.
7. Independent work in the wards.

Questions to control the initial level of knowledge

1. Name the types of feeding patients.
*Answer:*1. Active
2. Passive.
3. Artificial.

2. Name the ways of artificial feeding of patients.
*Answer:*1. Through a probe.
2. Nutrient enema.
3. Through a gastric fistula.
4. In / in the introduction of drugs.
5. S / to the introduction of medicinal substances.

3. How many treatment tables are there? Answer: 15 tables.

4. Which table is assigned:
a) in diseases of the cardiovascular system?

b) in diseases of the liver?
c) in diseases of the stomach? d)
with kidney disease?
*Answer:*1. 10 table (diet 10)
2. 5 table.
3. 1 table.
4. 7 table.

NUTRITION OF THE SICK

Rational nutrition of the patient is one of the most important conditions for proper and effective care and has a direct therapeutic value.

Dietology is the science of rational nutrition of a healthy and sick person. Diet determines the diet, composition and amount of food. Diet therapy aims to restore metabolic disorders, influence the disease process, eliminate products that adversely affect diseased organs, and all this improve the condition of patients.

An important element of nutrition is the regime, which should be understood as the observance of dietary prescriptions (tables), the intervals between individual meals; the volume of servings, taste and physical properties of food also matter. The temperature of hot dishes should be about 60 ° C, and cold 10-15 ° C.

We should not forget the importance of appetite and everything that contributes to it. Of no small importance is the aesthetic design of dishes, table setting, as well as the creation of a calm atmosphere during meals. Tables in the dining room should be designed for 2-4 people, and combine patients who are on the same diet.

For various categories of patients in our country, the Institute of Nutrition of the Academy of Medical Sciences has developed 15 basic diets, also called tables. For each diet (medical table) there are medical indications, which are taken into account by the attending physician.

DIET No. 1a

INDICATION: peptic ulcer of the stomach and duodenum during a sharp exacerbation (in the first 8-10 days of exacerbation); acute gastritis and exacerbation of chronic gastritis in the first 2 days.
GENERAL CHARACTERISTICS: a sharp limitation of chemical and mechanical stimuli of the mucous membrane of the receptor apparatus of the upper gastrointestinal tract; substances that linger in the stomach for a long time, stimulants of gastric secretion. Eating fractional b-7 times a day, table salt up to 8 g per day.
LIST OF RECOMMENDED DISHES: slimy soups from cereals (oatmeal, pearl barley, rice, semolina) with the addition of egg-milk mixture, cream, butter. Meat and fish steam soufflés, puree from lean meats, poultry and fish without fascia, tendons, skin. Pureed oatmeal, semolina, rice, buckwheat cereals with milk or cream added. Soft-boiled eggs, steam omelettes, beaten egg white dishes. Kissels and jellies from sweet varieties of berries and fruits, sugar, honey, sweet fruits and berry juices mixed with water and sugar. Whole milk, condensed milk, cream, freshly prepared unleavened cottage cheese. Tea with milk is not strong, rosehip broth with sugar. Butter and olive oil are added to ready meals.
PROHIBITED: vegetable dishes and side dishes, mushrooms, bread and bakery products, lactic acid products, spices, snacks, coffee.

DIET #1 6

INDICATIONS: exacerbation of peptic ulcer of the stomach and duodenum (10-20th day of the disease), acute gastritis (2-3rd day).
GENERAL CHARACTERISTICS: moderate mechanical, chemical and thermal sparing compared to table 1a. Eating fractional 6-7 times, table salt up to 8-10 g per day

LIST OF RECOMMENDED DISHES: to the products of diet 1a add crackers from white bread of the highest grade, thinly sliced and not toasted; low-fat varieties of meat, poultry and fish without tendons and skin, chopped steam-cooked or boiled in water meatballs, quenelles, etc.

DIET #1

INDICATIONS: peptic ulcer of the stomach and duodenum during the period of exacerbation without pronounced symptoms of "irritable stomach"; chronic gastritis with preserved secretion during the period of exacerbation.

GENERAL CHARACTERISTICS: moderate mechanical, chemical sparing of the mucous membrane and the receptor apparatus of the gastrointestinal tract, restriction of gastric secretion stimulants and substances that linger in the stomach for a long time. Eating 5-6 times, table salt up to 8-10 g per day.

LIST OF RECOMMENDED DISHES: yesterday's wheat bread, dry biscuit. Soups on a slimy broth with the addition of mashed boiled vegetables and cereals, egg-milk mixture, cream. Low-fat varieties of fish, meat and poultry are mostly minced, steam cooked or boiled in water. Boiled and mashed vegetables (mashed potatoes, steam soufflés). Pureed cereals (except wheat) with milk or cream added, pureed steam puddings, boiled vermicelli. Soft-boiled eggs, steam omelettes, dishes made from beaten egg whites (snowballs, meringues). Kissels, jellies, mousses, pureed compotes from sweet varieties of berries and fruits, apple marmalade. Whole milk, condensed milk, cream, fresh sour cream, fresh low-fat cottage cheese. Weak tea with milk or cream, rosehip broth with sugar. Butter and vegetable oil (olive, sunflower).

FORBIDDEN: white cabbage, turnip, radish, swede, radish, sorrel, spinach, onion, garlic, mushrooms, legumes, spices and coffee.

DIET #2

INDICATIONS: acute gastritis, enteritis and colitis during convalescence as a transition to rational nutrition; chronic gastritis with secretory insufficiency, enteritis, colitis in the period of stable remission.

GENERAL CHARACTERISTICS: a full-fledged physiological diet with the exception of foods and dishes that are stressful for the gastrointestinal tract, linger in the stomach for a long time, difficult to digest, but contributing to an increase in gastric secretion. Eating fractional 4-5 times a day, table salt up to 15 g per day.

LIST OF RECOMMENDED FOOD: yesterday's wheat bread, 1-2 times a week, a limited number of lean buns or baked pies. Soups on fat-free meat and fish broth with various cereals (except millet), noodles, vegetables. Low-fat varieties of meat and poultry, boiled in pieces or minced, fried without breading. Fish lean piece chopped, boiled, baked, fried without breading. Vegetables boiled, stewed and baked in slices, in the form of mashed potatoes, vegetable casseroles. Loose porridges (except millet and pearl barley) on water with the addition of milk.

Soft-boiled eggs, steamed, baked and fried omelettes, beaten egg white dishes. Kissels, compotes, jellies, mousses from sweet varieties of berries and fruits, raw sweet varieties of berries and fruits (strawberries and wild strawberries), baked apples, marmalade, sugar. Fresh milk only in dishes, fermented milk products (acidophillin, kefir), fresh, non-acid raw and baked cottage cheese, fresh sour cream no more than 15 g per dish. Dill, parsley, cinnamon, cloves, vanilla, bay leaves in small quantities, allspice, meat, fish, sour cream and vegetable broth sauces. Tea, coffee with milk or cream, black coffee, decoction of wild rose hips, blackcurrant. Butter and sunflower oil.

FORBIDDEN: legumes and mushrooms.

DIET #3

INDICATIONS: chronic bowel disease with a predominance of constipation in the period of mild exacerbation and remission.
GENERAL CHARACTERISTICS: increase in the diet of foods that enhance motor function. Eating 3 times, table salt up to 12-15 g per day.
LIST OF RECOMMENDED DISHES: wheat bread made from wholemeal flour or with the addition of wheat bran, with good tolerance, black bread (table, Orlovsky, rye) is allowed. Soups on weak fat-free meat, fish broth, vegetable broth (mainly with vegetables). Meat of low-fat varieties - beef, veal, chicken, etc. Low-fat fish (perch, bream, navaga, cod, carp, pike) boiled, steamed, aspic, in pieces, sometimes chopped. A variety of vegetables: raw and boiled for garnishes, in the form of salads, vegetable casseroles (beets, carrots, tomatoes, pumpkin, etc.). Friable cereals (buckwheat, pearl barley). Soft-boiled eggs or in the form of steam omelettes, no more than 2 pieces per day. Fresh, ripe, sweet fruits and berries, raw and in dishes in increased quantities. Milk in dishes and for tea. Acidophilus, kefir, fermented baked milk, curdled milk, etc. Mild cheese. Tea, rosehip broth, sweet fruit juices (especially plum, apricot), vegetable (tomato, carrot, etc.). Butter and olive oil in dishes.
FORBIDDEN: Vegetables rich in essential oils (turnip, radish, onion, garlic, radish, and mushrooms.)

DIET #4

INDICATIONS: acute and chronic bowel diseases during profuse diarrhea and pronounced dyspeptic phenomena.
GENERAL CHARACTERISTICS: a sharp limitation of mechanical and chemical irritants of the mucous membrane and the receptor apparatus of the gastrointestinal tract with the exclusion of foods and dishes that enhance the motor function of the intestine. Food intake is fractional 5-6 times, table salt 8-10 g per day.
LIST OF RECOMMENDED DISHES: crackers from the highest grades of white bread, thinly sliced. Soups on a low fat-free meat or fish broth with the addition of slimy decoctions, meat or fish quenelles steamed or boiled in water, meatballs, egg flakes. Steam or water-boiled meat and fish cutlets, quenelles, meatballs, boiled meat or fish soufflé. Lean meat in minced form, boiled or steamed, Poultry and fish lean in natural form or minced, boiled or steamed. Pureed porridges on water or fat-free meat broth (rice oatmeal, buckwheat, semolina). Eggs (with good tolerance) no more than 2 pieces per day in the form of steam omelettes. Kissels, jelly made from blueberries, bird cherry, ripe pears and other berries and fruits rich in tannins. Natural tea, black coffee, cocoa on the water, decoction of wild rose, blueberries, bird cherry.
LIMITED: sugar up to 40 g, butter 40-50 g, cream.
FORBIDDEN: pasta, milk, vegetable fiber, sauces, spices, smoked meats, snacks, pickles, legumes.

DIET #5

INDICATIONS: chronic hepatitis with a benign and progressive course and in the stage of compensation; chronic cholecystitis during exacerbation and remission, cholelithiasis. Acute hepatitis and cholecystitis during the recovery period.
GENERAL CHARACTERISTICS: maximum sparing of the liver. Strong stimulants of the secretion of the stomach and pancreas (extractive substances, products rich in essential oils), fried foods containing products of incomplete breakdown of fat (acroleins and aldehydes), refractory fats, foods rich in cholesterol, purines are excluded.
High content of carbohydrates. Eating fractional 5-6 times a day, table salt 8-10 g per day.
LIST OF RECOMMENDED DISHES: yesterday's wheat and rye bread, croutons,

dry biscuit. Soups on vegetable broth with various cereals and vegetables, dairy, fruit. Low-fat varieties of meat and poultry - boiled, baked after boiling. Low-fat boiled or steamed fish, in pieces and chopped. Vegetables and herbs in raw, boiled and baked form (salads, vinaigrettes), non-sour sauerkraut. Egg white dishes (steamed and baked egg white omelets, snowballs, meringues). Various sweet varieties of berries and fruits, fresh and dried, in kind and in dishes. Sugar, honey, marmalade, marshmallow, toffee, jam, marshmallow. Fresh milk in its natural form in dishes, fermented milk drinks, fresh cottage cheese, cheese. Eggs in dishes. Tea and coffee are weak with and without milk; fruit, berry, vegetable juices, rosehip broth. Butter and vegetable oil (do not fry, add to ready meals).
FORBIDDEN: turnip, radish, radish, sorrel, spinach, onion, garlic, mushrooms, spices, cocoa.

DIET number 5a

INDICATIONS: acute hepatitis and cholecystitis, exacerbations of chronic hepatitis, cholecystitis and cholelithiasis with concomitant diseases of the stomach and intestines. Acute and chronic pancreatitis.
GENERAL CHARACTERISTICS: the same as in diet No. 5, but with mechanical and chemical sparing of the stomach and intestines.
LIST OF RECOMMENDED DISHES: yesterday's wheat bread, dry biscuit. Soups on a slimy broth with mashed cereals and vegetables with the addition of an egg-milk mixture and butter or on a vegetable broth with well-boiled cereals (rice, semolina) and finely chopped vegetables (potatoes, carrots, zucchini, etc.) , vermicelli.
Steam meat cutlets, meat soufflé. Boiled lean fish, steam soufflé from it. Vegetables boiled, steamed, mashed. Various porridges (except millet and barley) on water and with the addition of "milk. Protein omelets steamed and baked, snowballs, meringues. Kissels and pureed compotes, jellies, mousses. Soufflé from fresh and dry sweet varieties of berries and fruits, sugar, honey, baked apples and pears. Milk only in dishes, lactic acid products and fresh cottage cheese. Tea and coffee with milk, rosehip broth, fruit and berry juices from sweet varieties of berries and fruits mixed with hot water. Butter and vegetable oil only in dishes.
FORBIDDEN: snacks, spices, cabbage, turnip, radish, sorrel, spinach, cocoa.

DIET number 6

INDICATIONS: gout, uric acid diathesis, oxaluria.
GENERAL CHARACTERISTICS: restriction of foods rich in purines, oxalic acid, calcium, restriction of proteins, fats, carbohydrates. Eating 3-4 times, table salt up to 6-8 g.
LIST OF RECOMMENDED DISHES: low-fat beef, lamb, pork, fish. Milk, dairy and lactic acid products, eggs are not limited. Potatoes, rice, pasta, cereal dishes, carrots, lettuce, melon, cucumbers, cabbage, onions, tomatoes, fruits (grapes, plums, cherries, pears, peaches, etc.), berries are recommended.
LIMIT: green peas, beans, lentils, sorrel, spinach, lettuce, rhubarb, radish, mushrooms.
PROHIBITED: offal (liver, kidneys, lungs, brains), meat broth, meat of young animals (lamb, veal, chickens, piglets), tea, coffee, cocoa, chocolate, spicy cheeses, canned food, sausages.

DIET number 7

INDICATIONS: acute nephritis, in the period of convalescence, chronic nephritis with minor changes in the urine sediment.
GENERAL CHARACTERISTICS: restriction of protein and table salt to 3-5 g; liquids -

up to 800 ml - 1 l; extractives, hot spices.
LIST OF RECOMMENDED DISHES: white and bran bread without salt, vegetarian soups without salt with vegetables and cereals. Lean meats and poultry. Fish lean piece, chopped, mashed, boiled. Vegetables in natural, boiled form, vinaigrettes, salads without salt. Cereals and pasta in the form of cereals, puddings. Egg - one per day. Fruits and berries in any form, honey, sugar, jam. Milk and dairy products, cottage cheese. Butter and vegetable oil.
LIMIT: cream, sour cream.
PROHIBITED: legumes.

DIET number 7a

INDICATIONS: acute nephritis, exacerbation of chronic nephritis with pronounced changes in the urine.
GENERAL CHARACTERISTICS: restriction of salt to 1-2 g and liquid to 600-800 ml, protein, maximum fortification of the diet due to the introduction of fruit and vegetable juices and the addition of vitamin C.
LIST OF RECOMMENDED FOOD: the same products as in diet number 7, but meat and fish are limited to 50 g per day.
FORBIDDEN: soups.

DIET number 8

INDICATIONS: obesity.
GENERAL CHARACTERISTICS: 20-50% energy restriction (depending on the degree of obesity and physical activity) mainly due to carbohydrates and fats with an increase in protein. Restriction of table salt to 3-5 tons and liquids to 1 liter. Eating 5-6 times.
LIST OF RECOMMENDED DISHES: yesterday's simple rye bread - 100-150 g. Vegetarian soups with vegetables and cereals, meat, fish. Meat, fish, with vegetable oil, buckwheat porridge. Milk and lactic acid products (fat-free). Raw fruits and berries and juices from them. Tea and coffee.
LIMIT: butter, sour cream, potatoes. FORBIDDEN: flavoring
seasonings.

DIET #9

INDICATIONS: diabetes mellitus.
GENERAL CHARACTERISTICS: diet with the exclusion of water-soluble carbohydrates, restriction of animal fats. The diet helps to eliminate metabolic disorders caused by an insufficient amount of insulin in the body. Meals 4-5 times, table salt 12 g per day.
LIST OF RECOMMENDED DISHES: plain tinned rye bread, xylitol biscuits. Soups on vegetable broth with vegetables and cereals. Buckwheat and oatmeal porridge. Potatoes, zucchini, cucumbers, etc. No more than 2 eggs per day. Lean meats, poultry, fish..
Xylitol compote, fruit juices
and vegetables, fruits and berries (prunes, apricots, watermelons, strawberries, raspberries). Whole milk, sour cream in dishes. Butter in dishes, sunflower and olive oil. Sweets up to 30-50 g per day (sugar is replaced with sorbitol or better with xylitol).
LIMIT: legumes, cereal dishes, pasta.

DIET #10

INDICATIONS: exacerbation of cardiovascular diseases with circulatory disorders of 1-HA degree (rheumatism, in the active phase, hypertension, coronary heart disease, etc.), diseases of the kidneys and urinary tract without impaired nitrogen excretion of the kidneys.
GENERAL CHARACTERISTICS: moderate restriction of proteins, fats and carbohydrates in conditions

yakh regime with limited mobility. Limiting the intake of table salt to 4-7 g (with a norm for a healthy body of 12-15 g), liquids to 1-1.2 liters, and with edema - 0.8 liters.
LIST OF RECOMMENDED DISHES: coarse gray bread, crackers. Cereal, dairy, vegetarian soups, borscht, low-fat meat broth once a week. Lean meats; poultry and fish in boiled and baked form. Oatmeal and buckwheat porridge, puddings and casseroles. Protein omelet. Vegetable vinaigrettes and salads (except for sorrel and mushrooms). Fruits, berries, juices. Fats per day up to 50 g, of which 50% are vegetable. Sugar up to 40 g per day. Weak tea.
LIMIT: strong tea, coffee, cocoa, radish, radish, garlic, onion, legumes. LIST OF RECOMMENDED DISHES: meat, fish, bread and cereal products.
LIMIT: milk and dairy products, vegetables, savory snacks, spices, etc. PROHIBITED: fatty meat, fish, pastry, brains, kidneys, liver, liver sausage, salty snacks, canned food, alcohol, caviar.

DIET #11

INDICATIONS: pulmonary tuberculosis, exhaustion and decreased reactivity of the organism, during convalescence, after infectious diseases, anemia, various suppurative processes. Meal 5 times, table salt up to 12-16 g.
GENERAL CHARACTERISTICS: a diet with an increased energy value, an increase in animal proteins, lipotropic substances, calcium, phosphorus and vitamins.
LIST OF RECOMMENDED DISHES: a wide variety of products. It is necessary that at least half of the protein comes from meat, fish, cottage cheese, milk, eggs.
FORBIDDEN: Poultry meat (duck and goose).

DIET #13

INDICATIONS: acute infectious diseases, postoperative period (except abdominal operations).
GENERAL CHARACTERISTICS: restriction of proteins, fats, carbohydrates, chemical and mechanical irritants of the mucous membrane and the receptor apparatus of the gastrointestinal tract. The food is predominantly liquid with limited vegetable fiber, milk, and snacks. Eating 6-8 times, depending on the patient's condition, in small portions, table salt up to 8 g.
LIST OF RECOMMENDED DISHES: white bread and crackers. Meat broth, meat soufflé. Soup-puree from meat on a mucous broth. Soft-boiled eggs, scrambled eggs. The porridges are mashed. Fruit, berry juices, fruit drinks, kissels. Butter.

DIET #14

INDICATIONS: Phosphaturia with stone formation.
GENERAL CHARACTERISTICS: the content of proteins, fats, carbohydrates, within the limits of physiological requirements. The diet includes acid-oriented foods and sharply limits alkaline-oriented and calcium-rich foods; limit food substances that excite the nervous system. Meal 4 times, table salt up to 15 g.

DIET #15

INDICATIONS: all diseases in the absence of indications for the appointment of a special diet.
GENERAL CHARACTERISTICS: a physiologically complete diet with twice the amount of vitamins and the exclusion of fatty meat dishes. Eating 4-5 times, table salt up to 12-15g.
LIST OF RECOMMENDED DISHES: white and rye bread. A wide variety of soups (milk soups in fat-free broth with cereals, vegetables, pasta) Low-fat meats, poultry. Any fish. Eggs and dishes from them. Various cereals and pasta. Vegetables and fruits are different. Milk and dairy products. Sauces and spices are different. Tea, coffee, cocoa,

fruit juices. Butter and vegetable oil.

DIET #16

INDICATIONS: appointed for 2-3 days after operations on the gastrointestinal tract; on the lungs, mediastinum, heart - on the 1st day, with feverish, semi-conscious states (traumatic brain injury).
GENERAL CHARACTERISTICS: low-calorie diet, sharply limit the content of proteins, fat, salt. The diet includes only liquid and jelly-like meals. Eating every 2 hours, around the clock, table salt 1.5-3 g.
LIST OF RECOMMENDED DISHES: tea with sugar, fruit and berry kissels. Jelly; rosehip broth with sugar, rice broth, weak broth, various juices diluted with sweet water.

Patients, especially the elderly, may often suffer from a combination of various diseases, such as peptic ulcer and chronic cholecystitis, cirrhosis of the liver and diabetes mellitus. In such cases, patients should select individual diets (tables), coordinating their composition with the hospital dietician and using products available at the catering department for this.

For some patients, in order to normalize certain metabolic disorders (for example, fat metabolism, uric acid metabolism, etc.), so-called fasting days are recommended, usually prescribed 1-2 times a week. The diet during such fasting days includes, as a rule, any one type of product (fruit, cottage cheese, milk, etc.) and is most often characterized by a reduced calorie content. For example, in case of hypertension, atherosclerosis, obesity, cottage cheese (400-600 g of cottage cheese and 2 glasses of milk or kefir per day) or apple (1-1.5 kg of apples per day) fasting days are used, and the entire volume of food is distributed evenly. portions for 5-6 receptions. Complete fasting is a very responsible and far from safe measure; it can be used only in the conditions of specialized departments and according to strict indications. It is especially unacceptable to use therapeutic fasting on your own, without constant medical supervision. Cases of severe complications are described, for example, profuse bleeding from acute stomach and duodenal ulcers that occurred against the background of a long-term “therapeutic” fasting, carried out independently, at home.

In the organization of nutrition of patients in the hospital, both medical workers and catering workers take part.

The doctor conducting the examination and treatment of the patient prescribes a certain diet for him, making an appropriate note in the medical history.
The ward nurse makes portions (Fig.), In which she indicates the total number of patients receiving one or another table of therapeutic nutrition.

The doctor conducting the examination and treatment of the patient prescribes a certain diet for him, making an appropriate note in the medical history.
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Based on the summation of the data of all portions at the catering department, the required number of required dishes is prepared.

Form N 1-84

(name of institution)

Portioner

for the nutrition of patients_____200____year

1. Information about the presence of patients
as of ———— person _____ 200__year

Name pa-lats (branches) and nutritional standards	Numbe r of patients	including diets.										

Rice. Portion.

The general daily management of the nutrition of patients (usually in large hospitals) is carried out by a dietitian who is responsible for the correct formulation and use of therapeutic diets. The dietitian, in addition, provides advice to the doctors of the departments regarding the most optimal choice of a therapeutic nutrition table. The direct management of the work of the catering department (quality control of products, their laying, cooking, delivery to departments, etc.) is assigned to the hospital dietitian. Distribution of ready-made food is carried out only after sampling by the doctor on duty of the hospital.

Test questions.

1. List the goals and objectives of diet therapy.
2. Give a brief description of diet tables.
3. How is food distributed to the sick?
4. How are critically ill patients fed?
5. List the types of artificial nutrition, indications for its use.
6. What are the features of diet therapy for patients who are in bed for a long time.

TEST CONTROL

1. What should be the ratio of proteins, fats and carbohydrates in the diet of patients? a) 1:1:4;
b) the content of proteins should prevail;
c) the ratio of proteins, fats and carbohydrates should be determined by the nature of the disease.

2. Is it rational to increase the energy value of the diet by increasing the protein content in it?
a) yes, because 1 g of proteins gives the body 4.1 kcal;
b) no, because 1 g of protein provides significantly less energy than 1 g of fat;
c) no, since proteins are mainly used as a plastic material.

3.What is the importance of including dietary fiber in the diet? a) the energy value of food increases;
b) the calorie content of the diet is reduced; c) the function of the digestive organs is normalized;
d) the activity of the intestinal microflora is normalized;
e) the intake of microelements into the body increases.

4. What dietary recommendations would you give to a patient with circulatory insufficiency?
a) restriction of fluid intake;

b) reducing the consumption of table salt; c)
mechanical sparing;
d) reducing the calorie content of the diet.

5. What recommendations would you use when compiling a diet for a patient with peptic ulcer?
a) frequent, fractional meals;
b) restriction of fluid intake;
c) mechanical and chemical sparing;
d) reducing the caloric content of the diet;
e) increasing the protein content in the diet; e)
organization of fasting days.

6. What dietary recommendations would you give to a patient with chronic renal failure?
a) decrease in fluid intake; b) increase in
fluid intake;
c) a decrease in the protein content in the diet; d) increase
the protein content in the diet.

7.List the functions of a dietitian in catering for patients: a) compiling portions;
b) control of the layout menu;
c) sampling;
d) advisory assistance to doctors of departments in matters of clinical nutrition; e)
control of the correctness of the preparation and application of therapeutic diets.
8.What are the roles of a dietitian in catering to patients? a) compiling
portions;
b) sampling;
c) control over the quality of products and their laying; d) control of the
delivery of prepared food to the departments.

9.In what cases is artificial nutrition of patients used through a nasogastric tube? a) with burns,
inoperable tumors of the esophagus and pharynx;
b) after operations on the
esophagus; c) in violation of
swallowing;
d) with fractures of the jaws;
d) in an unconscious state.

10. In what cases is artificial nutrition of patients used through a gastrostomy? a) with
swallowing disorders after cerebrovascular accidents
b) after operations on the esophagus;
c) with inoperable tumors of the esophagus; d)
with jaw injuries;
e) in cases of refusal to eat due to mental illness.

12. What is parenteral nutrition?
a) nutrition, which is carried out artificially; b) the introduction
for the purpose of feeding mixtures of a certain composition;
c) the introduction of various substances for the purpose of nutrition, bypassing the gastrointestinal tract.

TOPIC 6: BODY TEMPERATURE AND ITS MEASUREMENT.

educational goal: to teach students to follow the principles of medical ethics of deontology in thermometry, to teach students the technique of measuring body temperature, its graphic recording in a temperature sheet, to teach students to differentiate types of fever and provide emergency assistance to febrile patients.

Lesson equipment: a set of medical thermometers, temperature sheets, stands, tables on the topic.

The student must know:

1. Storage of thermometers and their disinfection.
2. Basic methods of temperature measurement. Necessary measures to ensure correct temperature measurement.
3. Measurement time. Registration of temperature measurement results
4. Age features of temperature reactions.
5. Care of febrile patients.

The student must be able to:

1. Measure body temperature.
2. Record measurement results in a temperature sheet.
3. Care for febrile patients depending on the period of fever.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. Who first proposed a medical thermometer.
2. Name the types of thermometers that are used to measure body temperature in humans.
3. Storage of thermometers and their disinfection.
4. Thermometry. On what processes does the body temperature in a person depend?
5. Basic methods of temperature measurement. Necessary measures to ensure correct temperature measurement.
6. Technique for measuring body temperature.
7. Technique for measuring body temperature in malnourished and seriously ill patients.
8. Registration of temperature measurement results in a temperature sheet.
9. Age features of temperature reactions.
10. Fever, types of fevers according to the height of temperature, according to the duration, according to the nature of temperature fluctuations.
11. Types of fevers in a graphic image.

6. Clinical analysis of patients with various types of fever.
7. Independent work of students in the department with patients.
8. Discussion of the results of independent work.
9. Control and correction of the final level of assimilation of educational material (solution of situational problems).

Tests-tasks to control the initial level of knowledge.

1. What are the methods of measuring body temperature?

*Answer:*Body temperature can be measured with a mercury medical thermometer with a Celsius scale, an electrothermometer, a thermometer based on liquid crystals.

2. Why is a medical thermometer called maximum?

*Answer:*A medical thermometer is called maximum because the mercury column does not fall after cooling when measuring temperature.

3. How; Should I keep a medical thermometer?

*Answer:*The medical thermometer is stored in a glass, on the bottom of which cotton wool is placed, a disinfectant solution (0.5% chloramine solution) is poured.

4. What is the technique for measuring body temperature?

*Answer:*1. Before measuring body temperature, thoroughly wipe the thermometer, shake until the mercury level is below 35 ° C.

2. Wipe the armpit with a dry towel.

3.Place the thermometer like this. so that the mercury tank is in contact with the body on all sides.

4. The duration of the measurement is 15 minutes.

5. Record readings on the temperature sheet.

5. How many times and at what time of the day is the body temperature measured in the hospital?

*Answer:*In the hospital, body temperature is measured twice: in the morning at 8 o'clock and at 16-18 o'clock in the evening.

6. How is a temperature curve drawn?

*Answer:*The temperature curve is obtained by connecting the morning and evening temperature points with straight lines during the observation time.

7. What temperature is considered normal in the morning and evening?

*Answer:*Normal body temperature ranges from 36 to 36.4℃ in the morning and from 36.6 to 37℃ in the evening.

8. In what range can the morning and evening temperature fluctuate in a healthy person? Answer: Morning and evening temperatures fluctuate within a degree.

9. What is the rise in temperature called?

*Answer:*An increase in temperature is called a fever

10. What are the temperature drops?

*Answer:*There are two variants of temperature drop: 1 - crisis, 2 - lysis.

11. What parts of the body can be measured?

*Answer:*The temperature can be measured: 1 - in the armpits, 2 - in the inguinal folds, 3 - in the rectum, 4 - oral cavity.

12. How much higher is the temperature in the rectum compared to the armpit?

*Answer:*Temperature in the rectum compared to the axilla higher by0.5-1°.

Depending on the daily fluctuations in temperature, the following types of fevers are distinguished:

1) persistent fever (febris continua):the temperature is usually high, lasts for a long time, daily fluctuations are noted within 1℃, usually within 38-39℃. Occurs with croupous pneumonia, typhus and typhoid fever;

2) fever remitting (laxative) (febris remittens)with a temperature difference in the evening and in the morning more than 1 - 2 °C. Characteristic for purulent diseases;

3) intermittent, or intermittent (febris interremittens),fever: the temperature rises to 39-40℃ and above, followed by a rapid (after a few hours) drop to normal or slightly below normal. Fluctuations are repeated every 1-2 or 3 days. This type of fever is characteristic of malaria;

4) recurrent fever (febris recurrens):a sudden rise in temperature to 40 ° C or more is replaced by its fall after a few days to normal, which lasts for several days, and then the temperature curve repeats (from 2 to 5 attacks). This type of fever is characteristic of relapsing fever;

5) undulating fever (febris undulans):there is an alternation of a constant increase in temperature with its gradual fall to normal and below normal, followed by a period without fever. Then comes a new increase followed by a decrease in temperature. A distinctive feature of undulating fever from relapsing fever is a gradual increase in temperature with a gradual fall. This temperature occurs with lymphogranulomatosis, brucellosis;

6) perverse fever (reverse type of fever) (febris inversa) -characterized by a rise in morning temperature to a greater extent than in the evening. Occurs in pulmonary tuberculosis, sepsis;

7) irregular fever (febris irregularis):irregular diurnal fluctuations in temperature of various magnitude and duration. Such a temperature occurs in rheumatism, dysentery, influenza, etc.;

8) hectic fever, or exhausting (febris hectica):temperature fluctuations during the day from 2 to 5 °C with a rapid drop to the norm and below. Such a drop in temperature is accompanied by debilitating weakness with profuse sweating. It is observed in severe forms of tuberculosis, sepsis and Hodgkin's disease.

Most fevers are divided into 3 stages:

1) ***Temperature rise stage:***characterized by the predominance of heat production over heat transfer. Cooling of the surface layer of the skin reflexively causes shivering, and the sensation of cold is explained by irritation of the nerve endings of the skin due to a decrease in its temperature caused by spasm of the superficial vessels.
With an increase in temperature, respiration and heartbeat usually quicken: when it rises by 1 ° C, it usually increases by 8-10 beats, and respiration by 4 respiratory movements per minute;

2) ***Stage of constantly elevated temperature:***characterized by increased heat production in comparison with its return;

3) Temperature drop stage:characterized by a decrease in heat production and an increase in its return. A decrease in temperature to normal values may result in a difference. A gradual decrease in temperature to normal over several days is called lytic or lysis, a sharp drop in temperature is called critical or crisis.

FEVER CARE.

Feverish patients need care taking into account changes in body temperature and condition.

A rapid increase in body temperature (temperature rise stage) is characterized by chills, i.e., a feeling of coldness and trembling in the muscles, headache and aching pain throughout the body may be disturbing. During this period, it is necessary to create peace for the patient, to lay him down

in bed, cover well, put a heating pad at your feet. Depending on the condition of the patient, it is recommended to drink hot tea or coffee at this time.

After chills, there is a feeling of heat in the whole body (a stage of constantly elevated temperature), the higher the temperature and the more pronounced its fluctuations, the more exhausted the patient is. During a fever, toxic products are absorbed into the blood, for the removal of which it is necessary to give patients a large amount of liquid in the form of fruit juices, fruit drinks, mineral water (the bottle should first be held open to remove gases).

To increase the body's resistance, it is necessary to give food consisting of high-calorie and easily digestible foods in liquid or semi-liquid form, the diet should include fruit and berry juices. Table No. 13 meets these requirements. Due to a significant decrease in appetite, patients should be fed 4-6 times a day in small portions. In the diet, salt is limited, which leads to increased diuresis. With a sharp headache, an ice pack is placed on the forehead, a cold compress, wet wraps can be carried out.

With severe dryness of the oral cavity and the formation of cracks on the lips, it is necessary to wipe and irrigate the oral cavity with a 2% solution of sodium bicarbonate, as well as lubricate the cracks with vaseline oil, 10% solution of borax in glycerin or baby cream. A very high body temperature may be accompanied by clouding of the creature, delirium, and sometimes acute excitation. Such patients need constant supervision by a nurse, control over the pulse rate, breathing and blood pressure is required.

In febrile patients who are in bed for a long time, the nurse should take care of the skin and prevent bedsores. For constipation, which is common in febrile patients, a cleansing enema is given. Seriously ill patients must perform physiological functions in bed, so it is necessary that bedpans and urinals be delivered to the patient on time.

The period of temperature decrease proceeds in different ways. The temperature can drop critically, i.e. quickly, from high numbers to low ones (from 40 to 36 ° C). A critical drop in temperature with profuse sweating is often accompanied by symptoms of cardiovascular weakness (collapse). In this case, the extremities become cold to the touch, cyanosis of the lips appears, the skin becomes covered with sticky cold sweat, the pulse becomes thready. The nurse covers such a patient with heating pads, raises the foot end of the bed by 30-40 cm and removes the pillow from under the patient's head. With profuse sweating, change bed and underwear. At the very beginning of the crisis, a doctor is called to the patient and the nurse urgently fulfills his appointments. If necessary, substances that increase blood pressure are administered - mezaton, caffeine, cordiamine,

In most patients, the temperature decreases lytically, i.e. gradually over several days. As a rule, there is a gradual improvement in the general condition of the patient.

*Remember!*A gradual decrease in temperature to normal values is called lysis, a sharp drop in temperature is called critical. A critical drop in temperature may be accompanied by symptoms of cardiovascular weakness.

Tests-tasks to control the final level of knowledge.

1. Is fluctuation in body temperature recorded in a healthy person in the morning and evening hours?

*Answer:*In a healthy person, temperature fluctuations are recorded in the morning and evening hours, but the temperature does not exceed 37 ° C.

2. At what age do people have a slightly higher temperature than usual?

*Answer:*In children.

3. Who first proposed a medical thermometer and in what year?
*Answer:*The medical thermometer was first proposed by Fahrenheit in 1723.
4. What processes determine body temperature in humans and animals?
*Answer:*From the processes of heat production and heat transfer.
5. How to explain the daily fluctuations in body temperature that occur in the body?
*Answer:*This is due to oxidative processes.
6. In what areas of the human body is body temperature measured in children?
*Answer:*In the inguinal fold.
7. What criteria are used in the interpretation of fever curves?
*Answer:*Feverish increases in body temperature are varied in height, duration and nature of fluctuations.
8. What are the three main periods in the course of a fever?
*Answer:*The first is a period of gradual increase in temperature, the second is a period of maximum increase, and the third is a decrease in temperature.
9. In what cases (diseases, conditions) does body temperature decrease?
*Answer:*With heart failure, with a critical drop in temperature after a fever and with hypothermia.
10. What types of fevers do you know according to the height of the temperature?
*Answer:*Subfebrile (not higher than 38 ° C),
moderately febrile (38-39 ° C), high
fever (39-40 ° C),
hyperpyretic, excessively high (above 41 ° C).
11. What types of fevers do you know by duration?
*Answer:*Transient (increased body temperature within a few hours), acute (within 15 days),
subacute (from 15 to 45 days),
chronic (over 45 days).
12. What types of fevers do you know by the nature of temperature fluctuations?
*Answer:*Constant, remitting, intermittent, undulating, exhausting, perverted.
13. What is the care of patients depending on the period of fever?
Answer: first period- warm heating pads for the legs, give the patient warm tea to drink, cover well; monitor physiological functions;
second period- give the patient high-calorie and highly digestible food in liquid form 5-6 times a day, drink plenty of water, monitor the toilet, oral cavity; monitor the pulse and blood pressure;
third period- Cover the patient with heating pads, give strong tea or coffee, monitor the skin (prevention of bedsores), diuresis, stool, wipe the skin with camphor alcohol.

Topics of abstracts (UIRS).

1. The main types of fever
2. Classification of fevers by duration.
3. First aid to the sick. With a sharp rise in temperature.
4. Hypothermia, its types
5. Care of patients with hyperpyretic fever.
6. Care and first aid for febrile patients during various periods of fever.
7. Emergency first aid in case of a critical drop in body temperature.
8. Hypothermia, etiology and first aid.

Questions for the final control of knowledge.

1. How to properly store medical thermometers?

2. What requirements must be observed when measuring body temperature?
3. Temperature sheet and the correctness of its filling.
4. What are the types of fevers?
5. What are the features of caring for febrile patients?
6. What options for lowering the temperature in febrile patients do you know?
7. What are the symptoms of a crisis and what is the emergency care for symptoms of cardiovascular weakness in a patient?

TEST CONTROL

1. What conditions can lead to a physiological increase in body temperature? a) muscle effort;
b) sleep;
c) eating;
d) emotional stress;
e) infectious diseases.

2. Why is it recommended to wipe the armpit dry before measuring the temperature?
a) for hygienic reasons;
b) so that the thermometer is in a more stable position; c) in order not to get underestimated measurement results.

3. The body temperature measured in the patient's rectum is 37.1 °C. How can such a temperature be characterized?
a) as normal temperature;
b) as a moderately high temperature; c) as subfebrile temperature.

4. Where should medical thermometers be stored in the department?
a) in cases at the post of a nurse;
b) in a jar at the bottom of which cotton wool is placed and disinfection is added. solution; c) for each patient;

5. What indicators are reflected in the temperature sheet?
a) graphic representation of the temperature curve;
b) graphical representation of the temperature curve, pulse curves, respiratory rate, blood pressure, body weight, diuresis, laboratory data;
c) graphical representation of the tamper-temperature curve, pulse curves, respiratory rate, results of medical rounds.

6. The patient's morning temperature remains within 36.0-36.5ºC for 2 weeks, and 37.5-38.0ºC in the evening. What type of fever does the patient have?
a) laxative, remitting; b) depleting, hectic;
c) perverted, wrong d) intermittent.

7. Why is it now rare to find a persistent type of fever in croupous pneumonia? a) the microflora causing the disease has changed;
b) the reactivity of the organism of patients has changed;
c) from the first days of the disease, antibiotic therapy is actively used.

8. How do the processes of thermoregulation change in the first stage of temperature increase?
a) the blood vessels of the skin narrow;
b) the blood vessels of the skin expand;
c) heat production in skeletal muscles increases; d)
increased sweating.

9. How do the processes of thermoregulation change in the stage of temperature drop? a) heat production in skeletal muscles increases;
b) sweating increases;
c) the blood vessels of the skin expand;
d) heat production in skeletal muscles decreases:

10. What nursing measures should be used in the first stage of fever (stage of fever)?
a) give the patient hot tea;
b) warmly cover the patient, cover him with heating
pads; c) change bed linen;
d) put a cold compress on the forehead.

11. What measures for patient care should be applied in the second stage of fever (the stage of maintaining the maximum temperature?
a) warm the patient, overlay heating pads;
b) monitor the pulse and respiration rate, blood pressure level; c) monitor the
state of the central nervous system;
d) take care of the oral cavity.

12. What measures for patient care should be applied in case of a critical drop in temperature?
a) carefully monitor the state of the cardiovascular system (pulse rate and its filling, blood pressure, etc.);
b) timely change underwear and bed linen; c) monitor the
condition of the oral cavity;
d) warm the patient and give him hot tea to drink; e)
to prevent bedsores.

TOPIC 7:SIMPLE PHYSIOTHERAPEUTIC PROCEDURES.

educational goal:to teach students tactful treatment of patients when setting cans, mustard plasters, compresses, using a heating pad, an ice pack, and conducting water procedures.

Lesson equipment:jars, mustard plasters, heating pad, ice pack, leeches, towels, cotton wool, gauze, compress paper, petroleum jelly, bandages, alcohol, matches, forceps, tables on the topic.

The student must know:

1. The mechanism of action, preparation of the patient and the method of setting cans, mustard plasters, warming compresses, heating pads, ice packs. Indications and contraindications for these manipulations. Activities after the procedure.
2. The technique of setting leeches and removing them. Care of the sick after the removal of leeches. Storage of leeches. indications for their use.
3. Water procedures, preparation of therapeutic baths, local baths (hand, foot,

sedentary).

4. Observation of patients during the procedure and first aid in case of complications.
5. Features of the implementation of the simplest physiotherapeutic procedures for patients of elderly and senile age.

The student must be able to:

1. Put banks, mustard plasters, compresses.
2. Prepare and apply a heating pad.
3. Apply an ice pack.
4. Put on a compress.
5. Prepare a medicinal bath.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. Compresses, types of compresses:
- What is the mechanism of action of a warm compress.
- Indications and contraindications.
- Preparation of the patient technology of imposing a compress.

2. Ice pack:
- Indications for use.
- How long can you keep an ice pack.
- What is the procedure for using an ice pack.

3. Warmer:
- What is the device of heating pads.
- What is the purpose of the heating pad?
- Indications and contraindications.
- Heating pad application method.

4. Mustard plasters:
- What is the mechanism of action of mustard plasters.
- List the indications for the use of mustard plasters.
- Rules for storing mustard plasters.
- What are the signs of the suitability of mustard plasters.
- Where can you put mustard plasters.
- Indications and contraindications.
- Name the sequence of setting mustard plasters.
- The method of setting mustard plasters for hypertensive disease.

5. Banks:
- What is the mechanism of action.
- What accessories are needed for setting cans.
- Indications and contraindications.
- Canning rules.

6. Bloodletting. Indications and contraindications.

7. Leeches:
- What is the purpose of medical leeches.

- How does the setting of leeches affect blood pressure.
- How are they stored.
- On what parts of the body can leeches be placed.
- On what parts of the body can not be put.
- Rules for setting leeches.
- What are the complications after their staging.
- When can you put leeches again.

8. Hydrotherapy (Balneotherapy):

- What are the rules of hydrotherapy.
- Types of therapeutic baths.
- What is the mechanism of action.
- Indications and contraindications.
- Preparation of therapeutic baths.

9. Features of the implementation of the simplest physiotherapy procedures for patients of elderly and senile age.

7. Independent work of students in the department with patients.
8. Discussion of the results of independent work.
9. Control and correction of the final level of assimilation of educational material (solution of situational problems).

Tests-tasks to control the initial level of knowledge

Mustard plasters.

1. What is the mechanism of action of mustard plasters?
*Answer:*Impact on blood circulation due to the action on the skin of a sick essential mustard oil, which irritates the skin and dilates blood vessels.
2. List the indications for the use (setting) of mustard plasters.
*Answer:*1. Pain. 2. Inflammation of the lungs 3. Bronchitis 4. Spasm of blood vessels.
3. Rules for storing mustard plasters.
*Answer:*1. In a dry and dark place 2. Not more than 11 months.
4. What are the signs of the suitability of mustard plasters.
*Answer:*1. Pungent smell of mustard oil. 2. Does not crumble. .
5. Where can mustard plasters be placed?
*Answer:*On all parts of the body, except for the palms and soles.
6. Name the sequence of setting mustard plasters.
*Answer:*1. Moisten mustard plasters in warm water (not higher than 45°).
2. Shake off and apply to the desired area of the body for 10-15 minutes.
3. After removing the mustard plasters, wash the skin with warm water, wipe dry.
7. Contraindications to the setting of mustard plasters.
*Answer:*1. Skin diseases.
2. Bleeding.
3. High skin sensitivity to mustard.
4. Heat.
8. Methodology for setting mustard plasters in hypertension.
*Answer:*1. On the back of the head ("mustard collar") and on the calf muscles
2. Mustard plasters are superimposed on gauze moistened with water and wrung out to lengthen the thermal effect.

Banks.

1. What is the mechanism of action of cans?
*Answer:*Due to the negative pressure created in the bank, a local rush of blood and lymph to the skin from deep tissues and organs is caused, which has a reflex effect.

effect on the vessels of internal organs. Resorption of hemorrhages in the skin leads to the entry of biologically active substances into the blood, which have a stimulating effect on distant tissues and organs.

2. Indications for the use of cans?

*Answer:*1. Inflammatory processes in the organs of the chest.
2. Intercostal neuralgia.
3. Radiculitis.
4. Myositis.

3. Contraindications for cupping.

Answer:.one. Pulmonary bleeding.
2. Pulmonary tuberculosis.
3. Tumors of the chest organs.
4. Diseases of the skin and its sharp sensitivity.
5. Sudden exhaustion of the patient.
6. A state of general intense excitement with convulsions.

4. How to prepare a jar for use?

*Answer:*1. Wash thoroughly with hot water 2. Wipe dry.
3. Check the integrity of the edges.

5. Canning rules.

*Answer:*1. Wind absorbent cotton wool on a metal rod 12-15 cm long.
2. Moisten it with alcohol, but not abundantly.
3. Insert a burning swab into the jar and quickly attach the jar to the body.
4. Keep on the body for 15-20 minutes.

6. How to withdraw banks?

*Answer:*With one hand, tilt the jar to the side, and with the fingers of the other hand, press on the skin on the opposite side.

7. What should be done after removing the cans?

*Answer:*1. Wipe the skin with petroleum jelly. 2. Warmly dress the patient, cover with a blanket.

leeches

1. What is the purpose of medicinal leeches?

*Answer:*For local bleeding and bleeding, as an anticoagulant.

2. How does the setting of leeches affect blood pressure?

*Answer:*After setting leeches, blood pressure drops.

3. How are leeches stored?

*Answer:*1. In jars of water. 2. Water must be changed daily.
3. Keep on the window at a room temperature of 10-15 °.

4. On what parts of the body can not put leeches?

*Answer:*1. To those places where the arteries and veins are located under the skin itself.
2. On the face. 3. On the palms and soles, where the skin is very dense.

5. Rules for setting leeches.

*Answer:*1.Usually placed from 6 to 12 leeches.
2. The position of the patient is lying down.
3. Shave, wash, dry and wipe the skin at the suction site.
4. Moisten the suction area with sweet water
5. Take a leech with tweezers and place it in a test tube with the head end to the hole
6. Attach the leech to the right place and wait until it sticks.

6. How long should leeches be kept?

*Answer:*Usually a leech lasts from 30 to 60 minutes. and the Sami disappears.

7. What should be done to remove the leech earlier?
Answer: Wet skin with salted water.
8. When can a patient be given leeches again?
Answer: In a few days.
9. What should be done after removing the leeches?
Answer: Apply sterile drapes to wounds to prevent infection.

Compresses.

1. What is the mechanism of action of a warm compress?
Answer: Prolonged expansion of the skin and deeper blood vessels, blood flow to this place, resorption of the process and reduction of pain.
2. List the contraindications for applying compresses.
Answer: Skin disease.
3. What are the layers of a warm compress?
Answer: 1. A piece of clean, dense but hygroscopic cloth soaked in a liquid and wrung out well.
2. Oilcloth or wax paper.
3. Cotton wool, and each subsequent layer should be 2 cm wider than the previous one.
4. How long does a warm compress last?
Answer: No more than 12 hours.

Warmer.

1. What is the purpose of a heating pad?
Answer: 1. For resorption of the inflammatory process.
2. To warm the body.
3. Jacques painkiller.
2. Contraindications to the appointment of heating pads.
Answer: 1. Acute inflammatory processes in the abdominal cavity.
2. Tumors.
3. Bleeding
4. Bruises on the first day.
3. What heaters do you know?
Answer: 1. Rubber. 2. Electrical 3. Chemical.
4. How to apply a rubber heating pad?
Answer: 1. Pour the heating pad into 3/4 of its capacity.
2. Release the air by pressing the heating pad.
3. Screw on the plug well.
4. Turn the heating pad upside down, check for leaks.
5. Wrap the heating pad in a towel and put it on the patient

Ice pack.

1. Indications for use.
Answer: 1. Acute inflammatory processes in the abdominal cavity.
2. Bleeding.
3. Bruises (on the first day).
4. Heat.
2.How long can you keep an ice pack?
Answer: You can keep it for a day, but every 20-30 minutes it is removed for 10-15 minutes.

HYDROTHERAPY

Hydrotherapy (hydrotherapy) -the use of water for therapeutic and prophylactic purposes. In hydrotherapy, along with the temperature factor, the mechanical factor is also important - the pressure of water, its movement.

Baths

Baths are water procedures used for hygienic, therapeutic and prophylactic purposes. Baths are common, when the whole body is immersed in water, and places
dye - when immersing a part of the body. There are also semi-baths - water covers the lower part of the body to the waist; sitz baths - water covers the pelvic area,
lower abdomen and upper thighs.

*Bath preparation.*The bath is filled immediately before taking it in order to avoid cooling. The amount of water is determined by the size of the bath, the volume of the human body and the degree of desired immersion.

A mixer is used to fill the bath with water. If it is not there, then in order to avoid the accumulation of steam in the bathroom, first pour cold and then hot water. With the help of a water thermometer (without removing it from the water), the water temperature is determined. When immersed in the bath, a towel is placed under the patient's head, and a stand is placed at the feet (in order to avoid slipping of the body to the foot end of the bath and to prevent muscle tension and maintain the desired position).

*Remember!*During the procedure, it is necessary to monitor the patient's condition, if he turns pale, dizziness, chills, a sharp increase in heart rate and respiration appear, it is necessary to stop the procedure and call a doctor.

Baths differ in temperature as follows: cold - 24-27°C, cool - 28-33°C, indifferent (without sensation of heat and cold) - 34-36°C, warm
- 37-39 ° C, hot - 40 ° C and above.

*Indifferent and warm baths*prescribed for neuroses with increased excitability (neurasthenia, insomnia), skin diseases accompanied by itching.

*hot baths*used for chronic diseases of the joints, diseases of the peripheral nerves (sciatica, polyneuritis), metabolic disorders (obesity, gout), attacks of renal colic.

*Cool baths*used for neuroses with depression, apathy, poor appetite.

Duration of baths: indifferent and warm - 10-15 minutes, cool and hot - 3-5 minutes. At the end of the bath, the patient is wiped with a terry towel, then a rest of about 30 minutes is required. Time of taking baths - indifferent and warm towards the end of the day, an hour before bedtime; cool and hot in the middle of the day, 2 hours after dinner.

In addition to common baths, semi-baths are used. They are more easily tolerated and used in debilitated patients. There are hand and foot baths. These baths are used to treat the hands, feet and adjacent joints. The technique of their implementation is very simple - the patient immerses the hand or foot in the prepared water. Hand and foot baths are hot (40-42°C), warm (35-38°C) and cold (10-12°C). Hot and warm baths are used for chronic diseases of the small joints of the hands and feet (their duration is 20-30 minutes) in order to increase blood circulation and absorbable effect. Cold baths are indicated for acute inflammatory processes, fresh trauma (bruises, sprains, etc.) in the area of the hands and feet. Their duration is 5-10 minutes.

*Sitz baths*belong to the local hydrotherapy procedures. Cold (10-15°C) short-term sitz baths are prescribed for intestinal lethargy (atonic constipation), sexual weakness, urinary incontinence; warm (37-38°C) sitz baths lasting 20-30 minutes - for chronic inflammatory diseases of the female genital organs, hemorrhoids, chronic inflammation of the prostate gland, hot sitz baths (40-42°C) lasting 10-15 minutes - for renal colic. Sitz baths are contraindicated in acute inflammatory processes, pregnancy, propensity for uterine bleeding.

currents.

medicinal baths. Coniferous baths, due to the presence of essential oils in the coniferous extract, favorably affect the nervous system and upper respiratory tract with their refreshing smell. They are prescribed for neurosis with increased irritability, stage I hypertension. When using coniferous extract in powder form, put 2 tablespoons in the bath, liquid coniferous extract - 100 mg per bath.

To prepare a starch bath, starch is used at the rate of 0.5–0.8 kg per bath. Starch is diluted in a small amount of cold water, thoroughly stirred and poured into the finished bath. Starch baths are prescribed for skin diseases accompanied by itching; exudative diathesis for the purpose of antipruritic and drying action. Starch baths have an enveloping effect and reduce skin irritations. They are used at a water temperature of 36-37℃, lasting 30-40-60 minutes. After the bath, the body is dried with a soft towel or sheet.

To prepare a bath with potassium permanganate, a 5% solution of potassium permanganate is added to a bath filled with water at a temperature of up to 36–38℃ (until a pink color appears). The duration of the procedure is 5-10-15 minutes, after which the patient is doused with warm water. These baths are mainly used for skin diseases accompanied by pustular or weeping elements, for the purpose of disinfecting and drying.

Souls.

Shower -one of the effective methods of hydrotherapy. Souls are distinguished by temperature:

- indifferent -32-34℃,
- warm - 35-37 ° C,
- cool - 24-31 ° C,
- cold - below 24 ° C.

Souls are assigned under the following conditions:

I)neuroses with increased excitability - indifferent and warm souls, 3-5 minutes;

2) neuroses with a depressed state of the nervous system (apathy, general weakness) - cool, 2-3 minutes;

3) metabolic disorders (obesity) - cool and cold, 3-5 min.

To harden the body, souls are used with a gradual decrease in temperature from 34 to 20 ° C.

test questions

1. List the indications and contraindications for the setting of mustard plasters, cans, leeches.
2. How to put mustard plasters correctly? List possible complications.
3. What is the cupping technique? List the possible complications in cupping.
4. On what parts of the body can leeches be placed?
5. What is the technique of setting leeches? List the possible complications in the use of leeches.
6. What is the care of the patient's skin after the removal of leeches?
7. Indications and contraindications for the application of
compresses. What accessories are needed for setting compresses?
8. What is the technique of setting compresses?
9. In what cases are heating pads used and what is their device?
10. How to use heating pads in patients?
11. How should an ice pack be given to a patient and when is it used?
12. What is the procedure for conducting baths (hand, foot, sitting, half-baths)?

Task tests to control the final level of knowledge

1. What measures can be taken to influence blood circulation?

Answer: Banks, mustard plasters, compresses, ice pack, hydrotherapy

2. What accessories are needed to set up jars?

Answer: A box for storing cans, where alcohol, vaseline, cotton wool are also located.

3. How should mustard plasters be placed?

Answer: 1. Check mustard plasters before use.

2. Moisten them in warm water (35 °) and quickly lay on the desired area of the skin and hold until a burning sensation.

3. After removing the mustard plaster, the skin is quickly wiped dry and the patient is warmly covered.

4. Mustard plasters are contraindicated in skin diseases and bleeding.

4. What is the technology of setting cans?

Answer: 1. Put from 10 to 30 pieces in the position of the patient lying down.

2. Cotton wool is wound around a metal rod and moistened with alcohol.

3. The jar is held close to the body, a burning swab is quickly injected into it, after which it is instantly applied to the patient's skin.

4. The duration of the procedure is 10-15 minutes.

5. To remove cans: tilt the can to the side, and press the skin with the fingers of the other hand;

6. Contraindications: pulmonary bleeding, tuberculosis, tumors, etc.

5. Compress types?

Answer: Warming (for resolving the inflammatory focus and reducing pain), cold (for bruises, injuries, bleeding). poultices (with local inflammatory processes in order to eliminate them as soon as possible).

6. What is the technology of applying compresses.

Answer: warming 1. Initially, a dressing is prepared from three layers of gauze, moistened in a solution of vinegar with water and a 20 ° alcohol solution.

2. Then it is gently applied to the body area, bandaged. Compress, lasts 6-8 hours, but not more than 12 hours.

3. Contraindications: dermatitis, pyoderma, furunculosis.

7. On what parts of the body can leeches be placed?

Answer: Occipital region of the head, sacral region, region of the heart, right hypochondrium, posterior surface of the legs.

8. What is the technology of setting leeches?

Answer: 1. Position of the patient - lying down.

2. Shave the skin over the place of application of leeches and wipe dry.

3. The leech is grasped with tweezers and placed in a test tube with the tail end down.

4. Then they put a test tube to the right place and wait for the leech to stick.

5. After that, the tube is removed.

6. The leech usually lasts 30-60 minutes and then falls off.

7. After removing the leeches, apply a sterile napkin.

8. Contraindications: violation of blood coagulation, skin diseases, anemia.

9. What are the complications after placing leeches?

Answer: Skin itching, bleeding, suppuration.

10. What is the heating device? How to properly apply a heating pad?

Answer: Rubber tank with a capacity of 1-1.5 liters with a well screwed stopper. Fill 3/4 of the volume with hot water. A hot heating pad is wrapped in a towel and served.

11. What is the procedure for applying an ice pack?

Answer: An ice pack is placed on the appropriate site in a towel folded four times, and sometimes it is hung up if its load causes pain to the patient.

12. What is the benefit of a bath?

*Answer:*The usefulness of the bath is ensured by the action of several factors: temperature, mechanical, chemical.

13. What are the contraindications for taking a bath?

*Answer:*Severe general condition, fever, heart failure.

14. Types of therapeutic baths?

*Answer:*Cold (below 20°C), cool (up to 30°C), warm (up to 40°C), hot (above 40°C), indifferent (34-36 ° C).

Questions to control the final level of knowledge

1. Types of hydrotherapy (hydrotherapy).
2. Methods of conducting baths (manual, foot, sitting, semi-baths).
3. Contraindications to hydrotherapy.
4. types of compresses. Compress technique.
5. Cupping technique, complications in cupping.
6. The use of leeches. List the possible complications in the use of leeches.
7. When to use lotions and poultices.

Final control:carried out by random testing of practical skills.

TEST CONTROL

1.How often should a wet cold compress be changed? a) after 2-3 minutes;
b) as soon as it dries; c) after 10-15 minutes.

2.When is an ice pack used? a) internal bleeding;
b) severe headaches and delirium at the height of fever; c) renal colic;
d) acute cholecystitis or acute pancreatitis;
e) for resorption of post-injection infiltrates.

3.How to check if a moist warm compress is applied correctly? a) after 1-2 hours, remove the compress and check its condition;
b) after 1-2 hours, put your finger under the compress and determine the state of its inner layer;
c) after 1-2 hours ask about the subjective feelings of the patient.

4.What are the contraindications for the use of heating pads on the abdomen? a) pain during exacerbation of peptic ulcer;
b) intestinal colic;
c) internal bleeding;
d) suspicion of acute surgical disease of the abdominal organs.

5.In what cases are mustard plasters used? a) acute colds;
b) skin diseases; c) immediately after the injury;
d) an attack of angina pectoris;
e) myositis, radiculitis, neuralgia.

6. What is the exposure of cans on the patient's body? a) 5-10 minutes;
b) set individually;
c) is determined by the change in the color of the skin under the banks.

7. What are the contraindications for cupping? a) acute pneumonia;
b) active form of pulmonary tuberculosis;
c) pulmonary bleeding;
d) skin diseases;
e) malignant neoplasms; e) myositis.

8. What are the indications for bloodletting?
a) venous congestion in the systemic or pulmonary circulation; b) in some cases of arterial hypertension;
c) polycythemia;
d) disorders of the blood coagulation system; e) severe atherosclerosis of cerebral vessels.

9. What is the therapeutic effect of hirudotherapy? a) local hemorrhage;
b) decreased blood clotting; c) analgesic effect;
d) resorption of inflammatory infiltrates.

10. On what parts of the body can leeches be placed? a) behind the ears, on the mastoid processes;
b) on the interscapular region; c) on the lumbar region;
d) on the left half of the chest; e) on the area of the right hypochondrium.

11. What effect do short cold baths have on the body? a) excitatory effect on the central nervous system;
b) calming effect on the central nervous system; c) spasm of smooth muscles of internal organs;
d) expansion of the smooth muscles of the internal organs; e) stimulation of metabolism.

12. What effect do short hot baths have on the body? a) excitatory effect on the central nervous system;
b) calming effect on the central nervous system; c) spasm of smooth muscles of internal organs;
d) expansion of smooth muscles;
e) increased heat transfer e) stimulation of metabolism.

THEME 8. METHODS OF USE OF DRUGS, ENTERAL AND EXTERNAL METHODS OF ADMINISTRATION MEDICINES. INJECTIONS.

educational goal: observance of ethics and deontology when distributing medicines, the responsibility of medical personnel for the storage of medicines of the A and B lists.

Lesson equipment: cotton wool, bandage, waxed paper, iodine tincture, ointments, patches, eye drops, pipettes, spatula, powders, tablets, potion cup, sterilizer, syringes, needles, tweezers, disinfectant solution, systems, dummies, phantoms.

The student must know:

1. Storage of preparations of lists "A" and "B", means for external use.
2. Methods of drug administration.
3. Organization of distribution of powders, capsules, solutions, mixtures, drops. Taking medication by patients in the presence of a nurse.
4. The use of external agents, rubbing ointments, lubricating the skin with iodine tincture, the use of plasters, powders. Instillation of drops in the ears, nose, eyes.
5. Organization of the work of the treatment room.

The student must be able to:

1. Lay out and distribute medicine for internal use; lay out the medicine according to an individual scheme.
2. Apply ointments, lubricate the skin with iodine tincture, apply plasters, powders. Instill drops in ears, eyes, nose.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. Classification of drugs:
- Solid dosage forms (tablets, capsules, powders...)
- Soft (candles, ointments, etc.)
- Liquid (solutions, tinctures, decoctions, etc.)
- Gaseous (aerosols)

2. Routes of drug administration (topically, orally, parenterally)
3. Rules for the discharge and organization of the distribution of medicines in the department.
4. Responsibility of medical personnel for the storage of preparations of lists "A" and "B", means for external use.
6. Forms of drugs used externally (ointment, liniment, talkers, aerosol, liquid)
7. The use of external agents, rubbing in ointments, lubricating the skin with iodine tincture, applying plasters, powders, inhaling aerosols. Instillation of drops in the ears, nose, eyes.
8. What are the forms of medicines used orally (infusion, decoctions, tablets, pills, mixture, powders, syrup)
9. Technology of enteral application of medicines.
10. What dosage forms are known that are used for parenteral administration.
11. Processing steps:
1. Disinfection

2. Pre-sterilization cleaning followed by obligatory cleaning quality control.
3. Sterilization.

12. Pre-sterilization preparation of syringes, needles.

13. Sterilization methods for medical instruments:

- Sterilization by dry heat;
- in a steam sterilizer;
- gamma rays;
- boiling; gas; firing.

14. Quality control of the processing of syringes and needles.

Technique for performing benzidine and orthodon tests (to detect latent blood on instruments). Technique for performing a phenolphthalein test (to detect contamination residues on instruments).

6. Organization of the work of the treatment room.
7. Acquaintance with the storage of medicines in the department.
8. Demonstration of practical skills in pre-sterilization processing of instruments.
9. Independent work of students in the department.
10. Discussion of the results of independent work.
11. Control and correction of the final level of assimilation of educational material.

1. ASEPTICA AND ANTISEPTICA.

ASEPTICA -This is a system of preventive measures aimed at preventing microorganisms from entering the wound, tissues, organs, body cavities of the patient during surgical operations, dressings and other therapeutic and diagnostic manipulations. Asepsis includes; a) sterilization of instruments, material;

b) treatment of the hands of a surgeon and a nurse,
c) compliance with the rules and techniques during the operation, research, etc.

ANTISEPTICS -a complex of therapeutic and preventive measures aimed at the destruction of microbes in a wound or the human body as a whole.
Distinguish: a) mechanical,
b) physical:
c) chemical
d) biological, e)
mixed.

Mechanical **-**surgical treatment of the wound.
Physical **-**use of hygroscopic dressing material, physiotherapy treatment.
Chemical **-**the use of antiseptic and chemotherapeutic drugs. Biological - the use of all kinds of sera, blood products, active immunization agents, etc., which affect the microbial cell and its toxins
Mixed **-**the use of several types of antiseptics is the most widespread.

2. DISINFECTION. ITS TYPES AND MEANS.

Disinfection -this is a set of measures aimed at the destruction of pathogenic and conditionally pathogenic microorganisms on environmental objects.
There are two types of disinfection: focal and prophylactic.
*Preventive*carried out to prevent the spread of infectious diseases

diseases in medical institutions (timely cleaning of premises, boiling, etc.).
*Spot disinfection*subdivided into final (after removal of the source of the causative agent nfekpdi) and current (in the presence of the patient; in order to immediately destroy the infectious agent)
When disinfecting, physical and chemical means of disinfection are used. Physical means: mechanical cleaning, wet cleaning, washing, shaking, airing. Thermal and radiant means: use of high and low temperatures, irradiation with ultrasonic germicidal rays.

3. STERILIZATION AND ITS METHODS.

Sterilizationit is the destruction of all microorganisms, pathogenic and non-pathogenic, by physical and chemical means.
Sterilization is carried out by steam, air and chemical methods, as well as by ionizing radiation and other methods!

4. SANITARY AND ANTI-EPIDEMIC REGIME

Sanitary and anti-epidemic regime- a whole complex of organizational sanitary and anti-epidemic measures aimed at preventing the occurrence of nosocomial infections.

The requirements for the sanitary and anti-epidemic regime are regulated by the following orders:

1. MZ USSR No. 720. "On improving medical care for patients with purulent - surgical diseases and strengthening measures to combat nosocomial infection"
2. Ministry of Health of the USSR No. 408. "On reducing the incidence of viral hepatitis."
3. OST 42-21-2-85. "Sterilization and disinfection of medical devices"

5. MEDICAL DEVICESSUBJECT TO DISINFECTION. DISINFECTION METHODS.

Honey. products that do not have contact with the wound surface, blood, infection preparations are only disinfected, then rinsed twice.
Instruments contaminated with blood are also disinfected before pre-sterilization cleaning and sterilization.

Disinfection methods:

I. Boiling.
a) boiling in water for 30 minutes:
6) boiling in 20% solution of drinking soda (distilled water with sodium bicarbonate) exposure 15 minutes.
II. Chemical
a) soaking in a triple solution, exposure 15 minutes. Recommended for glassware, corrosion-resistant metal.
b) soaking in 3% solution of chloramine for tuberculosis 5%, [exposure 4 hours], exposure 60 minutes.
c) soaking in 4% solution of hydrogen peroxide [for tuberculosis 3% H_2O_2 - 3 hours, exposure 90 minutes.
d) soaking in 0.1% solution of Desoxon-1, exposure 30 minutes; e) soaking in 1.5% solution of Ca hypochlorite, exposure 60 minutes.
This is followed by rinsing with running water and pre-sterilization cleaning.

Disinfection of disposable honey. instrumentation is carried out by immersion in disinfection. Solution.
a) 5% solution of chloramine, Exposure 30 minutes b) solution "A-33", Exposure 10 minutes.

Before immersion, the products are disassembled or cut and completely immersed in disinfection. rr

(OST 42-21-2-85) (Reg. No. 4089 of the Ministry of Health of the USSR} PRE-STERILIZATION CLEANING OF MEDICAL DEVICES

1) Rinse with running water for 0.5 minutes.
2) Soaking in the washing complex with full immersion of products 15 min.
3) Washing each product with a ruff, cotton-gauze swab or brush in a washing complex - 0.5 min.
4) Rinsing with running water: when using "Biolot" - Zmin., when using "Progress" - 5 minutes, when using "Astra", "Aina", "Lotus" - 10 minutes.

5) Rinsing with distilled water -- 0.5 min.
6) Drying with hot air at a temperature of 80-85% until the complete disappearance of moisture.
7) All honey should be subjected to pre-sterilization cleaning. products before their sterilization in order to remove protein, fat, mechanical contaminants, as well as drugs. Detachable products must be subjected to pre-sterilization cleaning in disassembled form.

(OST 42-21-2-85)

7 COOKINGWASHING SOLUTION.

1) Perhydrol solution 2 7.5%..... 17 ml.
Detergent "Lotus". "Progress", "Aina". "Aster" 5g
Pourable water .....978 ml.
or
Perhydrol solution 33%..... 15ml
Detergent "Lotus", "Progress", "Aina". "Aster"… 5g
Drinking water.....980 ml.

2) Hydrogen peroxide solution 6% .....80 ml.
Detergent "Lotus", "Progress", "Aina", "Astra" 5g
Drinking water… 915ml
or
Hydrogen peroxide solution 3% 160ml
Detergent "Lotus". "Progress", "Aina", "Astra" 5g
Drinking water 835ml

The washing solution can be used within 24 hours from the moment of preparation, if the color of the solution has not changed. The unchanged solution can be heated up to 6 times. The temperature of the washing complex when instruments are immersed in it is 50-55°C. during the washing process, the temperature is not maintained.

3) 0.5% solution "Biolot"
Detergent "Biolot". 5g
Drinking water 995ml
The washing complex is used once. The temperature of the solution when the instruments are immersed in it is 45-50°C. during the washing process, the temperature is not maintained.

(OST 42.21-2-85)

8. PRIMARY PROCESSING OF HONEY. INSTRUMENTS IN THE TREATMENT ROOM

1).NOT FLUSHING. Disinfection by one of the methods: a) immersion in 3% solution of chloramine for 60 minutes.

b) immersion in 6% hydrogen peroxide solution for 60 minutes; c) immersion in 0.1% Deoxon-1 solution for 30 minutes,

d) immersion in 1.5% Ca hypochlorite solution for 60 minutes.

2) Rinse under running water for 0.5 min.

3) Immersion in 1.5% alkaline solution at 50°C for 15 minutes. The temperature during the washing process is not maintained. RR is used once.

4) Rinse under running water for 0.5 min.

Further processing of syringes and needles is carried out in the CSO (pre-sterilization cleaning and sterilization).

(OST 42-21-2-85) (Project No. 408 of the Ministry of Health of the USSR)

9. PREPARATION OF ALKALINE SOLUTIONS FOR PRIMARY PROCESSING OF MED. TOOLS.

1) 1.5% alkaline solution

Detergent "Lotus" 15g
Drinking water. ..... 985 ml.

2) 2% soda solution

Soda 20g
Drinking water. ..... 980 ml

3) 3% soda solution

Soda ..... ZO G
Drinking water. ..... 970 ml

10. PRIMARY CLEANING OF MED. TOOLS

In the washing CSO, syringes and needles are thoroughly mechanically cleaned from the remnants of medicinal substances and blood.

I) Immersion in washing solution for 15 minutes. The temperature at the time of immersion of the instruments is 50°C. It is necessary to draw a washing solution into each needle with a syringe specially designed for this to completely expel air from the needle channel.

2) Washing in detergent solution with cotton swabs (30 sec. for each syringe).

3) Rinse under running water (25 sec. for each syringe). Temperature 50-60°C.

4) Rinse or boil in distilled water for 5 min. for the purpose of desalination. Water is changed after boiling 200 syringes.

5) Drying in an air sterilizer with hot air at a temperature of 80-85°C until the moisture disappears completely.

(OST 42-21-2-85)

11. WHEN MEDICAL DEVICES ARE STERILIZED.

All medical devices that come into contact with the wound surface, come into contact with blood or injectable drugs and certain types of instruments that come into contact with the mucous membrane during operation and can cause damage to it should be sterilized.

12. STERILIZATION METHODS. STERILIZATION MODES.

1) **Steam method**(water, saturated steam, overpressure). Sterilization mode:

a) steam pressure 2 atm., exposure time - 20 minutes, temperature - 132 ° C, control test - urea - is recommended for products made of corrosion-resistant material, textile materials (linen, syringes, tools, etc.).

b) vapor pressure 1.1 atm., exposure time - 45 minutes, temperature - 120°C, control test - benzoic acid; - recommended for rubber, plastic, etc. (gloves, catheters).

Sterilization is carried out in sterile boxes or double soft packing made of calico, parchment.

Terms of preservation of sterility in such packing - 3 days. In sterilization boxes with a filter - 20 days (instrumentation and materials are placed in sterilization boxes only in double soft calico or parchment packaging).

The sterility of the product in the bix or package is preserved from the moment of opening only for a day (it is obligatory to indicate the date of the bix opening).

2) air method(dry, hot air). Sterilization mode:

a) temperature - 180°C, exposure time - 60 minutes, control test - thiourea, succinic acid, tartaric acid. Recommended for glass, metal, silicone rubber products.

b) temperature - 160°C, exposure time - 150 min, control test - sucrose.

Dry products are sterilized.

Sterilization is carried out in paper packaging or without open packaging). The shelf life of the product in the package is 3 days, without packaging - should be used immediately after sterilization.

3) chemical method(using chemical agents) a) Sterilizing agent

hydrogen peroxide 6%

Immersion in solution at a temperature of 18 ° C - for 360 minutes, 50 ° C - for 180 minutes

A solution of hydrogen peroxide can be used within a day from the moment of preparation, provided that it is stored in a closed container in a dark place.

The temperature of the solution during the sterilization process is not maintained

b) Sterilizing agent - 1% solution "Deoxon-1". Holding time - 360 min., temperature not less than 20 C.

Sterilization with solutions of chemicals can be used for products made of polymeric materials, rubber, glass, corrosion-resistant metal.

Sterilization is carried out when the products are completely immersed in the solution for the duration of sterilization, after which the product is washed with sterile water.

The shelf life of the sterilized product in a sterilized box lined with a sterile sheet is 3 days.

(OST 42-21-2-85)

13. CHEMICAL CLEANING OF STAINLESS STEEL SURGICAL INSTRUMENTS.

Instruments during operation, pre-sterilization cleaning, sterilization may be subject to corrosion. Tools with visible corrosion spots, as well as with the presence of an oxide film, are subjected to chemical cleaning no more than 1-2 times a quarter.

1) Pre-rinsing with running water 0.5 min.

2) Soaking in solution:

acetic acid.....5g

Na chloride.....1g

distilled water.....up to 100

Temperature 20°C

3) Holding time:

stainless steel scalpels - 2 min. tools with an oxide film

- 3 min.

tools with severe corrosion damage - 6 min. (additionally clean the affected area with a ruff or cotton-gauze swab - 6 min.)

(OST 42-21'2-85)

14. QUALITY CONTROL OF PRE-STORAGE CLEANING OF MED. PRODUCTS WITH THE HELP OF AZOPYRAM AND PHENOLPHTHALEIN REAGENTS "AZOPYRAMIC TEST".

I. "AZOPYRAMIC TEST".

1 liter of Azopyram reagent contains 100 g of amidopyrine and 1.0-1.5 g of aniline hydrochloride, 96° ethyl alcohol up to 1 liter. The finished solution can be stored in a tightly closed vial in the dark at +4 C (in the refrigerator) for 2 months, in the dark at room temperature O 18-+23'C) - no more than 1 month.

Before the study, a working solution is obtained: by mixing equal volumes of Azopyram and an oxidizing agent (hydrogen peroxide solution 3%). The working solution should be used within 1-2 hours.

The test items are treated with the working solution, wiped with swabs moistened with the reagent, or a few drops of the reagent are applied to the test items using a pipette.

3-4 drops of the working solution are drunk into the syringes and the piston is advanced several times in order to moisten the inner surface of the syringe with the reagent, the reagent is left in the syringe for 0.5-1.0 minutes, after which the reagent is forced onto a gauze napkin.

The quality of cleaning catheters of other hollow products is assessed by introducing the reagent into the products using a clean syringe or pipette.

The reagent is left inside the product for 0.5-1.0 minutes, after which it is poured onto a gauze napkin.

Control is subjected to 1% of simultaneously processed products of the same name, but not less than 3-5 units.

In the presence of traces of blood, immediately or no later than 1 minute after the contact of the reagent with the contaminated area, a pink-lilac or brownish color appears. Staining that occurred later than one minute after the treatment of the test items is not taken into account.

In the presence of positive samples, all instruments are reprocessed.

II. PHENOLPHTHALEIN TEST

The test items are treated with the working solution: they are wiped with swabs moistened with a reagent or a few drops of the reagent are applied to the test items with a pipette.

3-4 drops of the working solution are poured into the syringes and the piston is advanced several times in order to moisten the inner surface of the syringe with the reagent, the reagent is left in the syringe for 0.5-1.0 minutes, after which the reagent is forced onto a gauze napkin.

The quality of cleaning of catheters or other hollow products is assessed by introducing the reagent into the products using a clean syringe or pipette.

The reagent is left inside the product for 0.5-1.0 minutes, after which it is poured onto a gauze napkin.

The quality of cleaning of catheters or other hollow products is assessed by introducing the reagent into the products using a clean syringe or pipette.

The reagent is left inside the product for 0.5-1.0 minutes, after which it is poured onto a gauze napkin.

Control is subjected to 1% of simultaneously processed products of the same name, but not less than 3-5 units.

In the presence of traces of alkali, immediately or no later than 1 minute after contact of the reagent with the contaminated area. a pink color appears.

In the presence of positive samples, all instruments are reprocessed.

(Project No. 720 of the Ministry of Health of the USSR)

15. SIGNIFICANCE AND MAIN TASKS OF THE CSO.

1) Prevention of parenteral infections with viral hepatitis, malaria, syphilis and other diseases, as well as post-injection infections

2) Ensuring full cleaning, sterilization, maintaining the sterility of syringes, needles, surgical linen, etc.

3) The CSO improves the culture and quality of medical care, frees up additional time for the attendants, and reduces the use of syringes.

(OST 42-2 1-2-85)

16. DOCUMENTATION IN CSO.

1) The log of the operation of the sterilizer (steam or air).
2) Journal of bacteriological control of sterility.
3) Cassette sterilization mode log.
4) Journal of receiving and issuing cassettes.

(Project No. 408 of the Ministry of Health of the USSR)

17. MULTIPLICITY OF THE SET OF MATERIAL FOR STERILITY, ITS VOLUME.

Bacteriological laboratories of health care facilities control the sanitary and hygienic regime (contamination of various objects and air) once a month, and underwear, hands of surgeons and skin of the surgical field (selectively) are produced once a week.

The objects of study during bacteriological control are; air environment, various environmental objects, surgical instruments, syringes, needles, blood transfusion systems, rubber and plastic products, surgical suture material, surgeons' hands and skin of the surgical field.

(Project No. 720 of the Ministry of Health of the USSR)

18 DISINFECTION OF SPATULA

1 Metal spatulas boil:

-2% soda solution - 15 min.

-Distilled water -30 min.

2 III wooden patels are destroyed after use (they are burned in a specially designated container).

19. DISINFECTION OF MEDICAL THERMOMETER

Complete immersion in solution, followed by rinsing in water. For this purpose use:

a) chloramine B (1% solution) - 30 min.
b) hydrogen peroxide (3% solution) - 80 minutes c) triple (solution) - 45 minutes.

Store in a dry place.

20. DISINFECTION OF OIL WRAPS ON DRESSING TABLES, EXAMINATION COUCHS, BEDS, OIL APRONS

2-fold wiping with a rag with an interval of 10-15 minutes, moistened in solution:
a) chloramine B 1% solution
b) chloramine B 0.75% solution with 0.5% detergent
c) hydrogen peroxide 3% solution with 0.5% detergent or soaking in 1% solution of chloramine for 30 minutes

21. DISINFECTION OF OILS IN THE DRESSING ROOM, OPERATING ROOM, CONTAMINATED WITH BLOOD.

2-fold wiping with a rag with an interval of 10-15 minutes, moistened in 3% solution of chloramine or soaking in 3% solution of chloramine for 1 hour

22. DISINFECTION OF SCISSORS FOR CUTTING THE NAILS. SHAVING EQUIPMENT.

1 Boiling in distilled water - 30 min
2 Immersion in throne solution for -45 min followed by rinsing in water. Store in a dry place.
3 Immersion in 6% hydrogen peroxide solution for 60 minutes.

23. DISINFECTION OF NEMA HIPS.

After use without rinsing:
1, Immersion in 3% chloramine solution - for 60 minutes
2 Rinse under running water with a cotton-gauze swab.
3. Boiling in distilled water for 30 minutes or in 2% soda solution for 15 minutes 4
Drain the water, store in the same container in a dry form.

24. DISINFECTION OF HAIR CLIPPERS.

1. Immersion in ethyl alcohol 70° for 15 min.
2. Immersion in a triple solution for 45 minutes
3. Immersion in 6% hydrogen peroxide solution for 60 min.

25. DISINFECTION OF RUBBER HEATERS, BUBBLES FOR ICE. 2-fold wiping with a rag with an interval of 10-15 minutes, dipped in solution:
a) chloramine B 1% solution
b) chloramine B 0.75% solution with 0.5% detergent.

26 DISINFECTION OF RUBBER RUGS IN THE BATHROOM

1. chloramine B 0.75% with 0.5% detergent for 30 min immersion
2. hydrogen peroxide 3%, detergent solution for 30 min immersion.

27. DISINFECTION OF BANKS AND URINES Immersion in 1% solution of chloramine for 120 min.

28.DISINFECTION OF BATHTUBS, SINKS, ETC. 1 Chloramine B 1% solution
2. Chloramine B 0.75% solution with 0.5% detergent.
3. Hydrogen peroxide 3% solution with 0.5% detergent.
4.Detergent-de-infection - means "Sanita", "Shine" 0.5 g per 100 cm2 of surface. Wipe with a moistened rag, 2 times with an interval of 10-15 minutes.

29. DISINFECTION OF BASINS FOR USED DRESSING MATERIAL.
Washed in disinfectants:
1. Chloramine B 0.75% with 0.5% detergent.
2. Chloramine 3% solution or 1.5% solution DSC HA (if contaminated with blood)

30. DISINFECTION OF PREMISES, FURNITURES. 2-fold wiping with a rag soaked in solution:
1. Chloramine B 1% solution
2. Chloramine B 0.75% solution with 0.5% detergent.
3. Hydrogen peroxide 3% solution with 0.5% detergent
4. Hypochlorite Ca O, 5% solution.

31 DISINFECTION OF CLEANING MATERIAL

Immerse in solution, then rinse and dry
1. Chloramine B 1% solution -60 min.
2 Hypochlorite Ca 0.5% solution -60 min.

32 DISINFECTION OF SLIPPERS

1. Rubbing with a swab moistened with a formalin solution of 25% or 45% about a solution of acetic acid until completely moistened inside.
2) Packing in a plastic bag for 3 hours.

3) Ventilate - 10-12 hours until the smell of the solution disappears completely.

33. FREQUENCY OF CHANGE UNDERWEAR AND BED LINEN.

Change of underwear and bed linen is carried out at least once every 7 days (after hygienic washing, as well as in case of contamination.

34. PROCEDURE FOR COLLECTING UNDERWEAR AND BED LINEN

1) Collected in cotton bags or containers with roofs
2) After changing the linen, they wipe the objects and the floor in the ward des. Means chloramine B 1% solution or Ca hypochlorite 0.5% solution)
3) Sorting and disassembly of dirty linen is carried out in a specially allocated room on an oilcloth labeled "for dirty linen".
4) Laundry is sorted in special clothes (dressing gown; cap, bhils, mask, oilcloth apron, gloves).
5) The room should have clean rags, a container for clean rags, a container for processing a chest, oilcloths, aprons, a container for clean gloves, a container for dirty gloves, individual cleaning equipment, a container with disinfectant. solution for processing and cleaning the premises (chloramine B 1% solution, Ca hydrochloride 0.5% solution).

35. DISINFECTIOUS MEASURES BEFORE THE PATIENT ENTERS THE WARD.

I. Bed, bedside tables, supports for the bedpan of the bedpan, are wiped with a rag moistened with disinfectant. solution.
2 The bed is covered with bedding that has undergone chamber processing
3. The patient is given individual items of care, which after use are removed immediately from the ward and washed thoroughly.
4. After the patient is discharged, personal care items are disinfected

36. DISINFECTION OF BEDDING AFTER THE RELEASE.

Disinfection in dez. chamber according to the steam-formalin or steam-air method is made after the discharge of each patient (mattress, blanket, pillow).

37. CORRECT CLEANING IN SURGICAL DEPARTMENTS.

1. Cleaning is carried out at least 2 times a day in a wet way with a soap and soda solution. Daz. weds are used after changing linen in case of nosocomial infection
2. In wards for patients with purulent-septic diseases and postoperative purulentCOMPLICATIONSdaily cleaning is carried out with the tactile use of disinfectants.
3. Cleaning of the operating block, dressing rooms, treatment rooms and resuscitation departments, the receiving flask. CSO is carried out in a wet way. As a des. solutions are used: a.) chloramine B 3% solution. b) Ca hypochloride 0.5% solution

38. FREQUENCY AND PROCEDURE FOR GENERAL CLEANING OF THE OPERATING ROOM, DEP. ANESTHESIOLOGY AND REANIMATION,

dressing and procedural.

1) 1 time per week.
2)The premises are previously freed from items of equipment, inventory, tools, etc.
3)As a disinfectant, a complex consisting of 6% hydrogen peroxide solution and 0.5% detergent or 1% activated chloramine solution (with the addition of 10%

r-ra ammonia).

4) After cleaning - the inclusion of ultraviolet lamps; for 2 hours.

39. SANITARY REQUIREMENTS FOR THE MAINTENANCE AND USE OF CLEANING EQUIPMENT

1. Marking (No. separate name of the room - measured by volume) 2. Separate storage of equipment for cleaning different rooms.

3. Disinfection in 1% solution of chloramine or 0.5% solution of Ca hypochloride for 60 minutes after use.

40. DISINFECTION OF BRUSHES FOR WASHING HANDS. TOOLS. Boiling in 2% soda solution for 15 minutes in different containers. Brushes are stored dry.

41 PROCESSING GLOVES.

1. Immersion in 3% chloramine solution for 60 minutes. 2. Washing with running water. 3. Immersion in the washing complex 4. Washing with running water.

5. Rinsing in distilled water.

*6*Drying, sprinkling with talc each pair of gloves with wrapping each glove separately in gauze, Then we put everything together in a 2-layer calico and in bix (control test - benzoic acid).

For cleaning the room in the enema room, etc. soak gloves after use *one%*solution of chloramine for 30 minutes, then dry and sprinkle with talc.

42 CATHETER PROCESSING.

1 Immersion in 3% chloramine solutionON THE60 min.

2 Washing with running water with kneading. 3 Immersion in the washing complex.

4 Rinse with running water.

5. Rinse in distilled water.

6. Drying with laying in a 2-layer calico, then in bix (control test - benzoic acid.)

43. PROCESSING RAG. 1. Immersion in

one of the solutions for 60 min. before and after use:

a) chloramine B 1% solution,

b) Ca hypochloride 0.5% solution,

2. Or boiling in 2% soda solution - 15 minutes.

3 Or boiling in distilled water - 30 min.

44. QUARTZ MODEOPERATING, dressing and procedural.

Every two hours quartzing 15 min. and airing - 15 min

45. PROVISION OF TIMELY DETECTION OF CARRIERS OF PATHOGENIC STAPHYLOCOCCUS AMONG HED. STAFF AT THE DEPARTMENT OF SURGICAL PROFILE.

1. Complete honey. examination of newcomers to work, including examination by a dentist, as well as bacteriological examination of the nasopharyngeal mucosa for the presence of pathogenic staphylococcus aureus

2. Head the department once every six months organizes a survey for the presence of staphylococcus, if it is found in employees - treatment, and in the event of a nosocomial infection - extraordinary examinations and examinations

46. TREATMENT OF HANDS AFTER EXAMINATION OF A PATIENT WITH PURIOUS-SEPTIC DISEASE. TREATMENT OF WOUNDS

When disinfecting hands, the drug is applied to the palmar surfaces of the hands in an amount of 5-3 ml and rubbed into the skin for 2 minutes. use

1. Ethyl alcohol 80º
2 0.5% alcohol solution of chlorhexidine at 70º
3. When disinfecting hands, chloramine 1% solution is also used (rinsing in the basin 2 min.).

47. MODE OF DISINFECTION BY THE CHEMICAL METHOD OF TOOLS. SYRINGES, NEEDLES FOR TUBERCULOSIS

1. Chloramine 5% solution - - soaking 240 min 2.
Hydrogen peroxide 3% solution - soaking 180 mil. 3.
Distilled water - boil 30 mils 4.2% soda solution - boil 15 min.

After that, we perform pre-sterilization treatment according to OST 42-2 I -2-85.

48 PREPARATION OF WORKING SOLUTIONS OF CHLORAMINE. SODA.

Concentration of working solutions (%)	The amount of the drug	
	For 1 l	For 10 l
0.1	1.0	10.0
0.2	2.0	20.0
0.3	3.0	30.0
0.5	5.0	50.0
one	10.0	100.0
2	20.0	200.0
3	30.0	300.0
five	50.0	500.0
10	100.0	1000.0

49 PREPARATION OF WORKING DEZ SOLUTIONS FROM 5% SOLUTION HYPOCHDORITE Ca.

Desired concentration		1 l	3 l	5 l	8 l	10 l
10% solution	By 5% rr					
0.5%	0.25%	50 ml	150 ml	250 ml	400 ml	50 ml
one %	0.5%	100ml	300 ml	500 ml	80 ml	100ml
3%	1.5%	300 ml	900 ml	1500 ml	240 ml	300ml
5°'o	2.5%	500 ml	1500 ml	2500ml	400 ml	500 ml

50 PROCESSING IN AND IVL DEVICES.

IN and IVL devices, both new and old, after each use, are processed: washed and disinfected in accordance with the instructions, pr. No. 720 of the Ministry of Health of the USSR.

1. The washing process includes a number of successive stages:

a) Preparation - disassembly of the units, removal of hoses, connecting tools, valve box covers, disconnection and emptying of condensate collectors, etc.

b) Disinfection connecting elements and endotracheal tubes contaminated with blood.

c) Washing under a cold stream, why warm howl.

d) Soaking with full immersion in washing solutionfor 15-20 min. (0.5% hydrogen peroxide

solution with 0.5% washing solution)

e) Washing with a cotton-gauze swab (25-30 seconds each item)

f) Rinse the washed parts in running water for 5-10 minutes. then rinsing with distilled water.

g) Drying on a sterile sheet.

2. Disinfection of component parts - immersion in one of the solutions a) 4%. solution of hydrogen peroxide - 60 min. 6) 3% formaldehyde solution - 30 min c) solution of chloramine -60 min. G) 0.1% solution of deoxon-1 - 30 min.

If tracheostomy cannulas and oropharyngeal air ducts are made of metal, they are disinfected by boiling in distilled water for 30 minutes.

Products after disinfection are washed sequentially in 2 portions of sterile water, then dried and stored under aseptic conditions, hoses - in a suspended state.

The process of washing the elements of the breathing circuit and components can be combined with the disinfection process in one process. For this purpose it is necessary to use solution. containing 3% solution of hydrogen peroxide and 0.5% solution of detergent "Progress Lotos") - exposure - 30 min (1l of water, 100ml of rehydrol, 5r CMC).

3. Disinfection of component parts and individual units and blocks of IN and IVL devices during

a] infection with mycobacterium tuberculosis: 3% solution of hydrogen peroxide -180 min.

1% solution of deoxon-1 - 30 min. 10% solution of formaldehyde - 60 min.

5% solution of chloramine 4 hours

boiling in distilled water - 30 min (blocks made of metal and heat-resistant plastics).

4. Disinfection of IN and IVL devices in assembled form with formaldehyde solution in ethanol - 90 min.

5. Sanitary treatment of the outer surfaces of the devices and their additional equipment is wiped with a clean rag moistened with a detergent complex, then rubbed with 1% solution of chloramine or 3% solution of hydrogen peroxide with a 0.5% washing solution.

51. ACTIONS IN THE APPEARANCE OF JAUNDICE IN A PATIENT.

1. Notify the attending physician or the head of the department

2 Until the diagnosis is clarified by an infectious disease doctor, isolate the patient in a separate room.

3. Allocate individual facilities for patient care: dishes, a thermometer, gowns for honey. personnel, a rug at the entrance to the ward., moistened with des. solution, clean rags for surface treatment, containers for disinfecting dishes, a vessel, a urinal.

4 Carry out wet cleaning of the ward and care items using dez. means 3% solution of chloramine or 1.5% solution of Ca hypochlorite.

5. Take blood from contact patients in the ward and medical staff for AST and ALT (as prescribed by a doctor).

6. Conduct daily thermometry, examination of the skin and mucous membranes, the patient's stool for 35 days.

7. Disinfection honey. tools should be carried out in accordance with OST 42-2 1-2-85.

8. To carry out current disinfection in accordance with the requirement of pr. No. 916 of the Ministry of Health of the USSR dated 09/04/83 "Sanitary and anti-epidemic regime of infectious diseases hospitals".

9.After hospitalization of the patient to the infectious diseases hospital (if the diagnosis is confirmed), it is necessary to carry out the final disinfection in the ward with 0.1% activated solution of chloramine with the obligatory treatment of bedding in the disinfection chamber.

(Project No. 916 of the Ministry of Health of the USSR)

52. ACTIONS IN SUSPECTED ACUTE INTESTINAL DISEASE IN A PATIENT.

1. Isolate in a separate room. 2. Notify the attending physician or the head of the department.

3.Allocate individual facilities for patient care: dishes, a thermometer, a beaker, syringes, cleaning equipment labeled "quarantine", gowns for honey. personnel, vessel, urinal, clean rags for surface treatment, containers for disinfecting dishes, a rug at the entrance to the ward, moistened with disinfectant. solution, etc.

4.Carry out wet cleaning of the ward and care items using des. means: 1% solution of chloramine. The dishes are disinfected after each meal with \% solution of chloramine or 0.5% solution of Ca hypochlorite (for 60 million immersion).

5.Take samples of the patient's stools: in the daytime - take in the bacteriological laboratory. at night - in the reception room.

6.Disinfection of medical instruments is carried out in accordance with OST 42-21-2-85

7.To carry out current disinfection in accordance with the requirements of Order No. 916 M3> of the USSR of 09/04/83 "Sanitary and anti-epidemic regime of infectious diseases hospitals".

8.After hospitalization of the patient to the infectious diseases hospital (if the diagnosis is confirmed), it is necessary to carry out final disinfection in the ward with 1% solution of chloramine with the obligatory treatment of bedding in the disinfection chamber.

(Project No. 916 of the Ministry of Health of the USSR)

53. PRIMARY MEASURES IN DETECTION OF A PATIENT WITH SUSPECTED PLAGUE, CHOLERA, OSPU, GVL (HEMORRHAGIC VIRAL FEVER).

1. WITHOUT LEAVING THE ROOM' WITH CLOSED DOORS!

Notify the manager department and heads, a doctor about suspected AIO (especially dangerous infections).

2. Request appropriate medications, honey. tools, packing with protective clothing, spy prevention means (at the reception), personal care items.

3 Temporarily prohibit entry and exit from the department and clinic. 4.Stop communication between departments and floors.

5. Set up posts at the ward where the patient is located, at the entrance to the department and on the floor. 6. Prohibit the circulation of patients in the department where the patient was identified.

7.Temporarily stop the reception and discharge of patients, the admission of visitors. It is forbidden to take things out of the ward, transfer case histories to the archive before the final disinfection.

8.In the ward where the patient is identified, the doors and windows are closed. Ventilation holes are sealed with adhesive tape (except in the case of cholera).

9.If there are two patients in the ward, they, like contacts, are isolated in different wards.

(Instruction of the Ministry of Health of the USSR 1985)

54. MEASURES AND MEANS OF PERSONAL PREVENTION IN AGI.

Prior to receiving protective clothing, medical workers should temporarily cover their nose, mouth with a towel or mask. Before putting on protective clothing, exposed skin areas are treated:

- with plague - solution of streptomycin (250,000 - 500,000 units)
- with cholera - solution of tetracycline (200,000 units)
- with GVL and smallpox - with a weak solution of potassium permanganate (0.5%), the eyes are washed with 1% solution of boric acid or a few drops of silver nitrate, in the nose - 1% solution of protargol.

In the presence of immune-specific drugs - gamma globulin, serum.

(Instruction of the Ministry of Health of the USSR 1985)

63. SET FOR BLOOD COLLECTION ON F. 50

1.bix;
2.syringes, disposable needles (at least 2);
3.clean gloves;

4. glass dry clean test tubes with cotton-gauze globok;
5. sterile cotton swabs;
6. tripod;
7. 70° ethylalcohol;
8. 6% solution of hydrogen peroxide;
9. 1% solution of boric acid,
10. 1% solution of protargol;
11. adhesive tape for packing container

64. PRECAUTIONS WHEN WORKING WITH BLOOD. 1.Med. personnel must be instructed before being allowed to work.

2. All manipulations in which contamination of the skin and mucous membranes with blood or serum can occur should be carried out with rubber gloves and a mask.

3. In case of contamination of the skin or mucous membranes with blood, immediately:

- - Wash the affected areas with warm water and soap, wipe dry.
- -treat the skin with 6% hydrogen peroxide solution or 70 ° alcohol
- -eye mucosa -1% solution of boric acid.
- - nasal mucosa - 1% solution of protargol, rinse the horn with 70 "alcohol or 0.05% solution of potassium permanganate.

4. The surface of working tables is treated with 3% solution of chloramine in case of contamination during work and at the end of the working day.

65. PROCESSING OF BANDING MATERIAL CONTAMINATED WITH BLOOD. Discharged into a container with dez. solution: 3% solution of chloramine - 1 hour or 1.5% solution of hypochlorite
Sa -1h.

66. SANITARY AND HYGIENIC REGIME IN BUFFET

1. Issuance of food to the sick is carried out by barmaids and dezh. honey. sisters in dressing gowns marked “for distributing food”.

2. After each distribution of food, the premises of the pantry and dining room are cleaned in dressing gowns marked “for cleaning”. Use dez. solutions: 1% solution of chloramine or 0.5% solution of hydrochlorite Ca

3. Cleaning material (buckets, mops) must be marked "for pantry". After washing the floors, cleaning equipment is disinfected in 1% solution of chloramine for 60 minutes, then rinsed in running water and dried.

4. Dishes are disinfected in 0.5% solution of chloramine or 0.25% solution of Ca hypochlorite or boiled for 15 minutes. followed by rinsing with running water.

5 Rags for washing and wiping tables, dishes after cleaning are thrown into a container marked “dirty rags” and boiled in 2% soda solution for 15 minutes. or subjected to disinfection in 0.5% solution of chloramine - 60 minutes, then dried and stored in a container with a lid, marked "clean rags".

6. Pantry personnel must observe the rules of personal hygiene: before going to the toilet, take off their bathrobe, after visiting, wash and disinfect their hands with 0.5% chloramine solution for 2 minutes.

(Project 720 of the Ministry of Health of the USSR) 67

ANAEROBIC INFECTION

The source of infection are patients with gas gangrene in any form: emphysematous, edematous, mixed and gas purulent.

The causative agents of gas gangrene (C1. perfiingens. CL. oedomaticus, CL septicum. CL. histolyt-

icran) belong to the genus of pathogenic clostridia - anaerobic spore-bearing bacilli. As a rule, an association of microbes may consist of pathogenic clostridia or in a mixture of pathogenic and low pathogenic clostridia. as well as from a mixture of clostridia with aerobic bacteria: staphylococcus aureus, Escherichia coli, Proteus.

The main route of infection transmission is contact. Infection can occur when the causative agent of gas gangrene gets on damaged skin or mucous membranes with soil, dirty linen, clothes, as well as when using insufficiently sterilized instruments, syringes, needles, suture and dressing materials.

For the treatment of patients with gas gangrene, separate chambers are allocated, if possible, with a special entrance, an operating room-dressing room, equipped with supply and exhaust ventilation that is not connected with other departments.

The walls of the premises are tiled to a height of at least 2 meters, the floor is covered with plastic or linoleum. The surfaces of furniture, apparatus and equipment are covered with smooth, non-porous materials that are easy to mechanically clean and disinfect.

All rooms for patients with anaerobic infection are equipped with wall or ceiling OBN-150 at the rate of I irradiator per 30 m³ of the room or OBN-ZOO at the rate of I irradiator per 60 m³ of the room.

The patient in the emergency room undergoes (if possible) complete or partial sanitization; takes a shower, cuts his nails, etc. In severe cases, the patient is admitted to the ward without treatment.

Before admission and after discharge of the patient, the bed, bedside table, bedpan support (if any) are wiped with rags abundantly moistened with 6% hydrogen peroxide solution with 0.5% detergent. The bed is made with bedding that has undergone chamber disinfection according to the regimen for spore forms of bacteria.

Dirty linen is disinfected before washing by soaking and exploratory boiling in a 2% solution of soda ash (detergent) for 120 minutes from the moment of boiling

The patient is allocated individual items of care - a spittoon, a bedpan, etc., which are washed after use. After the patient is discharged, care items are subjected to disinfection.

For washing hands and toilets and patients use soap in small packaging. After use, the dishes are freed from food debris, soaked in a 2% soda solution and boiled for 90 minutes. Then washed with running water and stored in a closed cabinet.

Chambers are cleaned at least 2 times a day using a wet method using a 6% hydrogen peroxide solution with 0.5% detergent.

Cleaning material (buckets, basins, rags, etc.) is marked and used strictly for its intended purpose. After use, it is autoclaved at 2 kgf/cm³ (132°C±2) for 20 minutes and stored in a designated place.

The dressing room is equipped with stationary bactericidal irradiators To reduce microbial contamination in the dressing room, it is recommended to install mobile recirculating air cleaners (VOPR-0.9 HJUI VOPR-1.5)

The surgeon, the procedural sister put on T-shirts) shoe covers before entering the dressing room. During the operation or dressing, an oilcloth apron is put on, which after each operation or dressing is wiped with a rag soaked abundantly in a 6% hydrogen peroxide solution with 0.5% detergent.

The dressing material is used once, during the operation or dressing it is collected in a specially allocated bix, autoclaved at 2 kgf/cm³ (132C'C±2) for 20 minutes and destroyed.

Note: it is strictly forbidden to throw away the material without decontamination. The tools used during the operation or dressing are collected in a container.

The dressing room is cleaned wet at least 2 times a day using a 6% hydrogen peroxide solution with 0.5% detergent, using personal protective equipment: RU-60 respirators and gloves After disinfection, the room is washed hot water and include bactericidal irradiators (OBN-150 or OBN-300) for 1.5-2 hours.

For sessions of hyperbaric oxygenation, one-seat hyperbaric chambers are used, installed in a specially dedicated baro-room.

For the duration of the session of hyperbaric oxygenation, the patient is given an individual bedding such as a small mattress and a headrest (in order to reduce the risk of spreading the infection, the cover on the bedding is changed after each session. If this requirement cannot be met, the bedding is sheathed with oilcloth or perishable. After session, they change the covers, wipe the bedding with Yutyu soaked in a disinfectant solution.

Disinfection of the inner surface of the pressure chamber is carried out after each oxygenation session by wiping with a sterile cloth soaked in a 6% hydrogen peroxide solution with 0.5% detergent. Then wipe dry with a sterile diaper or sheet.

CLEANING of the barosal is carried out at least 2 times a day using a 6% hydrogen peroxide solution with 0.5% detergent. At the same time, wipe all objects and equipment with a rag soaked in a disinfectant solution and wipe dry. In between sessions of hyperbaric oxygenation, bactericidal irradiators are turned on.

After the operation or dressing, all instruments, syringes, needles are immersed in a 6% hydrogen peroxide solution with 0.5% detergent for 60 minutes or boiled for 90 minutes.

The subsequent procedure for pre-sterilization processing of instruments and its sterilization is similar to that described in sections 6-12.

(Project 720 MZ USSR)

68. SANITARY - HYGIENIC REGIME IN THE DEPARTMENT OF PURULENT SURGERY.

I. It is necessary to have spongy foam rubber mats or rags for disinfecting shoes at the entrance and exit from the department, as well as procedural, dressing, operating room, pantry, moistened with disinfectant. solution (1% solution of chloramine or 0.5% solution of Ca hypochlorite). 2 It is necessary to have honey. gowns, dyed yellow, at the entrance to the medical department. personnel of other departments, as well as the exit from the department for honey. department staff niaPURULENTsurgery.

3. Honey. the staff of the purulent surgery department works in gowns, masks and hats dyed yellow. At the end of work, they change gowns, masks, and caps.

4. Spontaneous movement of patients from ward to ward and access to other departments is strictly prohibited.

5 In the wards, ultraviolet bactericidal irradiators of a closed type are installed.

6. The department of purulent surgery is cleaned at least 2 times a day and after changing linen using disinfectants (1% solution of chloramine, 0.5% solution of Ca hypochlorite).

ORGANIZATION OF COLLECTION. STORAGE AND SCRAP DELIVERY OF SINGLE-USE MEDICAL PRODUCTS FROM PLASTIC MASS

I. In the institutions, organizations and enterprises of the country's healthcare system, appoint responsible persons for the collection, storage and delivery of used single-use syringes.

2. After use, disinfect each syringe with disinfectant. Ras-

creations. Immerse the product in a disinfectant solution after preliminary 2-3 washings with the same solution in order to fill all the cavities of the product with it. Filling the product with a solution prevents it from floating.

3. To ensure the safety of personnel when performing work on the disinfection of single-use medical products made of plastics, one should be guided by

"Rules on labor protection of employees of the disinfection department and on the maintenance of disinfection stations, disinfection departments, departments for preventive disinfection of sanitary and epidemic stations, individual disinfection units" in accordance with the "Regulation on the organization of work on labor protection and safety in the cities, institutions, enterprises and organizations of the system of the Ministry of Health of the USSR, approved by the Order of the Ministry of Health. USSR dated August 30, 1982 No. 862.

The heads of the structural subdivisions where these works are carried out are obliged to develop appropriate labor protection instructions for the maintenance personnel.

4.The following agents can be used to disinfect syringes:

Name of funds	**Concentration solution**	**Time decontaminate vaniya**
Hydrogen peroxideChloramine Activated chloramine solution Neutral hypochlorite Sulfochloramine	6% (according to LDV) 5% (per preparation) 0.5% (per preparation) 1.5% (per preparation) 0.5% (per preparation)	60 minutes 60 minutes 60 minutes 60 minutes 60 minutes

The above disinfection of single-use plastic products completely prevents the possibility of infection by pathogens of bacterial and viral infections, including AIDS and hepatitis B.

5.After disinfection of single-use syringes made of plastics, it completely prevents the possibility of infection with pathogens of bacterial and viral infections, including AIDS and hepatitis B.

Polypropylene: cylinder width, needle head, low pressure polyethylene: piston rod, protective cap.

The presence of metallic or other inclusions is not allowed.

6. To exclude the possibility of reuse of decontaminated single-use plastic products, it is necessary to deform them. Why load separated products from homogeneous plastics into bixes, having previously covered the bottom of the bix with packing paper to prevent sticking of fused syringes with the bottom and walls. Bixes are loaded into the sterilizers available in this medical institution:

— steam sterilizer at 132°—20 min. (provides deformation and sterilization), .

— air sterilizer at 180° - 60 min. (provides disinfection and deformation).

7. In the future, the sintered mass from different biks is stored separately.

Tests-tasks to control the initial level of knowledge (I part)

1. Where are medicines and medical equipment kept by the guard sister?

*Answer:*Medicines and medical inventory is stored in a special closet of the guard sister.

2. How are the medicines arranged in the closet of the sentry sister?

*Answer:*Medicines are grouped.

3. Name a group of drugs that should be stored separately from each other.

*Answer:*Groups of drugs: 1) poisonous, 2) potent, 3) sterile,
4) internal, 5) external.

4. How should strong-smelling medicines be stored?

*Answer:*Strong-smelling medicines should be stored separately, as their odors are transferred to other medicines.

5. How are medical equipment (dressing material, syringes, thermometers) stored?

*Answer:*Medical equipment is stored separately from medicines.

6. Where are patient care items (ship, enemas, etc.) stored?

*Answer:*Patient care items are stored separately from medicines and equipment.

7. Where are poisonous drugs (drugs, strychnine, arsenic, etc.) stored?

*Answer:*Toxic medicines are stored in cabinet "A" under lock and key or in a safe.

8. Where are potent drugs (sleeping pills atropine, adrenaline, etc.) stored?

*Answer:*Strong medicines are stored in cabinet "B".

9. How is the consumption of poisonous and potent drugs kept?

*Answer:*To account for the consumption of poisonous and potent drugs, separate notebooks are made, the sheets of which must be numbered and stitched.

10. Who is responsible for prescribing and administering medicines of groups "A" and "B"?

*Answer:*The doctor is responsible for the prescription and consumption of medicines of groups "A" and "B".

11. Where are perishable medicines (infusions, decoctions, ointments) stored?

*Answer:*Perishable medicines are stored in the refrigerator.

12. How many days can sterile bottled solutions be stored?

*Answer:*Sterile solutions in bottles are stored for no more than 3 days, and then poured out.

13. What are the signs of spoilage of medicinal substances?

*Answer:*Signs of deterioration of medicinal substances: 1) the appearance of flakes, 2) a change in color, 3) a change in smell.

14. In what containers should finished medicinal products received from a pharmacy be stored?

*Answer:*Finished medicinal products should be stored in the packages in which they were released from the pharmacy.

15. What should a sister do before giving medicine to a sick person?

*Answer:*Before giving a medicine to a patient, you need to carefully read its name and dosage.

16. When should medicines be given to patients?

*Answer:*16.1. Medicines should be distributed immediately before their use according to the procedural list.

17. What are the ways to administer drugs?

*Answer:*1. Outdoor. 2. Enteral. 3. Parenteral.

18. What types of external use of medicines do you know?

*Answer:*1. Rubbing. 2. Lubrication. 3. Plaster. 4. Dusting or dusting.
5. Inhalation. 6. Instillation of drops in the eyes, ears, nose.

19. What should be done if the patient is mistakenly given another drug or its dosage is exceeded?

*Answer:*You should immediately inform your doctor about this.

1. Teach students the skin application of medicines.

1. Application of medicines should be carried out only on clean skin, with a clean instrument.
2. In the case of rubbing the ointment, the skin is first washed with soap and then the medicine is rubbed.
3. In the case of rubbing the ointment into the hairy parts of the body, the hair is shaved off.
4. To rub the skin area with a liquid medicinal substance, it is poured into the palm of the hand and then rubbed.

2. Teach students how to take medicines by mouth.

1. Convince that enteral medication is the most convenient and safe method of treatment.
2. Show all dosage forms used for enteral administration (powders, tablets, drops, etc.).
3. Explain that if swallowing is impossible, the medicine is administered in suppositories or enemas through the rectum

Questions to control the final level of educational material

Option 1

1. What are the routes of drug administration?
*Answer:*The drug may be applied topically, orally or parenterally.
2. Forms of drugs used externally.
*Answer:*Ointment, liniment, talkers, aerosol, liquid.
3. What are the forms of drugs used orally?
*Answer:*Infusion, decoctions, tablets, pills, potion, powders, syrup.
4. What are the known dosage forms used for parenteral administration?
*Answer:*Solutions in ampoules, vials, special utensils.
5. Stages of pre-sterilization processing of medical instruments.
*Answer:*Medical instruments are pre-rinsed with running water, then soaked in a washing solution and processed in it with a brush or cotton swab, rinsed in distilled water and dried with hot air.
6. What are the rules for placing instruments in the sterilizer before boiling?
*Answer:*Disassembled syringes are wrapped with gauze and placed on napkins in a sterilizer, which is filled with cold distilled water or boiled twice with the addition of sodium hydrochloride and boiled.
7. How long does it take to sterilize instruments in departments?
*Answer:*In conventional compartments, the duration of boiling is 45 minutes.
8. What are the tests for detecting occult blood on instruments?
*Answer:*Benzidine and orthodon tests.
9. Name the samples used to detect contamination residues on instruments.
*Answer:*Phenolphthalein test.
10. What is the duration of instrument sterilization in the department where a patient with viral hepatitis is located?
*Answer:*Within 1.5-2 hours.

Option 2

1. Technology of external use of medicines.
*Answer:*The application of medicines should always be done on clean skin with an instrument and thoroughly washed hands.
2. Technology of enteral drug administration.
*Answer:*The advantage of enteral administration of drugs is that that at the same time various forms are used not in a sterile form.
3. Who distributes medicines?
*Answer:*It is produced only by a nurse and patients should take medicines in her presence.
4. For what purpose does the prescription of the entire department go to the head nurse?
*Answer:*The head nurse must check the correctness of writing out prescriptions and sign with the head of the department, after which they start preparing medicines in the pharmacy.
5. In what form do medicinal substances come from the pharmacy?
*Answer:*Ready-to-use.

6. What should be done before giving the patient medicine?

*Answer:*You should carefully read the inscription on the package.

7. Where are special cabinets for storing medicines located and by whom are they controlled?

*Answer:*At the post of a nurse and supervised by sentinel nurses.

8. How should medicines be placed on the shelves?

*Answer:*It is advisable to arrange them in accordance with their appearance; larger dishes are placed at the back, and smaller ones at the front. This makes it possible to read any label and take the right medicine.

9. What are the reasons for the safety of medicines?

*Answer:*From many reasons: forms (powders, tablets, potions), temperature and humidity of the room, lighting, quality of occlusion.

10. Which forms of medicines spoil the fastest?

*Answer:*Infusions and decoctions should be stored in a cool place, preferably in a refrigerator.

11. What should be remembered when storing alcohol and ether solutions?

*Answer:*Alcohol and ether solutions evaporate and therefore become more concentrated, which can lead to overdose and poisoning.

12. How long can sterile solutions not in ampoules be stored?

*Answer:*The duration of storage of sterile solutions (outside the ampoules) depends on the period specified by the pharmacy.

Situational tasks

1. After sterilizing the syringe and needles, the nurse touched the needle. What should be done to prevent complications?

*Answer:*Change the needle as it has become unsterile.

2. The patient mistakenly took a nitroglycerin tablet not under the tongue, but inside. Is it dangerous? Answer: No.

3. The nurse supplied a sterilizer with medical instruments for sterilization, did not conduct proper sterilization preparation. What should a nurse do to ensure that sterilization is carried out properly?

*Answer:*Fulfill all these requirements for the pre-sterilization processing of instruments (rinsing, soaking, processing, etc.)

4. The nurse, having drawn the medicine into the syringe, put cotton wool on the needle. What threatens such a violation to the patient?

*Answer:*In this case, the imposition of cotton wool on the tip of the needle is unacceptable, since cotton fibers, having got into the tissue, create conditions for abscessing.

5. In the hospital, the number of abscess formations is increasing. How can this be explained?

*Answer:*Poor pre-sterilization preparation of syringes or insufficient boiling and autoclaving. Insufficient processing of the skin.

Topics of abstracts (UIRS)

1. Drug intolerance.

2. Penicillin shock and emergency care for it.

3. Anaphylactic shock and emergency care for it.

4. Modern views on allergies, sensitization.

Test questions:

1. What are the rules for prescribing and accounting for drugs in the department?

2. What are the general requirements for the storage of medicinal substances?

3. How to properly store and keep records of potent and narcotic drugs?

4. What are the features of storing drugs infused with alcohol and containing

ether?
5. What are the rules and features of the distribution of medicines in the department? List of appointments and rules for working with it.
6. List the ways in which drugs are administered.
7. What methods of external application of medicinal substances do you know?
8. Describe the enteral route of drug administration.
9. What is the technique for introducing rectal suppositories?

Final control: carried out by random testing of practical skills:

1. The use of iodine, powders, patches.
2. Applying ointment compresses.
3. The introduction of drops into the eyes, ears, nose.
4. Distribution of medicines on an individual basis.

TEST CONTROL

1. What is meant by the term substance abuse?
a) poisoning with various toxic substances;
b) pathological addiction to various drugs, chemicals;
c) pathological addiction to drugs.

2. Which of the following features are common to infusions, decoctions and solutions? a) they are all used for internal use;
b) they are all dosed in teaspoons or tablespoons; c) they all have the same state of aggregation.
3. In what cases are drugs administered orally after a meal? a) if they irritate the gastric mucosa;
b) if they are involved in the processes of digestion;
c) if they are destroyed by hydrochloric acid of gastric juice and digestive enzymes.
4. How are syringes and needles sterilized? a) in an autoclave;
b) in a dry oven;
c) using sterilizing gases; d) boiling.
5. What complications are associated with violation of the rules of asepsis and antisepsis during injections?
a) air and fat embolism; b) allergic reactions;
c) development of post-injection infiltrates and abscesses; d) Serum hepatitis.

THEME 9. TECHNIQUE OF SUBCUTANEOUS AND INTRAMUSCULAR INJECTIONS, TECHNIQUE OF INTRAVENOUS INJECTIONS, DRIPPING INTRAVENOUS INJECTIONS.

educational goal: observance of ethics and deontology during parenteral administration of drugs; the need for accurate and timely fulfillment of doctor's prescriptions; sensitive and polite treatment of patients when performing manipulations, tactfully treat each other, medical staff, be able to keep professional secrets. Education of responsibility in students while working in the treatment room and in the department.

Lesson equipment: cotton wool, bandage, waxed paper, iodine tincture, ointments, plaster, eye drops, pipettes, spatula, powders, tablets, ampoules, potion cup, sterilizer, syringes, needles, tweezers, disinfectant solution, systems, dummies, phantoms.

The student must know:

1. parenteral administration of drugs.
2. Syringe device. Syringe disassembly technique.
3. Preparing the hands of a nurse and the patient's skin for injections.
4. Syringe assembly technique. Picking up drugs from ampoules and vials.
5.Delivery of the syringe to the patient's bed. The technique of subcutaneous, intramuscular injections.
6. Features of the use of oily solutions for injection and treatment after that of syringes and needles.
7. The technique of intravenous injections and infusions. Filling the system for drip infusion of liquids.
8. Possible complications with parenteral administration of drugs.
9. How to use disposable syringes. Their benefits.

The student must be able to:

1. Collect the syringe and draw up the medicine from the ampoule.
2. Make subcutaneous, intramuscular, intravenous injections and infusions.

Plan and organizational structure of the lesson.

1. Greetings.
15. The role of student attendance.
16. Introductory speech of the teacher. Target setting.
17. Homework assignment.
18. Control and correction of the initial level of knowledge:

1. parenteral drug administration.
2. Types of syringes, needles and their device.
3. Syringe disassembly and assembly technique.
4. Subcutaneous injection technique.
5. The technique of intramuscular injections.
6. The technique of intravenous injections and infusions.

6. Organization of the work of the treatment room.
7. Acquaintance with the storage of medicines in the department.
8. Showing practical skills.
9. Independent work of students in the department.
10. Discussion of the results of independent work.
11. Control and correction of the final level of assimilation of educational material.

To teach students the technique of parenteral administration of drugs:

a) subcutaneously

1. Subcutaneous injections are carried out away from large vessels and nerve trunks.
2. The area of the skin where the drug is supposed to be injected is pre-treated with alcohol.

3. The skin is grasped in the fold and the needle is inserted subcutaneously.
4. The needle is inserted with a movement at an angle of 45 ° to a depth of 1-2 cm between the fingers of the left hand and the drug solution is slowly injected.
5. The needle is quickly removed.
6. The injection site is wiped with a cotton swab with alcohol or iodine.

b) intramuscularly

1. The optimal place for intramuscular injection of drugs is the upper square of the buttocks.
2. Quickly injected into the middle of the fold to a depth of 7-8 cm.
3. Then pull the plunger towards you to make sure that the needle is not in the vessel.
4. The needle is quickly removed after insertion and the skin is wiped with alcohol.

c) intravenously (stream)

1. To perform this method, you must have a syringe (10-12 ml), a rubber band, alcohol and sterile material.
2. The nurse washes her hands thoroughly with soap and hot water, wipes with alcohol.
3. Solutions for intravenous administration must be clear and not expired.
4. The solution is drawn from the ampoule with a wide diameter needle.
5. Remove all bubbles from the syringe.
6. The place of the proposed injection is carefully treated with alcohol (elbow).
7. Above the elbow, a tourniquet is applied to the middle of the shoulder and the vein is clamped.
8. The introduction of the solution can be jet or drip.

d) intravenous (drip injections)

1. The patient lies on his back.
2. Fix the hand with a soft bandage.
3. For injection, it is better to choose a vein of a smaller caliber.
4. A container with a solution is placed at a height of 1 m.
5. The flow rate of the liquid is usually 50-60 drops per minute.
6. Before starting the introduction, carefully check the system (droppers, rubber tube, etc.).
7. After insertion, the system is disassembled, washed, sterilized, it must be in the sterilizer.
8. The system for single use after the introduction of drugs is discarded.

Learn how to dilute antibiotics.

1. First, determine the patient's response to the introduction of antibiotics.
2. For this purpose, the Bezredk method is used (0.1 ml of an antibiotic solution is drawn into a syringe, injected subcutaneously, and the reaction is checked after 20 minutes).
3. If there are no deviations, another 0.5 ml of the solution is injected, and after 20 minutes everything else.
4. In case of facial flushing, discomfort in the heart area, immediately call a doctor.
5. The syringe is delivered to the patient's bed on a tray in a sterile material.

2-3 needles and sterile alcohol-soaked cotton swabs are placed on the tray.

Tests-tasks to control the initial level of knowledge (I part)

1. Benefits of parenteral drug administration.
*Answer:*1. Speed of action. 2. Dosing accuracy.

2. What are the basic requirements for parenteral dosage forms.
*Answer:*1. No irritating effect on tissues. 2. Sterility.

3. Name the main types of parenteral administration of drugs.
*Answer:*1. Intradermal. 2. Subcutaneous. 3. Intramuscular. 4. Intravenous.
5. Intra-arterial. 6. Introduction to cavities: pleural, abdominal, joints, etc.

4. List the types of sterilization of instruments for parenteral administration.
*Answer:*1. Boiling 2. Autoclaving 3. Soaking in antiseptic solutions.
4. Gamma irradiation. 5. Dry heat. 6. Gas 7. Roasting.
5. How many minutes should syringes and needles be boiled?
*Answer:*At least 45 minutes from the moment of boiling.
6. What part of the body is most convenient for intradermal injections?
*Answer:*Palmar surface of the forearm.
7. What syringes are used for intradermal injections?
*Answer:*With a division value of at least 0.1 ml.
8. What needles are used for intradermal injections?
Answer: 0.4 ml diameter.
9. How are needles inserted for intradermal injection?
*Answer:*1. At an angle of 15°. 2. Cut up. 3. Into the thickness of the skin.
10. Name the criterion for the correctness of intradermal administration.
*Answer:*The formation of a "lemon peel".
11. Name common sites for subcutaneous injection of drugs.
*Answer:*1. The outer surface of the shoulder. 2. Subscapular region.
3. Anterolateral surface of the thigh. 4. Anterolateral surface of the abdomen.
12. List the advantages and indications for using the lateral surface of the shoulder.
*Answer:*1. Technical convenience. 2. Ease of treatment of possible complications.
3. It is a versatile place.
13. Name the advantages and indications for the use of the subscapular region.
*Answer:*1. Does not interfere with active hand movements.
2. It is used for painful and locally reacting drugs.
3. The usual place for preventive vaccinations.
14. Name the advantages and indications for using the anterolateral thigh. Answer: 1. Large area.
2. Convenient for self-administration.
3. It is used in emergency situations and self-administration.
15. Name the advantages and indications for the use of the anterolateral surface of the abdominal wall.
*Answer:*1. Poor blood supply.
2. Used to prolong the duration of the drug (insulin, heparin, etc.).
16. How is the needle inserted for a subcutaneous injection?
*Answer:*1. Under the base of the skin fold. 2. At an angle of 30-45°. 3. To a depth of 2-3 cm.
4. Above the skin should remain at least 0.5 cm of the needle.
17. In which muscles are intramuscular injections made?
*Answer:*1.In the large gluteus. 2. In the triceps muscle of the thigh. 3. Into the quadriceps muscle of the thigh.
18. Name a common site used for intramuscular injection of drugs. Answer: The outer upper quadrant of the buttocks.
19. What needles are used for intramuscular injection? Answer: 6-10 cm long.
20. How is a needle inserted for an intramuscular injection?
*Answer:*1. At an angle of 60-90° 2. Sufficiently deep 3. No more than 2/3 of the needle.
21. The order in which syringes and needles are placed in the sterilizer.
*Answer:*1. Check for patency and tightness.
2. Syringes are stacked disassembled.
3. The cylinder is wrapped in gauze, the piston immediately falls.
4. Needles are laid with mandrin.
22. Why are two tweezers, hooks and a kidney-shaped basin placed in the sterilizer?
*Answer:*To ensure aseptic conditions when assembling the syringe.
23. What water is used for boiling syringes and how many minutes do they boil?

*Answer:*1. Fill with warm distilled water.

2. Or ordinary water with the addition of a pinch of sodium bicarbonate (2% solution).
3. Boil 40-45 minutes from the moment of boiling.

24. How long does it take to boil if any instrument has been added to the sterilizer?

*Answer:*Boiling is carried out for another 40-45 minutes.

25. How to remove instruments from the sterilizer?

*Answer:*The mesh, together with the syringes, is taken out with hooks and placed obliquely on the edge of the sterilizer.

27. How should the syringe be collected?

*Answer:*1. Wash your hands with soap and, without wiping, wipe with alcohol.
2. Remove the cylinder from the sterilizer with tweezers (insert one branch inside the cylinder) dra).
3. Intercept the cylinder with 2 fingers of the left hand.
4. Take the piston with tweezers by the handle and insert into the cylinder.
5. Take the needle by the sleeve with tweezers, put it on the syringe cone and fix it with rotational movements.
6. Remove the mandrin from the needle with tweezers.

Tests-tasks to control the initial level of knowledge (part II)

1. What veins are used for intravenous injections? List them in order of frequency of use.

*Answer:*1. Elbow bend. 2. Back of the brush. 3. Anatomical tobacco box.
4. Shins. 5. Heads.

2. List the rules for applying a tourniquet for intravenous injection.

*Answer:*1. Above the site of the proposed puncture.
2. "Venous tourniquet" (compressing only the vein, but not the artery).

3. How is a needle inserted for an intravenous injection?

*Answer:*1. Only in a clearly visible or palpable vein.
2. The skin is pierced at an angle of 30-45°, the vein -5-10°.
3. The cut of the needle is directed upwards.

4. What is the danger of an air embolism?

*Answer:*The entry of air from the right atrium into the left through an open oval window, which is present in 25% of people, and from there into the vessels of the systemic circulation, cerebral vessels, coronary arteries.

5. How is the correct position of the needle for intravenous injections checked?

*Answer:*By pulling on the plunger of the syringe, blood should appear in the syringe.

6. What should a nurse do if an intravenous injection fails?

*Answer:*1. Remove the needle, remove the tourniquet if it has not already been removed.
2. By pressing the vein to stop the bleeding.
3. Inject the drug into another vein.
4. Put a warm half-alcohol compress on the site of an unsuccessful injection.

7. List possible complications of intravenous injections.

*Answer:*1. Pyrogenic reaction. 2. Fat embolism of the pulmonary vessels.
3. Air embolism of the pulmonary vessels.
4. Dizziness, collapse, heart rhythm disturbance.
5. Infiltrate. 6. Hematoma. 7. Sepsis. 8. Phlebitis.
9. Allergic reactions.

Complications.

to pyrogenic reactionscan lead to the use of drugs with an expired shelf life, poorly prepared solutions. In patients with severe diseases of the cardiovascular system, such a complication may end fatal outcome.

Fat embolism of the pulmonary vesselsoccurs when drugs intended for intramuscular or subcutaneous injection are erroneously injected into a vein
introduction, for example, a solution of camphor in oil. This is manifested by sudden pains in the region of the heart, suffocation, coughing, blueness of the upper half of the chest.
Air embolism of the lungsoccurs when bubbles that are not removed in a timely manner from a syringe or system for blood transfusion
air.
Dizziness, collapse, heart rhythm disturbancemay be due to too rapid administration of the drug.
Infiltrateformed when the drug enters the subcutaneous adipose tissue. This occurs in the case of end-to-end perforation of the vein. In order to prevent this complication, by pulling the piston towards you, make sure that the needle is in the vein. In addition, during the administration of the drug, it is necessary to ensure that swelling does not form at the injection site, which indicates that the solution has entered the subcutaneous fatty tissue.

Getting under the skin of drugs such as eufillin, calcium chloride is very painful. If this happens, it is recommended to put a half-alcohol or dry compress on the elbow area.
Hematomasnear the injection site are formed more often in patients with impaired blood clotting or increased vascular permeability. Prevention of this complication is a fairly long (at least 3-5 minutes) and tight pressing of the injection site (sterile swab with alcohol, pressure bandage).
Sepsis -generalized infection caused by bacterial infection of the blood. Usually occurs when insufficient sterilization of reusable systems for intravenous drip of fluids.
Phlebitis -inflammation of the veins caused by chemical or physical irritation. Often accompanied by thrombosis of the affected vein.
allergic reactionsmay occur with most drugs. They appear in the form of itching of the skin, various skin rashes, Quincke's edema. The most dangerous form of the reaction is anaphylactic shock, accompanied by shortness of breath, nausea, skin itching, lowering blood pressure, loss of consciousness, and blue skin. If a patient develops any of these symptoms, the administration of the drug should be stopped immediately and the doctor should be informed about the incident.

As can be seen from the above, the intravenous method of drug administration, although it has significant advantages, can lead to a number of serious complications, and therefore it is necessary to carefully follow the rules for its implementation.
Remember!The stages of intravenous injection are: control of sterility and suitability of medicines and equipment, application of a tourniquet on the arm, venipuncture, loosening of the tourniquet, slow administration of the drug.

Complications of intravenous injections are associated with improper administration of the drug (rapid administration, administration of an oily, irritating drug, etc.), penetrating vein perforation, development of local or generalized infection.

GENERAL INFORMATION ON HOSPITAL INFECTIONS (HAI)

"Nosocomial Infection"(hospital, in-hospital, in-hospital, nosocomial) - any clinically recognizable infectious disease that affects the patient as a result of his admission to the hospital or seeking treatment there, or hospital employees as a result of their work in this institution, outside depending on the onset of symptoms during or after the hospital stay."

European Bureau of the World Health Organization, 1979

Even in highly developed countries, more than 5% of hospital patients develop nosocomial infections

THE MOST COMMON HAIs:

1. Urinary tract infections •
2. Purulent-septic infections
3. Respiratory tract infections
4. Bacteremia
5. Skin infections

For the occurrence of nosocomial infections, the presence of three links of any epidemiological process is necessary, namely:

1. Pathogen
2. Transmission agent
3. The human body susceptible to infection

VBI:

1. **EXOGENOUS**- the source of infection is introduced into the body from outside
2. **ENDOGENIC**- the infectious agent is present in the body initially

PATIENTS:

1. bacteria
2. viruses
3. mushrooms
4. protozoa
5. multicellular parasites

Mechanisms of transmission of nosocomial infections:

- *Aerosol*
- *Contact*
- *fecal-oral*

Ways of transmission of nosocomial infections:

- *Airborne, airborne*
- *Contact,contact household*
- *food*
- *Artifical (artificial) way of transmission*

THE MAIN WAY OF PREVENTION OF HAI- DESTRUCTION OF THE CHAIN OF INFECTION

Ways to break the chain of infection:

-Implementation of effective control of nosocomial infections.
- Elimination of pathogens.
- Interruption of transmission paths.
- Increasing the resistance of the body (immunity) of a person.

Comprehensive epidemiological measures should be aimed at all 4 links, in addition, it is necessary to carry out a complex of medical measures: reducing the morbidity of medical interventions, antibiotic prophylaxis of nosocomial infections, etc.

DISINFECTION = DISINFECTION DISINFECTION IS:

1. anti-epidemic measures aimed at interrupting the epidemic process by influencing the pathogen transmission mechanism;
2. Destruction of pathogenic and opportunistic microorganisms (except for their spores) from environmental objects or skin to a level that does not pose a health hazard

PURPOSE OF DISINFECTION: Removal or destruction of pathogens of infectious diseases from the objects of the external environment of the wards and functional premises of the departments of healthcare facilities, on medical equipment and tools

TYPES OF DISINFECTION

1. Preventive(in the absence of a focus of infection)
2. Current(produced repeatedly at home or health facility)
3. Focal(if there is an infection)
4. Final(performed once after hospitalization, transfer or death of the patient)

TYPES OF DISINFECTION

MECHANICAL -washing, vacuuming, ventilation; ventilation, washing, etc.

PHYSICAL- boiling, exposure to hot dry air, pressurized water saturated steam, ultraviolet irradiation, etc.

CHEMICAL -use of chemicals (antiseptics and disinfectants)

COMBINED -combining the use of several of the above methods (for example, wet cleaning of premises followed by ultraviolet irradiation)

THE CHOICE OF A DISINFECTANT METHOD DEPENDS ON A LARGE NUMBER OF FACTORS, INCLUDING THE MATERIAL OF THE OBJECT TO BE DISINFECTED, THE NUMBER AND TYPE OF MICROORGANISMS TO BE DESTROYED, AS WELL AS THE RISK OF INFECTING PATIENTS AND STAFF

THREE RISK CATEGORIES FOR INFECTIOUS DEFECTS BY CONTACT WITH ENVIRONMENTAL FACTORS AND RECOMMENDED DISINFECTION LEVELS		
LOW RISK	**MEDIUM RISK**	**HIGH RISK**
Objects in contact with healthy and intact skin, or inanimate, environmental objects that are not in contact with the patient (walls, floors, ceilings, furniture, plumbing and sewer equipment). Cleaning and drying are usually adequate decontamination methods.	Equipment, usedwhich does not imply penetration through. skin and sterile areas of the human body, but comes into contact with mucous membranes or damaged skin, as well as other objects, polluted disease-creative and spreading microorganisms(for example, endoscopes for gastrointestinal tract, vaginal instruments, thermometers). An adequate decontamination method is cleaning followed by **cleaning disinfection**	Items penetrating sterile tissues, including body cavities and vascular systems (eg, surgical instruments, intrauterine devices). Requires cleaning followed by sterilization. If sterilization is not possible, sometimes it is sufficient - enhanced disinfection

HEPATITIS B

Viral hepatitis is a large group of viral anthroponotic diseases that occur with damage to the liver tissue, the etiological, epidemiological and pathogenetic characteristics of which are different, but the clinical manifestations are quite similar, the outcomes and consequences are due to the peculiarities of the etiology and pathogenesis.

Hepatitis B is a global problem of world and domestic health care.

More than 2 billion people are infected with the hepatitis B virus, which is 1/3 of the world's population.

Every year in the world people die from diseases associated with hepatitis B: 100 thousand people - from fulminant (fulminant) forms, 300 thousand people - from primary liver cancer, 500 thousand people - from acute infection, 700 thousand people -

from cirrhosis

ROUTES OF TRANSMISSION OF HEPATITIS B

1. By contact with blood or other body fluids (parenteral)
2. Upon contact with household items contaminated with the patient's biological fluids (contact-household)
3. From mother to child (perinatal)
4. Through sexual contact with an infected person (sexual)

PREVENTION OF HEPATITIS B IN HEALTHCARE WORKERS

Reducing the risk of hepatitis B virus (HBV) transmission is based on a carefully thought-out system of preventive measures, which (as recommended by the WHO Viral Hepatitis Prevention Committee) include:

- application of forms and methods of work that meet safety regulations and the most high modern standards;
- strict adherence to universal preventive measures, use of appropriate personal protective equipment;
- active vaccination of persons belonging to high-risk groups;
- epidemiological analysis of cases of occupational HBV infection, carrying out the necessary
- anti-epidemic measures in each specific case;
- documentary registration of cases of infection.

UNIVERSAL PREVENTION

- healthcare workers dealing with blood or other body fluids should consider all patients as a potential source of infection with hepatitis viruses;
- precautions such as the use of gloves, masks, gowns and other means should be strictly observed (for example, goggles protect the eyes, waterproof clothing protects the skin, etc.);
- injections, dressings and disposal of waste materials must be carried out in strict accordance with existing orders and recommendations.

EMERGENCY MEASURES AGAINST POSSIBLE HEPATITIS B

It is necessary to determine the antibody titers no later than within 48 hours after a possible infection.

If the healthcare worker has not been previously vaccinated or if his antibody titers are below 10 IU/l, then, in addition to vaccination, the introduction of immunoglobulin against hepatitis B is recommended.

HAND TREATMENT

HAND WASHING IS THE MOST EFFECTIVE METHOD TO PREVENT THE SPREAD OF MICROORGANISMS BETWEEN STAFF AND PATIENTS OF THE MEDICAL INSTITUTION

HAND DECONTAMINATION LEVELS

I. SOCIAL LEVEL (HOUSEHOLD)

- Washing moderately soiled hands with plain soap and water removes most transient microorganisms from the skin. Special processing of hands is carried out:
- before eating, feeding patients, working with food;
- after visiting the toilet;
- before and after patient care;
- after any contamination of the hands

II. HYGIENIC LEVEL (DISINFECTION)

Washing hands using antiseptics. Contributes to a more effective removal of temporary microorganisms. Hygienic processing is carried out:

- before performing invasive procedures;
- before caring for an immunocompromised patient;
- before and after wound and urinary catheter care;
- before and after putting on gloves;
- after contact with body fluids or after possible microbial contamination

SURGICAL LEVEL. It is performed before any surgical interventions and involves special treatment of the hands.

Target:destruction of transient flora and reduction of the content of resident organisms to prevent the risk of contamination of the surgical wound when gloves are damaged. The same substances are used as in the hygienic treatment. A specific method of hand disinfection is important

HAND WASHING METHOD

REPEATEACH ACTION 5ONCE

1. palm to palm
2. Right palm over left rear
3. Left palm over right rear
4. Palm to palm, fingers of one hand in the interdigital spaces of the other
5. The back of the fingers to the palm of the other hand
6. .Rotational friction of the palms
7. Rotational thumb friction

SUBSTANCES USED FOR HAND WASHING AS ANTISEPTICS

WATER	ALCOHOL
1. Povidone-iodine solution with detergent containing 0.75% available iodine. 2. Moisten hands with clean water, moisten with detergent (3-5 ml depending on its composition) or lather thoroughly. Wash hands for 10-15 seconds using the method described above and dry 3. 4% solution of chlorhexidine bigljonate with detergent.	1. 5% chlorhexidine solution or povidone-iodine solution in 70% isopropanol or ethanol, 60% isopropanol solution or 70% ethanol solution with a softener (for example, 0.5% glycerol). 2. Apply at least 3 ml of 70% alcohol or an antiseptic alcohol preparation with a softener to the hands and rub dry. Alcohol is more effective than aqueous antiseptic solutions, but pre-washing may be required if hands are heavily soiled. 3. Alcohol is effective when quick hand disinfection is needed when water or towels are not available.

FEATURES OF SURGICAL PROCESSING OF HANDS

Substances: The same as for hygienic hand washing. When using an alcohol preparation, it is applied 2 times in 5 ml. Each portion is rubbed dry.

Treatment: The duration increases to 2-3 minutes; covers the wrists and forearms.

The presence of watches and rings: Reduces processing efficiency. Sterile brushes: Used only for nails, used only once at the beginning of the working day.

TOOL PROCESSING

Decontamination of medical instruments is the process of removing or destroying microorganisms in order to ensure the infectious safety of an object

TYPES OF INSTRUMENT DECONTAMINATION
Carried out using chemical and physical methods of disinfection

CLEANING	DISINFECTION (INTERMEDIATE DISINFECTION)	ENHANCED DISINFECTION (HIGH LEVEL DISINFECTION)	STERILIZATION
Removal of foreign materials from the object (organic and inorganic substances and microorganisms). Thorough cleaning and drying; remove the pain most microorganisms from objects. Cleaning precedes the final	A process that reduces the number of pathogenic microorganisms, but not necessarily bacterial spores, from inanimate objects or the skin to a level that does not pose a health hazard	The process of destruction of tuberculosis mycobacteria and enteroviruses, as well as other vegetative forms of bacteria, fungi and more resistant viruses (only resistant spores (botulism, tetanus) can remain)	The process of destroying all types of microorganisms, as well as bacterial spores. It is carried out using special methods: - chemical (gas, chemical preparations) physical (steam, air, glasperlenic, radiation)

work (disinfect-tion and sterilization). Carried out manually - in an aqueous solution detergenttool s with a brush or cotton-gauze swab			naya, plasma)

PROCESSING SEQUENCE OF MEDICAL INSTRUMENTS

1. Preliminary (primary) disinfection. Purpose: Decontamination of instruments for the protection of medical staff performing cleaning from infection
2. Washing with running water. Purpose: Disinfectant removal
3. Cleaning (soaking and mechanical cleaning). Purpose: Removal of all possible contaminants
4. Washing with running water. Purpose: To remove cleaning solution residues and dirt
5. Washing with distilled water. Purpose: Complete removal of cleaning solution residues and contaminants
6. Drying. Purpose: Removal of water that can dilute disinfectant for final disinfection or sterilization
7. Final processing (final disinfection and sterilization). Purpose: Protecting the patient from infection
8. Storage of sterile (disinfected) material

CLASSIFICATION OF ENVIRONMENTAL SUBJECTS BY CATEGORIES FOR THE RISK OF HAI TRANSFER

LOW RISK (NON-CRITICAL ITEMS)	MEDIUM RISK (SEMI-CRITICAL ITEMS)	HIGH RISK (CRITICAL ITEMS)
Items in contact with healthy skin, not in contact with mucous membranes (tonometers, axillary thermometers, crutches, bed linen), as well as inanimate environmental objects not in contact with patients (walls, floors, ceilings , furniture, plumbing). Adequate decontamination method is low-level cleaning or disinfection	Equipment that comes into contact with mucous membranes or damaged skin (respiratory and anesthetic equipment, endoscopes, rectal thermometers, vaginal instruments), as well as any objects that conta-mined by virulent microorganisms. Adequate decontamination method **— cleaning followed by medium or high level disinfection (depending on *equipment)***	Items penetrating into sterile tissues, including gel cavities and vascular systems (surgical instruments, implants, needles, intrauterine devices, vascular catheters, soaked catheters). An adequate method of decontamination is cleaning followed by sterilization

PRECAUTIONS FOR MANUAL CLEANING

1. Careful handling of sharp objects
2. Thick latex gloves
3. Waterproof apron/robe
4. Protective glasses
5. Mask

HIV. AIDS

HIV infection is a disease caused by the human immunodeficiency virus, characterized by a slowly progressive defect in the immune system, which leads to the death of the patient from secondary lesions (infectious and neoplastic processes), described as acquired immunodeficiency syndrome (AIDS), or from subacute encephalitis.

ROUTES OF TRANSMISSION

1. Sexual
2. Parenteral
3. When breastfeeding
4. Vertical

CLINICAL CLASSIFICATION OF HIV INFECTION

1. STAGE OF INCUBATION. From the moment of infection to the appearance of antibodies. The diagnosis can be confirmed by polymerase chain reaction by detecting the HIV-RNA antigen. Isolation of the HIV antigen by ELISA has low specificity.

2. STAGE OF PRIMARY MANIFESTATIONS. It is characterized by a relative balance between the body's immune response and the action of the virus. Duration from 2-3 to 10-15 years

ACUTE INFECTION. Usually lasts 2-3 weeks. Accompanied by fever of varying severity, lymphadenopenia, enlargement of the liver and spleen, skin rashes, meningeal phenomena are possible. Then it goes to stage 2B or 2C

2B. ASSYMPTOMIC INFECTION It is characterized by the absence of clinical manifestations. There may be a moderate increase in lymph nodes. In contrast to the stage of incubation, antibodies to HIV antigens are determined.

2B. PERSISTENT INFECTION. Characterized by persistent generalized lymphadenopathy, which is the only clinical manifestation at this stage

3. STAGE OF SECONDARY DISEASES. With the progression of the disease, clinical symptoms develop, indicating a deepening of immune damage, which characterizes the beginning of the 3rd stage.

BEHIND. It is characterized by weight loss of less than 10%, bacterial, fungal, viral lesions of the mucous membranes and skin, inflammatory diseases of the upper respiratory tract.

ZB. It is characterized by a weight loss of more than 10%, skin lesions that are of a deeper nature, and a tendency to a protracted course. Damage to internal organs develops, localized Kaposi's sarcoma.

ZV. It is characterized by cachexia, generalization of infectious diseases,

disseminated Kaposi's sarcoma, severe lesions of the central nervous system of various etiologies

4. TERMINAL STAGE

It is characterized by irreversible damage to organs and systems. Even adequately conducted therapy for secondary diseases is ineffective, and the patient dies within a few months.

HIV PREVENTION MEASURES IN MEDICAL FACILITIES

The most real danger of infection occurs when gloves are torn and punctured, which can lead to contact with contaminated material on the skin, possibly with microtraumas, especially from punctures and cuts. To reduce the likelihood of infection in such cases, it is recommended:

1. When preparing for manipulation in a patient with HIV infection, make sure that the emergency kit is intact.
2. Perform manipulations in the presence of a second specialist, who, in the event of a rupture of gloves or a cut, can continue to perform it.
3. Treat the skin of the nail phalanges with iodine before putting on gloves.
4. If contaminated material comes into contact with the skin: treat it with 70% alcohol, wash with soap and water and re-disinfect with 70% alcohol; treat mucous membranes with a 0.05% solution of potassium permanganate; rinse mouth and throat with 70% alcohol or 0.05% potassium permanganate solution. Don't rub! For injections and cuts, squeeze blood out of the wound and treat the wound with a 5% iodine solution. Prophylactic thymoside (AZT) 800 mg/day for 30 days is recommended.

MASKS

Necessary to avoid airborne transfer of microorganisms, as well as in the presence of the likelihood of getting into the mouth and nose of body fluids.

Masks should be replaced when they become damp. You can not lower them around the neck, reuse. All masks must completely cover the mouth and nose.

High quality disposable masks are much more effective than regular gauze or paper masks in preventing the spread of airborne or droplet vectors.

EYE PROTECTION

Protective barriers for the eyes and face are needed to protect the eyes from splashes of blood or body fluids.

robes and aprons

With the exception of operating rooms or isolation rooms, where sterile gowns are worn to protect the patient, the main purpose of gowns and polyethylene aprons is to prevent spread of infection from getting on the clothing and skin of staff. Gowns and aprons are needed only if the wet bodily secretions are likely to contaminate clothing or skin.

Under no circumstances should staff be allowed to wash bathrobes at home.

UNIVERSAL SAFETY MEASURES FOR MEDICAL PERSONNEL FROM INFECTION

All patients should be considered as potentially infected with HIV and other blood-borne infections.

Medical personnel should remember and apply the 7 safety rules to protect the skin and mucous membranes when in contact with the blood or body fluids of any patient.

1. Wash hands before and after any patient contact.
2. Consider blood and fluid secretions of all patients as potentially infectious and only handle them with gloves.
3. Immediately after use, place used syringes and catheters in a special container for the disposal of sharps, never remove needle holders with needles from syringes and do not manipulate used needles in any way.
4. Use eye protection and masks to prevent possible splashing of blood or liquid secretions into the face (during surgical operations, manipulations, catheterization and medical procedures in the oral cavity).
5. Use special waterproof clothing to protect the body from possible splashes of blood or liquid secretions.
6. Treat all linen soiled with blood or liquid secretions as potentially infectious.
7. Treat all laboratory specimens as potentially infectious.

SAFETY OF MEDICAL PERSONNEL
Mechanisms of transmission of infection from the patient to medical personnel

1. **CONTACT**
2. **FEcal-oral**
3. **AEROSOL**
4. **TRANSMISSIBLE**

GENERAL PREVENTION MEASURES

- Initial and regular examinations with registration of the state of immunity and immunization.
- All incidents (needle stick or cut) should be reported to the supervisor and recorded in the register. The same applies to cases of infection through contact with a patient.
- All skin lesions should be covered with a waterproof dressing.

IMMUNIZATION IS THE BEST PROTECTION FOR STAFF

DESIRED VACCINATIONS:from typhus; influenza, poliomyelitis (during an epidemic). BCG

An important point in the prevention of nosocomial infections among staff is personal hygiene. To the right

personal hygiene routines include: daily shower or bath, with particular attention paid to hair and nails; thorough laundering of gowns and other personal clothing; protecting the mouth and nose (if possible with disposable protective equipment) and turning the head away from nearby people when coughing and sneezing; scrupulous hand washing.

USE OF GLOVES

Gloves should be worn if there is any possibility of contact with blood or bodily fluids, mucous membranes or broken skin of any patient, or if there are cuts or other injuries to one's own skin.

Gloves should be changed between contact with patients and after contact with secretions and excretions before serving the same patient. Used gloves must be disposed of properly. Sterile gloves are worn only for sterile procedures.

RECOMMENDED VACCINATIONS: from diphtheria, hepatitis B, tetanus

SEQUENCE OF ACTION WHEN USING STERILE GLOVES

PUTTING ON	REMOVAL
1. Развернуть упаковку с перчатками. 2. Взять перчатку за отворот левой рукой так, чтобы пальцы не касались внутренней поверхности перчатки. 3. Сомкнуть пальцы правой руки и ввести их в перчатку. 4. Разомкнуть пальцы правой руки и натянуть на них перчатку, не нарушая ее отворота. 5. Завести под отворот левой перчатки 2, 3- и 4-й пальцы правой руки, уже одетой в перчатку так, чтобы 1-й палеи правой руки был направлен в сторону 1-го пальца на левой перчатке. 6. Держать левую перчатку 2, 3- и 4-м пальцами правой руки вертикально. 7. Сомкнуть пальцы левой руки и ввести ее в перчатку. 8. Расправить отворот левой перчатки, натянув ее на рукав, затем на правой с помощью 2- и 3-го пальнем, подводя их под подвернутый край перчатки.	1. With the fingers of the right hand in a glove, make a lapel on the left glove, touching it only from the outside. 2. With the fingers of the left hand, make a lapel on the right glove, also touching it only from the outside. 3. Remove the glove from the left hand, turning it inside out and holding the lapel. 4. Hold the glove removed from the left hand in the right hand. 5. With your left hand, take the glove on your right hand by the lapel on the inside and remove the glove from your right hand, turning it inside out. 6. Place both gloves (the left one is inside the right one) in a container with a disinfectant (if they are reusable) or throw them into a waterproof bag.

Questions to control the final level of educational material.

1. What vein is most often used for intravenous drug administration and why?
*Answer:*The cubital vein, the most accessible.
2. What determines the choice of route of drug administration?
*Answer:*First of all, the condition of the patient, as well as the nature of the drug effect.
3. How are subcutaneous drug injections technically performed?
*Answer:*The area where the injection is supposed to be treated with alcohol, the skin is taken into a fold and the drug is injected into its base, after which the needle is quickly removed and the skin is wiped with alcohol.
4. What is the technological essence of intramuscular injections?
*Answer:*The site of intramuscular injections is treated with alcohol, a needle is quickly inserted into the middle of the fold (to a depth of 7-8 cm), the piston is pulled back to make sure that the needle is not in the vessel and the drug is injected, the needle is removed, and the injection site is wiped with alcohol.
5. What are the complications of intravenous drug administration?
*Answer:*Possibility of vascular embolism, by accidental introduction of air.
6. What are the conditions for drip (intravenous) administration of medicinal solutions?
*Answer:*The use of sterile droppers, sterile solutions with a slow flow of fluid (40-60 drops per minute). Monitoring the patient's condition.
7. What should be done after removing the needle from the vein?
*Answer:*After removing the needle, the injection site is treated with alcohol.
8. What is the duty of the nurse if the patient's condition worsens after the introduction of drugs?
*Answer:*Immediately call a doctor, and provide first aid yourself.
9. In what cases the drug can not be used for parenteral administration.
*Answer:*Error in prescription, cloudiness of the solution, precipitation, outdated date of manufacture.
10. What are the complications of venipuncture?
*Answer:*Ineffective puncture with the formation of hematoma, phlebitis.
11. What is the preparation of the hands of a nurse for parenteral administration of drugs?
*Answer:*Before starting parenteral drug administration, the nurse should thoroughly wash her hands with soap and a brush under running water, and then treat the skin with alcohol.

Situational tasks

1. The patient was injected subcutaneously with the drug into the anterior surface of the shoulder. What complications can be expected?
*Answer:*Possible damage to blood vessels or nerves.
2. After the intramuscular injection of penicillin, the patient turned pale, covered with a cold sweat, the pulse became thready. What is this condition and how to stop it?
*Answer:*Acute vascular insufficiency. Lay the patient on his back. Give a sniff of ammonia, invite a doctor.
3. When transporting a sterile syringe to the patient's bed, the nurse covered the needle with a cotton swab. What are the complications?
*Answer:*The needle has become non-sterile. A possible complication is a post-infectious abscess.
4. When diluting penicillin, the nurse used a 2% solution of novocaine. What can happen?
*Answer:*The antibiotic may not dissolve and precipitate.
5. After venipuncture of the elbow, redness, swelling, and pain appeared in the injection area. What is allowed and how to fix it?

*Answer:*The drug was injected not into a vein, but subcutaneously. A warming compress should be placed, if a hypertonic solution is introduced, the injection site is chipped with a 0.25% solution of novocaine.

6. After the administration of the antibiotic, the patient developed reddening of the skin, unpleasant sensations in the region of the heart, epigastric region. What does this mean and what should be done? Answer: The patient has an allergic reaction to this antibiotic. Stop further administration of the antibiotic, introduce antihistamines, calcium chloride, with severe loy reaction - intravenously administered prednisolone, hydrocortisone.

7. At the time of intramuscular injection of the drug, the needle entered the blood vessel. What are the consequences and how to deal with them?

*Answer:*There may be bleeding. Stop the injection, press the skin with a cotton swab with alcohol and keep it for 2-3 minutes.

Test questions.

1. List the advantages of parenteral drug administration.
2. Demonstrate the technique of assembling a sterile syringe with one and two tweezers, draw up the medicine from the ampoule. Make subcutaneous and intramuscular injections.
3. Calculate and dilute antibiotics.
4. Demonstrate how to use disposable syringes.
5. What are the possible complications during intravenous injections and infusions?
6. Assemble a disposable drip infusion system.
7. List the procedure for performing an intravenous injection and perform it on the dummy. 10. List the most convenient sites for intradermal subcutaneous, intramuscular and intravenous injections.
12. What is the intradermal injection technique?
13. What is the technique of subcutaneous injections?
14. What is the intramuscular injection technique?
15. What is the intravenous injection technique?
16. Name the complications of intradermal, subcutaneous, intramuscular and intravenous injections.
17. What are the possible complications during subcutaneous and intramuscular injections?

Final control:carried out by random checkpracticalskills:

1. The use of iodine, powders, patches.
2. Applying ointment compresses.
3. The introduction of drops into the eyes, ears, nose.
4. Distribution of medicines on an individual basis.

TEST CONTROL

1. What route of drug administration is called parenteral? a) the use of drugs by injection;
b) any method of drug administration, bypassing the gastrointestinal tract; c) external use of medicines.

2. When is the rectal route of drug administration used? a) if oral administration is not possible or desirable;
b) if it is necessary to provide a local therapeutic effect;
c) if you need to get a quick and pronounced effect.

3. In what cases is it advisable to use injection methods of drug administration?
a) if you need to get a quick therapeutic effect;

b) if the drug acts very briefly; c) if the drug is highly toxic;
d) if it is necessary to ensure the exact concentration of the drug in the blood; e) if there are no other ways of administering the drug.

4. What areas of the body are most suitable for subcutaneous injections? a) the outer surface of the shoulder;
b) the inner surface of the shoulder;
c) the outer surface of the thigh; d) the inner surface of the thigh; e) subscapular region;
e) sidewaysthe surface of the abdominal wall.

5. What areas of the body are most suitable for intramuscular injections? a) the outer surface of the thigh;
b) the inner surface of the thigh;
c) lateral surface of the abdominal wall; d) upper outer quadrant of the buttocks;
e) subscapular region.

6. What are the indications for the use of intravenous infusions? a) decrease in the volume of circulating blood;
b) intoxication of the bodyri infectious diseases andpoisoning; c) increased blood pressure;
d) violations of water-electrolyte balance and acid-base state.
7. What is the role of the air tube in an intravenous drip system? a) displaces the liquid from the vial with the solution;
b) prevents the penetration of air into the tubes of the system; c) promotes the droplet movement of liquid through the system.

TOPIC 10: SUPERVISION AND CARE WITH RESPIRATORY DISEASES.

educational goal:compliance with the principles of ethics and deontology when caring for patients with respiratory diseases, elderly and senile patients.

Lesson equipment: Spirometer, pneumotachometer, stopwatches for counting the frequency of respiratory movements, floor and personal spittoons with a ground-in lid, a set of instruments for pleural puncture (needles, syringes, pleuroaspirator, Bobrov apparatus), a set of medicines to help in case of acute cardiovascular insufficiency during pleural puncture (ammonia, cordiamine), oxygen pillows, oxygen cylinders with reducers, installations for centralized oxygen supply, nasal catheters, temperature sheets for recording respiration, pulse and blood pressure, a set of drugs for emergency care for pulmonary bleeding (camphor, epsilon-aminocaproic acid, calcium chloride solution, ascorbic acid solution, rubber bands.

The student must know:

1. The method of counting the number of respiratory movements and register in the temperature sheet.
2. To acquaint students with the main symptoms of respiratory diseases: shortness of breath,

cough, pleural pain, pathological secretions from the respiratory tract when coughing (sputum, hemoptysis).
3. The concept of shortness of breath and suffocation. Creating a comfortable position for the patient in bed, using a headrest, a functional bed.
4. Determination of violations of the phases of breathing, as well as the definition of rhythm disturbances and frequency of respiratory movements.
5. Provide emergency assistance in case of respiratory diseases (suffocation, shortness of breath, cough, hemoptysis)
6. Rules for the care of bedridden patients with respiratory diseases.
7. Filling an oxygen bag and giving it to patients.
Use of various oxygen installations. Hydration of oxygen.
8. Cough, helping with it.
9. Collecting sputum in measuring cups during the day, in pocket spittoons. Disinfection of spittoons. Sending sputum to the laboratory.
10. Symptoms of hemoptysis, pulmonary hemorrhage. Urgent first aid.
11. Use of an inhaler.
12. General care for patients with respiratory diseases.
13. Organization of the work of a nurse in the pulmonology department.
14. Features of observation and care of elderly and senile patients with respiratory diseases.

The student must be able to:
1. Use the spittoon and sanitize it.
2. Count the respiratory movements, make their graphic recording.
3. Provide first aid for an attack of unproductive cough.
4. Use a functional bed and other devices to create a comfortable position for the patient (fixing skills).
5. Use an inhaler.
6. Put banks, mustard plasters, compresses (consolidating previously acquired skills).
7. Give the patient humidified oxygen.
8. Collect sputum and send it to the laboratory.
9. Provide first aid for pulmonary and nasal bleeding.
10. Apply an ice pack (reinforcing skills).
11. Provide first aid for suffocation.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:
    1. Anatomy and physiology of the respiratory organs.
    2. Definition of external respiration.
    3. Types of breathing (thoracic, abdominal, mixed). Pathological types of breathing (breath of Kussmaul, Biot, Grokk, Cheyne-Stokes).
    4. The method of counting respiratory movements. Registration of the breathing curve on the temperature sheet.
    5. List the main symptoms of impaired respiratory function.
    6. The concept of shortness of breath and suffocation. Creating a comfortable position for the patient in bed, using a headrest, a functional bed.
    7. Cough, helping with it.

8. Symptoms of hemoptysis, pulmonary hemorrhage. Urgent first aid.

9. Collecting sputum in measuring cups during the day, in pocket spittoons. Disinfection of spittoons.

10. Method for collecting sputum for laboratory testing:

- sputum collection for general clinical examination
- - / - to detect Mycobacterium tuberculosis
- - / - for sensitivity to antibiotics

11. Observation and care of patients with respiratory diseases.

12. Peculiarities of care for elderly and senile patients.

13. Oxygen therapy. Safety precautions when working with oxygen.

14. Hyperbaric oxygenation, complications.

15. How to use oxygen.

16. Pleural puncture (pleurocentesis, thoracocentesis), complications. Methods of diagnostic and therapeutic thoracentesis.

17. Organization of the work of a nurse in the pulmonology department

6. Demonstration of patients with respiratory diseases.

7. Control over the performance of manipulations by students: counting the number of respiratory movements, their graphic recording in the temperature sheet, filling the oxygen bag. Giving patients an oxygen bag, etc.

8. Independent work of students in the department.

9. Discussion of the results of independent work.

eleven. Control and correction of the final level of assimilation of educational material (solution of situational problems).

Tests-tasks to control the initial level of knowledge of students (part 1).

1. Define shortness of breath.

*Answer:*Shortness of breath is a difficulty in breathing, characterized by a violation of the frequency, rhythm, depth of respiratory movements and the ratio of the phases of inhalation and exhalation.

2. What is suffocation?

*Answer:*Suffocation is called paroxysmal arising severe shortness of breath.

3. What are the types of shortness of breath.

*Answer:*Inspiratory, expiratory.

4. First aid for shortness of breath.

*Answer:*1. Give an elevated position.
2. Get rid of tight clothing.
3. Open a vent or window.
4. Give an oxygen bag.

5. Enter the normal number of breaths per minute.

*Answer:*16-20 respiratory excursions in 1 minute.

6. Define cough.

*Answer:*Cough is a protective reflex act aimed at removing foreign bodies, mucus, sputum from the bronchi and upper respiratory tract in various diseases of the upper respiratory tract, bronchi, and lungs.

7. First aid for an attack of unproductive cough.

*Answer:*1. Give a warm drink (only hot with soda or half with warmed borjomi).
2. Put jars or mustard plasters.
3. Take warm foot baths.

8. What are the complications of coughing?

*Answer:*1. Syncopal attacks (episodic loss of consciousness at the height of the cough).
2. Rupture of the emphysematous bulla of the lung with the development of pneumothorax.

9. Give a brief description of pulmonary hemorrhage.
*Answer:*The appearance of blood in the sputum in the form of streaks or a large amount of scarlet blood.
10. What are the immediate first-aid measures for pulmonary hemorrhage?
*Answer:*1. Provide complete peace (calm down, forbid talking, lay down).
2. Give an elevated position.
3. Put an ice pack on the chest, allow small (0.5-1 cm in diameter) pieces of ice to be swallowed.
4. Monitor the state of the cardiovascular system.
5. Give antitussives (codeine, codterpine, etc.).
11. What manipulations are contraindicated in pulmonary hemorrhage?
*Answer:*1. Put mustard plasters. 2. Put banks. 3. Apply heating pads. 4. Apply physiotherapy.
12. List the methods of oxygen therapy.
*Answer:*1. Oxygen inhalation. 2. Enteral administration of oxygen.3. Hyperbaric oxygenation.
13. Safety precautions when working with an oxygen cylinder.
*Answer:*1. It is unacceptable to smoke, use open flames or electrical appliances in the room where the oxygen cylinder is located.
2. Heating of a cylinder is inadmissible.
3. You can not use a defective cylinder.

Tests-tasks to determine the initial level of knowledge of students (part 2).

1. What is the procedure for disinfecting individual spittoons?
*Answer:*1. Spittoons are disinfected by boiling before giving to the patient.
2. Add to 74 2% solution of chloramine.
3. At least once a day, sputum in a spittoon is disinfected with a 3% solution of chloramine or a 2% solution of potassium permanganate and poured into the sewer.
2. How is sputum collected for general clinical analysis?
*Answer:*1. In the morning on an empty stomach.
2. After rinsing the mouth with baking soda or furacilin (1:5000), or 0.01% potassium permanganate solution by coughing.
3. How is sputum collected for antibiotic sensitivity?
*Answer:*Sterile Petri dishes are used to culture sputum for antibiotic susceptibility.
4. List the complications of oxygen therapy. 1, 2, 3, 4, 5.
*Answer:*1. Retrolentary fibroplasia. 2. Arterial hypotension.
3. Stop breathing. 4. Oxygen poisoning.
5. Damage to the epithelium of the airways, alveoli.
5. How to avoid complications of oxygen therapy? 12.
*Answer:*1. Do not apply 100% oxygen concentration.
2. Limit the time of oxygen supply.

Questions to control the initial level of assimilation of educational material

Option 1

1. What are the respiratory organs for? What is the number of respiratory movements per minute in a healthy person?
The respiratory organs serve to carry out the life process, which consists in maintaining a constant exchange of gases - oxygen and carbon dioxide - between the external environment and the body. The number of respiratory movements is normally 16-20 per minute.
2. Define external respiration.
External respiration is the exchange of gases between the lungs and atmospheric air.

3. What pathological types of breathing do you know?
Pathological types of breathing include: Kussmaul breathing, Biot. Cheyne-Stokes.
4. What is shortness of breath?
Shortness of breath is a disorder of the rhythm, depth and frequency of breathing.
5-6. Describe inspiratory and expiratory dyspnea.
Inspiratory dyspnea is breathing with difficulty in inhaling, which develops in the presence of a mechanical obstruction in the upper respiratory tract.
Expiratory dyspnea is breathing with difficulty exhaling occurs in bronchial asthma, pulmonary emphysema.
7. How to collect sputum for general analysis?
After rinsing the mouth, sputum is collected in a transparent glass container and sent to the laboratory for examination for general analysis.
8. Describe sputum in terms of consistency and color.
Distinguish sputum by consistency: mucous, serous, purulent, mucopurulent, bloody; by color: colorless, pinkish, rusty, scarlet, greenish, grayish.
9. How to take sputum for Mycobacterium tuberculosis by flotation method?
Sputum is collected within 2-3 days, after which it is sent to the laboratory for testing for Mycobacterium tuberculosis.
10. Sanitary and hygienic rules for a patient with an open form of pulmonary tuberculosis. When coughing, it is recommended to cover your mouth with a handkerchief so that sputum particles do not fall on others. Do not spit sputum on the floor, into a handkerchief, as it can be a source of infection for healthy people. Sputum should be collected in a spittoon with a ground stopper. Spittoons are disinfected with a 5% solution of chloramine and boiling in a 2% soda solution for 15 minutes.
11. What is characterized by pulmonary bleeding and how to distinguish it from gastrointestinal bleeding
Pulmonary bleeding is accompanied by cough, and gastrointestinal bleeding is accompanied by vomiting, movements.
12. Providing emergency first aid for pulmonary hemorrhage.
Create complete physical and mental rest for the patient. Lay in bed with the head end of the bed raised. Before the arrival of the doctor, give the patient a solution of salt (20 g per glass of water) or a 10% solution of calcium chloride (30-40 ml) to drink. In case of profuse bleeding, apply tourniquets on three limbs until the doctor arrives.
13. Diet of patients with hemoptysis.
Food should be chilled, easily digestible, rich in vitamins, and should be taken in small portions in a semi-liquid form.
14. Providing emergency care to patients with pleural pain.
With severe pleural pain, it is necessary to administer painkillers (analgin, novocaine blockade).
15. How to prepare a patient for a pleural puncture?
The patient is seated astride a chair, facing the back of the chair, on which a pillow is placed. Lay your arms bent at the elbows on the pillow. The body of the patient should be slightly turned in the direction opposite to that. where the puncture will take place. Before puncture, treat with 5% alcohol solution of iodine, carefully treat with alcohol and local anesthesia of the proposed puncture site.
16. What should the doctor prepare for a pleural puncture?
For pleural puncture, it is necessary to prepare iodine, alcohol, sterile syringes, needles, a pleuroaspirator, 0.5% novocaine for local anesthesia, a sterile tube for sending pleural fluid to the laboratory.

Option 2

1. How to correctly count the respiratory movements?

Counting of respiratory movements should be carried out within a minute, imperceptibly for the patient.
2. What is suffocation?
Choking is a rapidly developing shortness of breath when the patient is close to suffocation.
3. What types of shortness of breath do you know (depending on the causes and
mechanism)? Shortness of breath can be pulmonary, cardiac, hematogenous,
nervous or centrogenous.
4. Describe Biot's breathing.
Proper alternation of deep breathing movements and pauses.
5. Describe Cheyne-Stokes breathing.
The correct alternation of periods of breathing with an increase and decrease in the frequency and depth of breathing with pauses.
6. Kussmaul's breath - give a description.
Slow and deep breathing (occurs in diabetic coma, hepatic coma, cerebral hemorrhage).
7. What is sputum?
Sputum - pathological discharge from the respiratory tract and lungs when coughing.
8. How to collect sputum for bacteriological examination?
The patient should thoroughly rinse his mouth and collect sputum in a sterile dish.
9. What is the purpose of therapeutic exercises for lung diseases?
Physiotherapy. It is prescribed to restore the functions of the body disturbed by the disease with the help of physical
exercises. Improving breathing, therapeutic exercises prevent the development of an inflammatory process in the lungs in patients on bed rest.
10. What is the purpose of a pleural puncture for a patient? a)
life imprisonment;
b) for the purpose of diagnosis, while in addition to the general analysis of the pleural fluid, the specific gravity, the total amount of protein, and the Rivalta test are examined in it. shaped elements, atypical cells, mycobacterium tuberculosis, etc. are counted.
11. What diseases cause oxygen starvation?
Oxygen starvation is observed in pneumonia, bronchial asthma, pulmonary edema, emphysema, etc.
12. What is the purpose of oxygen therapy?
Oxygen therapy is prescribed for the development of oxygen starvation (hypoxia).
13. What physical procedures are contraindicated for hemoptysis and pulmonary hemorrhage?
With hemoptysis and pulmonary bleeding, banks, mustard plasters and other physiotherapeutic methods of treatment are contraindicated.
14. What is characteristic of pleural pain?
Pleural pains worse with deep inspiration. The position of the patient on the side of the lesion limits the movement of the pleural sheets and thereby reduces pain.
15. How to take sputum for testing for atypical cells?
To collect sputum for atypical cells, it is necessary that the patient rinses his mouth well, and then collects the sputum in a clean dish, after which the sputum is urgently sent to the laboratory for examination.
16. What precautions should be taken when using bottled oxygen?
Oxygen cylinders should be stored in a dry room at a temperature not exceeding 35 ° C, in an upright position, in special nests. Protect the cylinder from shocks, impacts, falling. When opening the cylinder, it is not recommended to stand facing the stream of oxygen, as you can damage your eyesight.

Option 3

1. Describe chest type of breathing.

Thoracic type of breathing is most common in women. With it, the chest cavity expands mainly in the anterior-posterior and lateral directions.

2. Describe abdominal breathing.

The abdominal type of breathing is more typical for men. The expansion of the chest cavity with it occurs mainly in the vertical direction, due to the diaphragm.

3. What are the characteristics of mixed breathing?

With a mixed type of breathing, the expansion of the chest is uniform in all directions.

4. What is the vital capacity of the lungs? The vital capacity of the lungs in men is 3000-5000 ml, in women - 2000-3500 ml.

5. What to recommend to a patient with difficulty in sputum production?

The patient should be advised 2-3 times a day for 20-30 minutes to take such a position in bed, which makes it easier to remove the accumulated sputum.

6. What is the first aid for a patient with bronchial asthma in status asthmaticus? Release the patient's chest from restrictive clothing, give the patient a semi-sitting position in bed, increase the air supply to the room, and carry out oxygen therapy.

7. What diseases cause dry cough?

Cough is dry with inflammation of the upper respiratory tract, inflammation of the pleura, compression of the bronchus by a tumor, a foreign body.

8. Organization of the work of medical personnel in the pulmonology department.

Medical staff should:

a) often ventilate wards and treatment rooms; b)

monitor the disinfection of spittoons;

c) monitor the three-time wet cleaning of the premises with disinfectant solutions;

d) strictly follow the doctor's prescription;

e) be able to prepare the patient for endoscopic examination.

9. What diseases cause a wet cough?

Cough is wet with pneumonia, tuberculosis, bronchitis, bronchiectasis, abscess and gangrene of the lungs.

10. Elements of care for patients with pleuropneumonia.

Patients with lung disease should be kept in bright, spacious, well-ventilated rooms with centralized oxygen supply. Daily morning toilet, prevention of bedsores. Measurement of daily sputum production, counting of breaths, determination of the Stange and Gench test.

11. Ways of introducing oxygen in oxygen therapy.

Oxygen therapy is most often carried out by inhalation. In addition, oxygen can be injected under the skin, into the pleural, abdominal cavity, stomach, intestines, to irrigate wounds, oxygen baths.

12. What is "medical oxygen"?

Medical oxygen contains 99% pure oxygen and 1% nitrogen.

13. How should medical oxygen cylinders be stored?

Oxygen cylinders should be stored in a vertical position, in a dry place at a temperature not exceeding 35°C. Smoking in the room where oxygen cylinders are stored is strictly prohibited.

14. What is the purpose of oxygen therapy?

With therapeutic ((spruce (to improve the patient's well-being, reduce cyanosis, stop shortness of breath, improve cardiac activity, normalize sleep).

15. Describe the state of asphyxia.

Asphyxia is respiratory arrest due to lack of oxygen.

Situational tasks and questions for the final control of knowledge.

1. Patient K., 43 years old, turned to you for help, complaining of hematemesis. You suspected he had stomach bleeding.

Based on what data will you distinguish gastric bleeding from pulmonary?

*Answer:*Table of differential diagnosis of pulmonary and gastric bleeding.

Clinical signs	**Bleeding**	
	pulmonary	**gastric**
The nature of the bleeding.	When coughing.	When vomiting.
The color of blood.	Bright red, scarletfoamy.	dark red,the color of coffee grounds.
Admixture of leftover food.	Missing.	Available.
Anamnestic data.	Respiratory diseases, pulmonary edema.	Gastric diseases,liver disease.

2. Patient R., aged 52, is in the therapeutic department for right-sided lower lobe pneumonia. The doctor prescribed jars for the night. The nurse washed the jars and placed them on a towel to drain. After 5 minutes, she put the patient to bed on his stomach and put the jars on his back for 10 minutes.

Name the mistakes made by the nurse.

*Answer:*a) Did not wipe dry washed jars;

b) did not lubricate the back with petroleum jelly or glycerin (to avoid back burns).

3. At work in a hot shop, 22-year-old worker S. M. suddenly developed nasal bleeding. A nurse has been called from the health center. The patient is excited, complains of weakness, dizziness, cough, nausea. There was pallor of the skin.

What first aid should be provided to the patient?

*Answer:*1. Transfer the patient to a cool room, calm him down, convince him that sudden movements, coughing, talking, blowing his nose can increase bleeding.

2. The patient should be seated, given a position in which there is less opportunity for blood to enter the nasopharynx.

3. Put an ice pack wrapped in a scarf, a scarf moistened with cold water, a bandage, a ball of cotton wool, etc., on the nose and bridge of the nose.

4. An adequate supply of fresh air must be ensured.

5. If the bleeding does not stop, you can try to stop it by firmly pressing both halves of the nose against the septum. The patient's head is tilted slightly forward and possibly higher, the nose is squeezed with force. The patient should breathe through the mouth. You need to squeeze your nose for 3-5 minutes. The patient should spit out the blood that got into the mouth.

6. Instead of pressing, you can tamponade the nasal passages with a dry ball of cotton or a ball of cotton moistened with a solution of hydrogen peroxide. Cotton balls are introduced into the nasal passages, the patient's head is tilted forward. On cotton wool, the blood quickly coagulates and the bleeding stops.

7. If these measures do not stop the bleeding, you should immediately call a doctor or take the patient to the hospital.

4. List the first aid measures for patients with shortness of breath or suffocation.

5. List the methods of first aid for pulmonary hemorrhage.
6. List the methods of providing first aid in case of an attack of unproductive cough.
7. Features of care for patients with respiratory diseases.
8. Organization of the work of a nurse in the pulmonology department.
9. Features of care for elderly and senile patients with respiratory diseases.

Situational tasks

1. Sick. 20 years old, was admitted to the clinic with severe cyanosis, recurrent attacks of suffocation. He sits in bed, cannot take a horizontal position. Cough with a small amount of glassy sputum. Breathing with sharply labored and prolonged exhalation. 22 min. Wheezes whistling during breathing are heard throughout.
Task: What type of dyspnea does the patient have, how and in what sequence to provide her with emergency assistance?

*Answer:*The patient has expiratory dyspnea. It is necessary to free the patient's chest from tight clothing, heavy blankets. Give the patient a semi-sitting position in bed, increase the oxygen supply in the room, and carry out oxygen therapy.

2. A 70-year-old patient has been suffering from headaches for a long time, and recently his memory has significantly weakened. Objectively, there are convoluted vessels on the temples. The pulse is high, firm, 70 beats. in min. HELL 180-70 mm. rt. Art. Respiration is characterized by the periodicity of respiratory movements, between which there are pauses with a gradual increase in respiratory movements and subsequent extinction to a complete stop.
Task: Draw a graphically described type of breathing and name it. Under what conditions of the respiratory center does this type of breathing appear?

*Answer:*This is Cheyne-Stokes breathing. It occurs in diseases of the brain, coma, poisoning, and severe circulatory disorders.

3. Patient, 20 years old. She has been coughing for a long time (several years), but she has not turned to doctors for help. Suddenly, in the morning, after a strong coughing attack, a large amount (300 ml) of frothy blood of a scarlet color was released.
Task: Where did the bleeding come from? Provide emergency first aid (specify the sequence).

*Answer:*The patient has pulmonary hemorrhage. It is necessary to put her in bed with a raised headboard, create physical and mental peace, forbid talking. Give a drink a strong solution of table salt (1 tablespoon per glass of water) or 10% calcium chloride solution.

4. Patient, 19 years old. Parents suffer from pulmonary tuberculosis During the last 3 years the patient developed weakness, subfebrile temperature, cough with a small amount of sputum. Task: What should be the examination of the patient? What method is used to collect sputum for the study of mycobacterium tuberculosis in it?

*Answer:*The patient needs to examine sputum for Mycobacterium tuberculosis. Sputum is collected by flotation.

5. A 60-year-old patient was delivered to the department in a serious condition with severe dyspnea and cyanosis. There is no centralized oxygen in the department, there is only bottled oxygen.
Task: How to apply oxygen directly from the cylinder? List the sequence of your manipulations. Compressed gaseous oxygen ignites on contact with what substances?

*Answer:*When prescribing oxygen inhalation for a long time, you can use the oxygen cylinder directly, which is installed at the patient's bedside. With the help of a regulator, oxygen under constant pressure passes through rubber tubes to moisten it through the water poured into the vessel from the Bobrov apparatus, and then enters the patient's mouth or nose. Compressed gaseous oxygen in contact with oils, fats, oil ignites.

6. During the pleural puncture, the patient turned pale sharply, covered with sweat. Task: What are the nurse's emergency procedures?

*Answer:*Inhalation of ammonia, fresh air, cordiamine or caffeine intramuscularly.

7. A patient with pulmonary tuberculosis behaves untidy: he coughs when surrounded by healthy people, spitting sputum on the floor, into a handkerchief.
Assignment: Nurse Tactics?

*Answer:*Explain to the patient that when surrounded by healthy people, one should refrain from coughing or cover one's mouth with a handkerchief so that sputum particles do not fall on another person. Spitting sputum on the floor or a handkerchief is not allowed, as this can cause illness to those around you. Teach the patient how to use an individual spittoon.

8. For a patient with exudative pleurisy, the doctor should perform a pleural puncture (diagnostic). Task: What tools and medicines should the nurse prepare?

*Answer:*Syringe 20 g, needles 7-10 cm long, 1-1.2 mm in diameter, novocaine 0.5% 5-10 g, ammonia, cordiamine, sterile test tubes 2-3 pcs.

9. The patient was on strict bed rest for a long time. Assignment: Tactics of a nurse for the prevention of congestive pneumonia.

*Answer:*Ventilation of the ward, in the absence of contraindications, turn the patient on his side, light back massage, therapeutic exercises.

10. A patient with pulmonary heart failure, as prescribed by a doctor, receives diuretic drugs. Task: How to determine the effectiveness of diuretic drugs?

*Answer:*Daily collect daily urine in a container and note in the medical history on the temperature sheet the amount of fluid drunk and excreted.

11. A patient with pneumonia had a sharp drop in temperature (from 39° to 35°), he became covered with sticky sweat, and turned pale.
Task: What condition has developed in the patient and the activities of the nurse before the arrival of the doctor?

*Answer:*The patient developed a collapse. To stop it, it is necessary to introduce cardiotonic agents, for example, cordiamine.

12. The patient has a severe form of pleuropneumonia. An admixture of blood appeared in the sputum (rusty sputum).
Task: Is it possible to give the patient jars and mustard plasters during this period?

*Answer:*When "rusty sputum" appears, it is impossible to put jars and mustard plasters on the patient.

SUMMARY TOPICS.

1. The main symptoms in various diseases of the respiratory system.

2. Emergency care for asthma.
3. Emergency care for pulmonary hemorrhage.
4. Principles of care for patients with impaired respiratory function.
5. Physiotherapy for respiratory diseases and prevention of congestive pneumonia.
6. Oxygen therapy: indications, inhalation methods of oxygen administration.
7. Hyperboric oxygenation, indications and contraindications.
8. Organization of the work of paramedical personnel in the pulmonology department.

Test questions.

1. The method of counting respiratory movements.
2. List the main symptoms in violation of the function of the respiratory system.
3. What pathological types of breathing do you know?
4. Describe the types of shortness of breath depending on the violations of the respiratory phases. What is the help for shortness of breath, suffocation?
5. What is sputum, what does it indicate? Sputum collection technique.
6. Oxygen therapy (give a brief formulation of the method). Methodology and possible complications.
7. What methods of inhalation oxygen therapy do you know?
8. Principles of emergency first aid for acute respiratory failure.
9. Principles of emergency first aid for patients with pulmonary hemorrhage.
10. Features of care for patients with respiratory diseases.
11. Technique and possible complications during pleural puncture.

Knowledge level control:is carried out by testing practical skills, solving situational problems on the topic and test control.

TEST CONTROL.

1. Which of the following methods of examination of the respiratory system are X-ray methods?
a) bronchography;
b) bronchoscopy;
c) fluorography; d) tomography;
e) spirography.

2.What are the symptoms of chest pain associated with pleural effusion? a) increased pain with deep breathing and coughing;
b) stabbing character of pain;
c) compressive nature of pain;
d) increased pain when positioned on the sore side;
e) reduction of pain when positioned on the sore side; e) increased pain with pressure on the chest.

3. What procedures should be prescribed to the patient to reduce persistent dry cough?
a) bronchial drainage with a change in body position;
b) warm alkaline drink;
c) banks, mustard plasters;
d) expectorants and antitussives; e) inhalation of oxygen.

4.For which study is it necessary to accumulate sputum for 1-3 days? a) examination for the presence of atypical cells;
b) examination for the presence of Mycobacterium tuberculosis;
c) sputum culture to identify microflora and its sensitivity to antibiotics.

5.What lung diseases can be accompanied by hemoptysis? a) acute bronchitis;
b) lobar pneumonia; c) bronchial asthma;
d) bronchiectasis e) lung cancer.

6. What signs of bleeding indicate its pulmonary origin? a) scarlet, foamy blood;
b) dark blood, clots like "coffee grounds"; c) the released blood has an alkaline reaction; d) the released blood has an acidic reaction;
e) coughing up blood.

7. What measures should be taken if a patient develops pulmonary hemorrhage? a) appoint complete rest;
b) put an ice pack on the chest area; c) introduce vikasol and calcium chloride;
d) put banks or mustard plasters; e) apply oxygen inhalation.

8. What diseases are characterized by acute respiratory failure? a) acute bronchitis;
b) pulmonary emphysema;
c) blockage of the trachea and large bronchi by a foreign body;
d) pulmonary embolism;
e) drug poisoning.

9. What are the characteristics of expiratory dyspnea? a) difficulty exhaling;
b) difficulty in breathing;
c) difficulty in inhaling and exhaling.

10. What is the optimal concentration of oxygen in the inhaled mixture? a) 15-20%;
b) 40-60% c) 75-80%; d) 95%.

11. What is the purpose of oxygen humidification during oxygen therapy?
a) preventing its unnecessary loss;
b) compliance with safety regulations;
c) prevention of the toxic effect of oxygen on the body.

12. What is the purpose of a pleural puncture?
a) removal of fluid from the pleural cavity for diagnostic purposes; b) removal of fluid from the pleural cavity for therapeutic purposes;
c) introduction of drugs into the pleural cavity;

d) separation of pleural adhesions;
e) suction of sputum from the bronchi and their washing

THEME 11. OBSERVATION AND CARE OF PATIENTS WITH DISEASES OF THE BLOOD CIRCULATION. MEASUREMENT OF ARTERIAL PRESSURE, DETERMINATION OF THE PROPERTIES OF ARTERIAL PULSE

Target:medical deontology and ethics in caring for patients with cardiovascular diseases. To teach students the technique of measuring blood pressure and determining the properties of the arterial pulse.

educational goal:issues of medical deontology and ethics in the care of patients with cardiovascular diseases. Creating a favorable psychological climate for patients with acute myocardial infarction.

Lesson equipment:

1. Patients with various manifestations of cardiac and vascular insufficiency.
2. Riva-Rocci apparatus (Sphygmomanometer, tonometers, phonendoscopes), patient observation sheets with graphic recording of pulse, daily diuresis, blood pressure.
3. Table "Characteristics of diets. Unloading days.
4. Systems (sterile) for single intravenous administration of fluids. A set of drugs needed to provide emergency care in various acute conditions (shock, collapse, syncope, cardiac asthma).
5. Items for the care of patients with cardiovascular diseases (rubber circles, tourniquets, drinkers, enema accessories, camphor alcohol, oxygen plants, temperature sheets, portions).

The student must know:

1. Pulse, its properties, technique of determination, digital and graphic recording.
2. Blood pressure, the technique of its measurement, digital and graphic recording.
3. The main symptoms of diseases of the cardiovascular system.
4. The concept of the causes of pain in the heart and first aid for them.
5. Acute vascular insufficiency (fainting, collapse) and first aid for them.
6. General care of patients with diseases of the cardiovascular system.
7. Features of care for patients with this pathology of the elderly and senile age.

The student must be able to:

1. Determine the patient's pulse, give its characteristics, write down graphically.
2. Measure blood pressure and interpret the obtained data.
3. Determine swelling on the legs and lower back of the patient.
4. Provide first aid for acute vascular insufficiency.
5. Provide first aid for acute heart failure.
6. Calculate the frequency of respiratory movements and evaluate its nature (reinforcement of skills).
7. Observe the appearance of the patient and assess his condition, follow the physiological functions.
8. Provide first aid for pain in the heart.
9. Feed the seriously ill (reinforcing the skill).
10. Use a functional bed (skill consolidation).
11. Change underwear and bed linen (reinforcing the skill).

12. To carry out the prevention of bedsores (reinforcing the skill) .13. Submit the vessel, urinal, disinfect them (reinforcing skills).
13. Give oxygen (reinforcing the skill).
14. Carry out subcutaneous and intramuscular injections for cardiovascular patients (reinforcement of skills).

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:
6.
   1. Deontology in the care of patients with diseases of the circulatory system.
   2. List the characteristic symptoms of cardiovascular diseases.
   3. Observation and care of patients with pain in the heart.
   4. Emergency first aid in case of pain in the region of the heart or behind the sternum.
   5. Observation and care of patients with circulatory failure: Acute vascular insufficiency, provision of first aid. Chronic heart failure.
   6. Peculiarities of care of patients with this pathology in senile and advanced age.
   7. What is the method of determining the arterial pulse. Describe it graphically.
   8. Define blood pressure.
   What is the technique for measuring it according to the Korotkov method. Characteristics of blood pressure in healthy and sick.
   9. Organization of the work of a nurse in the cardiology department.
   10. Features of clinical nutrition of patients with zabol. circulatory organs.

6. Demonstration of patients with diseases of the circulatory system.
7. Demonstration of practical skills: a technique for determining the arterial pulse, its registration in the observation sheet, measurement of blood pressure.
8. Independent work of students in the department.
9. Discussion of the results of independent work.
10. Control and correction of the final level of assimilation of educational material. (solution of situational problems).

Control of the initial level of knowledge of students

1. List the main symptoms in the pathology of the circulatory system.
1. Pain in the region of the heart or behind the sternum. 2. Palpitations, interruptions in the work of the heart.
3. Shortness of breath. 4. Edema.
2. Emergency first aid in case of pain in the region of the heart or behind the sternum.
1. Lay the patient down and calm down.
2. Give a nitroglycerin tablet under the tongue, having previously found out how this drug is tolerated.
3. Put a mustard plaster on the area of the heart.
4. If the pain does not stop within 5 minutes, urgently call a doctor.
3. Features of shortness of breath in cardiac pathology.
Increased dyspnea in the horizontal position and decrease in the vertical

4. What is the emergency first aid in case of suffocation in a patient with a disease of the cardiovascular system?
   1. Give a semi-sitting position with lowered legs, calm down.
   2. Apply tourniquets to limbs.
   3. Give oxygen.
   4. Urgently call a doctor.
5. How to correctly apply tourniquets to the limbs
   1. Over a gauze pad or towel.
   2. The limb should turn blue, the veins should swell, but the pulsation of the peripheral arteries should remain.
   3. The tourniquets are applied for 30 minutes.
6. List the main symptoms of fainting.
   1. Sharp weakness, dizziness, ringing in the ears, sometimes nausea, "darkens" in the eyes, loss of consciousness.
   2. The skin is pale, cold sticky sweat.
   3. The pulse is soft and rare.
   4. The pupils constrict.
7. List the main symptoms of collapse.
   1. Sharp pallor, collapse of visible veins, cold clammy sweat, extremities cold to the touch.
   2. Breathing is rapid, shallow, but not difficult.
   3. The pulse is frequent, soft, thready.
   4. BP is drastically reduced.
   5. The patient is motionless, although conscious, answers questions with difficulty.
8. First aid for fainting.
   1. Lay the patient down so that the head is lower than the legs.
   2. Unfasten clothes.
   3. Spray your face with cold water, let the ammonia smell and rub the whiskey with ammonia.
   4. Rub the skin of the face and soles.
9. First aid for collapse.
   Put the patient to bed, warm with heating pads, drink strong tea, inject 1-2 ml of 10% caffeine, 1-2 ml of cordiamine under the skin, urgently call a doctor.
10. What is a pulse?
    Rhythmic contractions (pulsation) of the vascular wall are synchronous with the work of the heart.
11. What is the heart rate of a healthy person? 60-90 beats per 1 minute.
12. List the places of the pulse examination.
    1. On the radial artery.2. On sleepy.3. On the temporal.4. On the thigh.
    5. On the popliteal.6. On the artery of the dorsal foot.
13. Stages of the study of the pulse.
    1. Determination of the pulse on both hands.
    2. Study of the properties of the arterial wall.
    3. Investigation of the properties of the pulse.
14. Pulse properties. 1.Frequency. 2.Rhythm.3.Filling.4.Tension.5.Height.6. The form.

Questions to control the initial level of educational material

Option 1

1. Why are diseases of the heart and blood vessels considered a severe pathology of the internal organs?
These diseases are widespread, give high disability and mortality of the population.

2. Method for determining the pulse.
It is determined by palpation: with three fingers of the right hand on the radial artery in the area

lower third of the forearm.
3. Characteristics of the pulse. Frequency, rhythm, content, size, shape.
4. Method for determining blood pressure.
It is measured with a sphygmomanometer, Riva-Rocci apparatus, in the elbow bend at the projection of the brachial artery, Korotkoff sounds are heard with a stethophonendoscope (the appearance of a pulsation is systolic blood pressure, the disappearance is diastolic).
5. Characteristics of blood pressure in healthy and sick.
Healthy BP 100-150 mm Hg. column - systolic, and 60-90 - diastolic (depending on age). BP with hypotension 100/60 mm Hg. Art. and below. BP with hypertension 160/95 mm Hg. Art. and higher.
6. Name the general symptoms in diseases of the circulatory system.
Pain in the region of the heart, shortness of breath, suffocation, cough, palpitations, cyanosis, wheezing in the lungs, enlargement of the boundaries of the heart, heart murmurs with rhythm disturbance, liver enlargement, anasarca, ascites, edema in the legs and trunk.
7. What is pulse pressure? The difference between systolic and diastolic blood pressure in a healthy person. It is equal to 40-50 mm Hg. st
8. What does a thready pulse indicate? About a sharp drop in blood pressure.
9. What is a pulse deficit?
Difference between heart rate and pulse rate
10. What does the appearance of edema on the legs in a patient with heart pathology indicate? About cardiac insufficiency.
11. Where should patients with myocardial infarction be observed in the acute period? In the intensive care unit or intensive care unit.
12. What foods should be recommended to a patient with heart disease. Rich in potassium and magnesium: baked potatoes, dairy products, cabbage, dried apricots,
raisins, prunes, pumpkin, black radish.

Option 2

1.Fainting (symptoms).
Weakness, darkening of the eyes, ringing in the ears, nausea, dizziness, loss of consciousness, pallor, cold sweat, thready pulse, a sharp decrease in blood pressure, lack of breathing or a sharp decrease in it.
2. Describe systolic blood pressure.
Systolic pressure is the pressure at the moment of maximum rise in the pulse wave that occurs after left ventricular systole.
3. Technique for measuring blood pressure.
The patient during the measurement of blood pressure should sit quietly or lie down. A cuff is placed on the patient's bare shoulder 2–3 cm above the elbow bend. A phonendoscope is applied in the elbow bend over the region of the radial artery pulsation. The numbers on the scale show systolic pressure (appearance of tones) and diastolic pressure (disappearance of tones).
4. Therapeutic nutrition of patients with circulatory failure
Table 10. Restriction of table salt (up to 2 g per day), liquids and spicy foods. Fasting days, Karel's diet.
5. First aid for hypertensive crisis.
Rest, lying position, sedatives (valerian, motherwort, validol), access to fresh air, mustard plasters on the collar area.
6. First aid for an attack of angina pectoris.
Validol, nitroglycerin under the tongue, rest, fresh air, unfasten clothes, mustard plasters on the heart area.
7. Emergency care for pain in the heart?
Mustard plasters on the heart area, irrigation of the heart area with chlorethyl, nitroglycerin under

tongue, inhalation of oxygen and nitrous oxide.

8. The mode of the patient with a hypertensive crisis

Bed first, then the mode expands depending on the nature of the complications.

You should follow the doctor's prescription.

9. Why is inhalation of oxygen moistened with alcohol vapor prescribed for pulmonary edema?

For reduction of foamy sputum in the bronchi.

10. Mode of the patient with myocardial infarction.

Bed and acute and subacute periods of myocardial infarction. It is allowed to sit from the 3rd week, walk from the 4th week (depending on the course of the disease and complications).

11. Acute vascular insufficiency (causes).

Mental shocks, blood loss, trauma, pain, poisoning.

12. What enemas can be recommended to a patient with myocardial infarction? Hypertonic, oily, medicinal.

Option 3

1. Deontology in the care of patients with diseases of the circulatory system

Sensitivity, attention, tact when caring for bedridden and seriously ill patients, instilling confidence in recovery, conversations with caregivers about nutrition and the rules for caring for patients.

2. First aid for fainting.

Fresh air, inhalation of ammonia, unbutton the collar of clothing, lying on the back, head end below the torso.

3. Ways to introduce oxygen.

The inhalation method of introducing oxygen through a mask, nasal catheters, oxygen is supplied from a balloon and by a centralized method. Subcutaneous and rectal methods of administration.

4. Collapse emergency.

Subcutaneous administration of cordiamine, caffeine, camphor, mezaton, ephedrine and glucocorticoids as prescribed by a doctor.

5. First aid for shock.

Painkillers prescribed by a doctor: analgin, baralgin, drugs in combination with diphenhydramine or pipolfen. With a fall in blood pressure, cordiamin, mezaton, norepinephrine, reopoliglyukin, intravenous glucocorticoid hormones.

6. Emergency first aid for an attack of cardiac asthma.

Establish an inhalation supply of oxygen moistened with alcohol, create an orthopnea position for the patient, apply tourniquets to three limbs, administer a diuretic (lasix), invite a doctor.

7. The role of the nurse in caring for patients with circulatory diseases.

Control and careful observance of the diet, monitoring of physiological functions, general condition and physiological functions, the transfer of products, the implementation of medical procedures.

8. Tactics of a nurse in caring for patients with myocardial infarction.

Control of diet, hygiene, physiological functions, general condition.

Control of blood pressure and P, the implementation of medical procedures.

9. Therapeutic nutrition of patients with heart failure.

Diet according to table 10, in cases of severe edema - table 10a, the exclusion of fatty and spicy foods. The intake of salt and spicy foods is limited.

10. Equipment for the cardiology department.

Control over drinking regimen and diuresis, nutrition. Regularly count the pulse, the number of breaths per minute, measure blood pressure and record these indicators in the temperature sheet.

11. Care of patients with heart failure.

A specialized cardiology department should be equipped with blood pressure measuring devices, syringes, sterile systems, heart monitors, defibrillators, oxygen, electrocardiographs, cabinets with emergency medical aid kits.

12. Therapeutic nutrition of a patient with myocardial infarction.

Small in quantity, fractional (6 times a day), low-calorie diet No. 17, introduction of foods rich in magnesium and potassium, restriction of salt, spicy dishes, spices.

Task tests to control the initial level of knowledge

1. What is called blood pressure?
Blood pressure is the force with which blood acts on the walls of blood vessels.

2. Healthy blood pressure readings.
Normal blood pressure numbers are from 100/60 to 140/90 mmHg

3. What types of sphygmamanometers do you know?
1. Mercury. 2. Membrane (spring). 3. Electronic.

4. What is the technique for measuring blood pressure according to Korotkov?
1. The cuff of the sphygmamanometer is placed on the shoulder, directly on the body, so that a finger passes between it and the skin.
2. Having felt the pulse of the ulnar artery, a phonendoscope is installed in the elbow bend.
3. Close the air valve and begin to increase the air pressure in the cuff with the help of a pear. The pressure should be increased until a pulsation is heard, and by another 20-30 mm Hg. Art. above.
4. By slightly loosening the screw of the air valve, air is slowly released, the moment when vascular sounds appear corresponds to the systolic (maximum) pressure.
5.The moment of disappearance of vascular tones corresponds to diastolic (minimum) pressure.

5. List the most common mistakes in determining blood pressure.
1. Arm muscles are not relaxed.
2. Apply cuff over clothing.
3. Measurement of blood pressure is carried out once, and not 2-3 times.
4. When working with a mercury sphygmamanometer, one should strive to ensure that the zero mark of the manometer is at the level of the heart.

Situational tasks

1. Determine the pulse deficit in a patient with cardiosclerosis and cardiac arrhythmias.
Task: a) Methodology.
b) What kind of arrhythmia is evidenced by a pulse deficit?
*Answer:*a) In one minute, 2 researchers simultaneously count the number of heart contractions and the number of pulse beats. The difference between them will be the pulse deficit.
b) About atrial fibrillation and group extrasystole.

2. Tactics of a nurse in determining the thready pulse. Task: a) What does this indicate? b) What should the nurse do?
*Answer:*a) About acute cardiovascular insufficiency.
b) Urgently lay the patient down, inhalation of ammonia vapors, call a doctor.

3. The patient has burning, constricting pain behind the sternum, radiating to the left arm. Task: Tactics of first aid.
*Answer:*Nitroglycerin (1 tab. under the tongue), rest, fresh air. Mustard plasters on the heart area, inhalation of oxygen and nitrous oxide.

4. At the emergency room, the patient was diagnosed with acute myocardial infarction, pain behind the sternum persists.
Task: a) Which department should the patient go to? b)
Transportation of the patient to the department.
*Answer :*a) Transportation of the patient to the department should be careful, on a gurney, in a supine position.
b) In the cardiological, in the intensive care unit.

5. A patient with myocardial infarction (2 days) got out of bed, went to the toilet, washed himself, sat down to dine in the dining room.
Task: a) Specify violations in the regime.
b) Why is the violation of the regimen dangerous for patients with myocardial infarction?
*Answer:*a) Patients with acute myocardial infarction are shown strict bed rest. b) Death may occur from cardiac arrest and pulmonary edema.

6. A patient with acute myocardial infarction on the 7th day of the disease suddenly developed an asthma attack, cough with foamy bloody sputum, cold sweat, weakness, cyanosis.
Assignment: Tactics of the nurse before the arrival of the doctor.
*Answer:*a) Place the patient in an orthopnea position or with the head of the bed raised. b) Give oxygen (inhalation), moistened with alcohol vapor.
c) Apply tourniquets to 3 limbs. d)
Urgently call a doctor.

7. A patient suddenly developed acute vascular insufficiency (fainting) after a mental overstrain.
Task: a) How will blood pressure and pulse change?
b) The tactics of the nurse before the arrival of the doctor.
*Answer:*a) The pulse is not determined, may be thready, blood pressure drops to zero.
b) Put the patient on his back, with the head down, give ammonia, fresh air, rest, administration of cordiamine, caffeine, mezaton intramuscularly (as prescribed by the doctor).

8. The patient has an injury, an open fracture of the lower limb, loss of consciousness, respiratory arrest, pulse and blood pressure are not determined.
Task: Nurse Tactics.
*Answer:*a) Artificial respiration and closed heart massage, cordiamine, caffeine, lobelia, cytiton, parenterally (as prescribed by a doctor), after breathing is restored - oxygen inhalation.

9. The patient has a hypertensive crisis. BP 260/130 mmHg
Art. Task: a) What is the danger of such a state?
b) What should be the regimen for such patients?
c) First aid tactics.
*Answer:*but). A stroke, myocardial infarction may develop. b) Bed.
c) Rest, cold to the head, warmth to the feet, fast-acting antihypertensive drugs (as prescribed by a doctor), as well as bloodletting, leeches, diuretics.

10. The patient has heart failure, pronounced edema of the lower extremities, ascites. Task: What is the diet of such patients?
*Answer:*Diet number 10a and 10, with restriction of salt, liquid. Unloading days - fruit, vegetable, cottage cheese, apple.

11. A patient with myocardial infarction after a heavy meal developed an acute attack of pain in the region of the heart, shortness of breath.
Task: a) Why did the pain attack develop? b) Nurse tactics.
*Answer:*a) Eating caused a rise in the diaphragm, spasm of the heart vessels and an attack of angina pectoris.
b) Nitroglycerin under the tongue, oxygen inhalations, chlorethyl irrigation or nitro ointment on the heart area.

12. Patient with heart disease. Bed rest for a month, pain in the sacrum, heels, shoulder blades, local redness, weeping began to bother.
Task: a) What are these manifestations? b) Nurse tactics.
*Answer:*a) Bedsores - trophic disorders in the skin and subcutaneous fat.
b) Improve the patient's hygiene: turn the patient several times (per day, wipe the skin of the back with camphor alcohol, put rubber circles under the places of greatest contact with the bed, make sure that there are no wrinkles on the bed linen.

Situational tasks and questions for the final control of students' knowledge.

1. Blood was taken from a young man's vein for analysis. Suddenly he turned pale, broke out in a cold clammy sweat, lost consciousness and fell out of his chair.
Explain the patient's condition. What is first aid?
2. Patient M., 52 years old, complains of frequent bouts of compressive and pressing pain behind the sternum and in the left half of the chest, at the same time severely aching his left arm. Pain occurs with any slight physical exertion, sometimes at night, during sleep, often after eating.
Consider a diagnosis. Your actions during an attack.
3. Describe diet No. 10 used in the treatment of patients with cardiovascular diseases.
4. How to establish the presence of edema in a patient?
5. Meaning and methods for determining diuresis in patients with lesions of the cardiovascular system.
6. Features of general care for patients with diseases of the cardiovascular system.
7. Explore the pulse, characterize it and depict it graphically.
8. Determine blood pressure using the Korotkoff method, write it down and display it graphically.

Test questions.

1. Method for determining blood pressure (BP) and pulse (P), properties of the pulse.
2. List the main symptoms in diseases of the circulatory system.
3. Describe the main symptoms in acute vascular insufficiency (fainting, collapse, shock).
4. Principles of pre-medical emergency care in acute vascular insufficiency.
5. Describe the main symptoms in acute heart failure (cardiac asthma, pulmonary edema).
6. Principles of emergency first aid for acute heart failure.
7. Care of patients with diseases of the circulatory system.
8. Features of care for elderly patients and senile patients with circulatory failure.
9. The main symptoms of chronic heart failure.

TEST CONTROL

1. What properties of the pulse characterize the level of blood pressure? a) frequency;
b) rhythm;
c) with rare heart contractions.

2. Pulse deficit is observed:
a) with low blood pressure;
b) when the pulse rate is less than the heart rate; c) with rare heart contractions.

3. Pulse pressure reflects:
a) difference between systolic and diastolic pressure;
b) simultaneous registration of blood pressure and pulse rate;
c) the level of pressure in the cuff, at which pulse waves begin to appear on the radial artery.

4. A transient increase in blood pressure can be observed: a) during physical exertion;
b) with emotional stress; c) during sleep;
d) during a quick transition from a horizontal to a vertical position.

5. What are the distinguishing features of pain in the region of the heart characteristic of an attack of angina pectoris?
a) compressive character;
b) stabbing character;
c) retrosternal localization;
d) connection with physical stress;
e) duration for several hours; e) duration for several minutes; g) spread of pain in the left shoulder, shoulder blade; h) disappearance after taking nitroglycerin.

6. What features of an angina attack give grounds to suspect the development of myocardial infarction?
a) the occurrence of an attack of angina pectoris at rest;
b) the duration of the attack for several hours; c) lack of effect after taking nitroglycerin;
d) the occurrence of a repeated attack of angina pectoris during the day.

7. When an attack of angina pectoris occurs, the patient is recommended:
a) cessation of physical activity;
b) taking nitroglycerin;
c) placing mustard plasters on the area of the heart; d) the introduction of adrenaline, cordiamine;
e) inhalation of oxygen.

8. What kind of help should be given to a patient with pulmonary edema? a) to give a semi-sitting position;
b) apply tourniquets to the lower limbs;
c) introduce blood-substituting fluids (rheopolyglucin);

d) put mustard plasters on the heart area;
e) inhalation of a mixture of oxygen and ethyl alcohol vapors; f) introduce diuretics and cardiac glycosides.

9. What drugs should be used in cardiogenic shock? a) cardiac glycosides;
b) diuretics;
c) blood-substituting fluids; d) corticosteroids.

10. Chronic heart failure is characterized by:
a) shortness of breath;
b) edema;
c) tachycardia;
d) collapse;
e) increased blood pressure; e) cyanosis.

11. When caring for a patient with chronic heart failure, the following are especially important: a) bed rest;
b) control over the dynamics of edema;
c) the creation of an elevated headboard; d) oxygen therapy;
e) limiting fluid and salt intake; e) frequent change of underwear and bed linen.

12. What kind of help should be given to a patient with fainting? a) give a position with an elevated headboard;
b) give a position with a low headboard; c) free from restrictive clothing;
d) provide access to fresh air; e) give nitroglycerin;
e) give a sniff of cotton wool with ammonia.

TOPIC 12: "SURVEILLANCE AND CARE OF PATIENTS WITH DISEASES DIGESTIVE ORGANS»

educational goal: deontological principles of care for patients with diseases of the gastrointestinal tract, methods of collecting materials for laboratory research and preparing patients for functional research methods.

Target tasks:

1. To teach students to examine the patient, paying particular attention to the condition of the oral cavity, pharynx, and pharynx.
2. To teach how to care for patients with diseases of the gastrointestinal tract, taking into account the characteristics of the elderly and senile age.
3. To be able to prepare patients for the study of gastric juice, duodenal sounding.
4. To teach how to prepare patients for X-ray and endoscopic examination of the gastrointestinal tract.
5. Be able to provide emergency care for gastrointestinal bleeding.

Lesson equipment:

1. Graph of the topic's logical structure.
2. Patients with various diseases of the gastrointestinal tract
3. Tables, slides reflecting the norm and pathology of the gastrointestinal tract.
4. Probes: gastric (thick and thin), duodenal (with olive); for artificial parenteral nutrition.
5. Syringes of five and two grams, twenty grams, etc., Janet's syringe.
6. Esmarch's mug, rubber pear for enemas.
7. Gas pipe, bedpans.
8. Sterile test tubes for bacteriological examination of the contents of the pharynx, nose, tonsils.
9. Glass funnel with a capacity of about a liter.
10. Table with the characteristics of the diets of the Institute of Nutrition of the Russian Academy of Medical Sciences. Unloading days.

The student must know:

1. Oral care.
2. Providing first aid for vomiting.
3. Collection of vomit and sending them to the laboratory.
4. Signs of gastric bleeding and first aid for them.
5. Probing of the stomach. Types of probes. Technique of performance, preparation of the patient.
6. Gastric lavage. Execution technique. Patient preparation and necessary supplies. Patient care after the procedure.
7. duodenal sounding. Execution technique. Patient preparation.
8. Preparation of the patient for x-ray examination of the stomach and gallbladder.
9. Features of care and preparation for the study of patients in the elderly and senile age.
10. Taking stool and sending it to the laboratory. Preparation of the patient for taking feces for occult blood.
11. Intestinal bleeding and first aid.
12. Storage, disinfection and delivery of the vessel to the patient.
13. Flatulence and the introduction of a vent tube.
14. Enemas. Types of enemas. Indications and contraindications for setting enemas.
15. The technique of setting enemas. The position of the patient. Disinfection of the system and handpieces. Enema storage.
16. Sigmoidoscopy, colonoscopy (concepts).
17. Preparation of the patient for x-ray examination of the intestine.
18. Features of care and preparation for the study of patients in the elderly and senile age.

The student must be able to:

1. Treat the oral cavity of a seriously ill person (reinforcing the skill),
2. Provide first aid for vomiting.
3. Collect the vomit and send it to the laboratory.
4. Provide first aid for stomach bleeding.
5. Prepare the patient for gastric and duodenal sounding.
6. Rinse the stomach with a probe. Provide first aid in case of poisoning.
7. Prepare the patient for x-ray examination of the stomach.
8. Collect feces for general analysis and occult blood and send it to the laboratory.
9. Help with intestinal bleeding.
10. Insert gas tube.
11. Disinfect and serve the ship to the patient (reinforcing the skill).

12. To be able to make a cleansing, nourishing, hypertonic, drip, oil enema.
13. Prepare the patient for an x-ray examination of the intestine.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5.Control and correction of the initial level of knowledge:

1. List the main symptoms of diseases of the gastrointestinal tract.
2. Observation and care of patients with abdominal pain and dyspeptic disorders.
3. Observation and care of patients with gastrointestinal bleeding.
4. Gastric lavage. Patient preparation and supplies. Indications and contraindications. Technique.
5. Gastric sounding. Method of taking gastric juice.
6. Electrometric (pH - metric) method of taking gastric juice.
7. Study of the secretory function of the stomach. Methodology of fractional research. Possible complications.
8. duodenal sounding. Patient preparation. Methodology and technique of the procedure, possible complications.
9. Taking stool for examination and sending it to the laboratory. Preparation of patients for taking feces for occult blood (Gregersen's reaction)
10. The technique of setting enemas. Disinfection of systems and tips.
11. Technique for introducing a gas outlet tube.
12. Preparation of patients for x-ray examination of the gastrointestinal tract.
13. Preparation of patients for endoscopic examination.
14. Laparocentesis. Methodology and technique. Complications.

6. Demonstration of patients with diseases of the digestive system.
7. Monitoring the implementation of manipulations by students in the therapeutic department.
nine. Discussion of the results of independent work.
eleven. Control and correction of the final level of assimilation of educational material (solution of situational problems).

Questions to control the initial level of assimilation of educational material

Option 1

1. How are bedpans disinfected? In 1% chloramine solution.
2. What types of endoscopic examinations are performed in the gastroenterology room? Esophagogastroscopy, colonoscopy, rectoscopy.
3. Can a patient with sudden onset abdominal pain be given an anesthetic before seeing a doctor? No.
4. What bile secretion stimulators are used for tubeless probing of the gallbladder?
1) 25 ml of 33% magnesium sulfate solution.
2) 40% solution of sorbitol or xylitol.
3) 60 ml olive oil.
5. What does coffee grounds vomit indicate?

On light bleeding from the vessels of the stomach.

6. What does the appearance of tarry stool indicate?

For bleeding from the gastrointestinal tract (most often from the 12th duodenum).

7. What should I think about in case of an admixture of scarlet blood in the stool? About bleeding from hemorrhoidal veins or from the large intestine.

8. What is the patient's diet if gastrointestinal bleeding is suspected? Food should be cold, carefully processed mechanically and thermally. Exception-
sour, spicy foods and spices, concentrated meat and vegetable broths.

9. How is the esophagogastroduodenoscope disinfected?

Soap solution, water and peroxide solution.

10. What is the difference between cystic bile obtained by duodenal sounding?

"Bubble" bile is thick, dark green in color.

11. How to collect feces for a coprogram

In a dry, clean dish.

12. What conditions should be observed when examining feces for the content of protozoa?

The simplest are sought in completely fresh, still warm feces.

Option 2

1. List the main symptoms of diseases of the gastrointestinal tract. Pain, nausea, vomiting, heartburn, loss of appetite, weight loss, impaired stool.

2. What are the indications for gastric lavage?

Food, drug and chemical poisoning, chronic gastritis in the stage of decompensation.

3. What are the main symptoms of gastrointestinal bleeding? Vomiting "coffee grounds", melena, anemia, collapse.

4. List tubeless methods for studying gastric secretion. Uropepsinogen, metatest.

5. What does the Boas-Ewald Trial Breakfast consist of? 40 g of stale bread and 200 g of tea.

6. List the causative agents of gastric secretion used in fractional sounding.

Histamine, meat broth, cabbage breakfast, 5% alcohol solution, caffeine, etc.

7. What stimulus is used to open the sphincter of Oddi during duodenal sounding?

30 ml of 33% magnesium sulfate solution or 60 ml of olive oil.

8. What is the preparation of the patient for the study of feces for occult blood?

Gregersen's reaction: Prescribes a three-day diet with the exclusion of meat. fishes. Do not brush your teeth (to avoid getting blood from the gums).

9. What types of enemas do you know?

Cleansing, siphon, medicinal, nourishing, emulsion.

10. How is a patient prepared for a colonoscopy?

For 2-4 days, a slag-free diet is prescribed, on the eve of the study, after breakfast, they give 30-40 ml of castor oil, dinner is canceled, in the evening and in the morning 2 hours before the study, cleansing enemas are given until the intestines are completely empty.

11. What portions are received with duodenal sounding?

Choledochal (portion A), cystic (portion B), hepatic (portion C).

12. What is first aid for gastrointestinal bleeding? Put the patient to bed, raising the head, put a pouch on the epigastric region
ice pack, call a doctor.

Option 3

1. What are the main complaints of patients with diseases of the liver and biliary tract?

What are the main complaints of patients with diseases of the liver and biliary tract?

2. What color changes in feces occur with obstructive jaundice?
Discoloration of feces.

3. In what form should the bile obtained by duodenal sounding be delivered to the laboratory? Warm.

4. What should be done to a patient who has severe flatulence? Put a gas outlet tube, give carbolene, dill water.

5. What should be done if the patient vomits?
Help to prevent aspiration of vomit. Collect vomit for examination.

6. Where do smears for bacteriological examination come from?
From the pharynx from the tonsils, from the nose, from the rectum.

7. What should be indicated on the label of glassware with material intended for shipment to the laboratory?

Surname, name, patronymic of the patient, date. department, ward, purpose of the study, doctor's name.

8. Is it possible to put a heating pad on the patient's stomach without a doctor's prescription? No.

9. What is the purpose of medicinal enemas?

Therapeutic (reducing the inflammatory process in the colon) and the introduction of drugs and nutrients into the body.

10. In what cases is a siphon enema prescribed?

If intestinal obstruction is suspected, in the absence of the effect of a cleansing enema and the use of laxatives. to remove products of increased fermentation and putrefaction from the intestines.

11. What are the contraindications for the use of histamine in gastric secretion studies?
Suspicion of gastrointestinal bleeding.

12. What are the contraindications for the introduction of the probe to the patient?

Bleeding, the presence of a decaying tumor of the stomach or esophagus, stenosis of the esophagus, varicose veins of the esophagus.

Tests-tasks of the I level of assimilation to control the initial level of knowledge.

1. What is first aid for vomiting?

1. If the patient's condition allows, he should be seated; if not, turn the patient's head to one side and hang it off the bed a little.

2. The chest and knees are covered with an oilcloth apron, the lower edge of which hangs into a basin or bucket, if the patient is lying, a tray is placed near the mouth, and an oilcloth is placed under the patient's head.

3. Support the patient by the shoulders and head, slightly tilting him forward.

4. Rinse the mouth or wipe the mouth (if the patient is unconscious) with a 2% sodium bicarbonate solution or a 0.01% potassium permanganate solution.

5. To stop vomiting, you can give mint drops to drink, cold water acidified with citric acid, 0.5% novocaine solution, swallow pieces of ice.

2. What is the emergency medical treatment for stomach bleeding?

1. Create complete physical and mental peace, put to bed with your head down.
2. Put an ice pack on your stomach. 3. Give hemostatic agents.
4. Call a doctor.

3. What is the purpose of gastric lavage?

1. For medicinal purposes. 2. For diagnostic purposes

4. Gastric lavage methods.

1. Ingestion of 1-2 liters of warm soda water.

2. Use of a gastric tube.

5. What is the principle of gastric lavage with a probe? one.

Siphon principle. One vessel is a funnel, the other is a stomach. When the funnel is raised, the liquid will flow into the stomach; when lowered, it will flow from the stomach into the funnel.

6. Accessories needed for gastric lavage.

1. Thick gastric tube 1-1.5 m long.
2. Glass funnel with a capacity of 1 l, lumen 8 mm.

7. Solutions used for gastric lavage.

1. 2% solution of sodium bicarbonate 2. Weak solution of potassium permanganate.
3. Boiled water.

8. When washing the stomach appeared streaks of blood. What should the nurse do in this case?

The appearance of blood streaks indicates that the procedure should be discontinued unless the washing is associated with acid poisoning.

9. How to carry out gastric lavage in debilitated patients?

Washing is carried out in bed. The patient is laid on his side, his head should be laid low and turned to the side so that the washing liquid does not flow into the larynx.

Tests-tasks of the II level of assimilation to control the initial level of knowledge of students.

1. Types of enemas.

1. Cleansing. 2. Siphon 3. Nutrient 4. Medicinal 5. Drip.
6. Oily 7. Hypertonic 8. Emulsion

2. What is the purpose of cleansing enemas?

To cleanse the lower intestine from feces and gases during stool retention, before X-ray studies of the gastrointestinal tract and kidneys, before operations, childbirth, artificial abortion, setting medicinal enemas.

3. How a cleansing enema works.

The action of cleansing enemas is based on the excitation of intestinal peristalsis with water, softening and crushing of feces.

4. What accessories are used for setting cleansing enemas?

1. Esmarch's mug 2. Sterile tips. 3. Tripod for hanging Esmarch's mug 4. Vaseline 5. Thermometer. 6. Oilcloth.

5. How much water is needed for a cleansing enema and at what temperature? 1-1.5 l at room temperature.

6. At what distance is the tip inserted into the rectum? 8-10 cm.

7. What is the purpose of siphon enemas?

For rapid bowel movement in case of intestinal obstruction.

8. The principle of operation of the siphon enema.

The siphon method (multiple bowel lavage) is the principle of communicating vessels. One of them is the intestines, the other is a funnel at the outer end of a rubber tube inserted into the rectum.

9. Necessary accessories for siphon enemas.

1. Rubber tube 75 cm long - 1 m and 1.5 cm in diameter with a funnel put on the outer end 2. Dishes with a capacity of 8-12 liters 3. Bucket or basin for draining water.

10. What solutions are used for siphon enemas?

1. Weak solution of potassium permanganate 2. 2% sodium bicarbonate solution.
3. Boiled water.

11. At what distance is the probe inserted into the rectum with siphon enemas? 20-40 cm.

12. Types of medicinal enemas. 1. Local 2. General.

13. What is the purpose of medicinal enemas?

1. Local - to reduce the inflammatory process in the large intestine.
2. General - for the introduction of drugs and nutrients into the body.

14. What temperature should the medicinal solution be and why? 1. 38-40°.
2. Low temperature causes the urge to defecate, and the medicine does not have time to be absorbed
-
sya.
15. Preparing the patient for medicinal enema.
30-40 minutes before the medicinal enema put a cleansing enema.
16. What are the main substances used in medicinal enemas?
1. Painkillers 2. Sleeping pills 3. Calming.
17. What is the purpose of drip enemas?
To compensate for a large loss of fluid, blood, long-acting medicinal enemas (drip method of administration) are used.
18. What solutions are used for drip enemas?
1. Physiological 2. 5% glucose solution.
19. How much fluid per day can be administered by drip method? With what frequency?
1. Z l liquid 2. 60-80 drops per minute.
20. Volume and temperature of fluid used in nutrient enemas? 1. 200 ml 2. 38-
40°.
21. Nutrients used in enemas.
1. 20% glucose solution 2. Meat broth 3. Milk, cream.
22. What is the purpose of nutritional enemas?
When not to introduce nutrients through the mouth and as an additional method of introducing nutrients into the body.
23. What examination of feces requires preliminary preparation of the patient and what does it consist of?
When examining feces for occult blood, the patient is prepared for 3 days, excluding meat and fish products, egg dishes, green vegetables, tomatoes and medicines containing iodine, bromine and iron from the diet, on the 4th day feces are sent for research.
24. For what examination of feces is it necessary to use special dishes?
Feces for dysentery are sent in special test tubes containing an English mixture of glycerin and alcohol, which preserves dysentery sticks well.
25. How is feces taken for bacteriological examination?
For bacteriological examination of feces, there are sterile test tubes with cotton swabs screwed onto a wire. The patient is laid on the right side, the buttocks are moved apart and a cotton swab is carefully inserted into the anus, then it is also carefully removed and inserted into the test tube without touching the edges and the wall.
26. Which fecal analysis is mandatory for each patient?
Mandatory for each patient is the analysis of feces for the determination of helminth eggs.
27. Which x-ray examination requires special preparation of the patient? Special preparation is required for X-ray examination of the gastrointestinal
intestinal tract, biliary tract, urinary tract, pelvic bones and spine.
28. What is the preparation of the patient for such an X-ray examination? Preparation consists in a thorough cleansing of the intestines with a cleanser.
nyh enemas in the morning and evening. Compliance with the diet for 1-2 days before the study, with the exception of foods that cause flatulence. With flatulence - taking activated charcoal, enzymes (festal).

Questions for the final control of students' knowledge.

1. List the main symptoms in diseases of the stomach.
2. What are the symptoms of stomach bleeding? What is first aid for bleeding?

3. Emergency medical care for vomiting.
4. Method for collecting vomit for laboratory research.
5. What is the preparation of patients for gastric and duodenal sounding?
6. Indications and technique of gastric lavage.
7. Describe the procedure for taking gastric contents with a thin probe.
8. Explain the technique of duodenal sounding.
9. Tell us the procedure for preparing a patient for an X-ray examination of the stomach.
10. Features of care and preparation for research of patients in the elderly and senile age.
11. What is the procedure for examining a patient with dysfunction of the digestive system?
12. What are the features of caring for patients with impaired function of the digestive system, taking into account the characteristics of the elderly and senile age?
13. How to take smears for bacteriological examination?
14. How to perform gastric lavage?
15. How to conduct a fractional study of gastric secretion and duodenal contents.
16. How to prepare patients: for X-ray examination of the gastrointestinal tract, for endoscopic examination of the stomach and intestines?
17. Preparation of the patient for the study of feces for occult blood.
18. What is the order of delivery of material for research to the laboratory?
19. How to perform cleansing, siphon, medicinal, drip, nutritional and other enemas?
20. What is the procedure for installing a gas outlet tube?

Situational tasks

1. A patient with peptic ulcer of the stomach vomited the color of "coffee grounds", he turned pale, his blood pressure dropped, his pulse became thready.
Task: What should the nurse do?
Put the patient to bed, call a doctor, put a cold bubble on the epigastric region.

2. A patient with peptic ulcer of the stomach was assigned to study feces for occult blood. Task: Why is this research being done? How to prepare the patient.
The study of feces for occult blood is carried out to exclude bleeding from the gastrointestinal tract. The patient is prescribed a diet that excludes meat, fish, three days before the study. It is forbidden to brush your teeth (possible bleeding from the gums can give a positive reaction to occult blood).

3. The patient developed nausea, salivation, vomiting of food.
Task: What should the nurse do?
Lay the patient in bed on his side with his head lowered over the pelvis. Clean the mouth with a spatula from food masses. Give water to rinse your mouth. Call a doctor.

4. During a cleansing enema, the patient is worried about flatulence.
Task: What should the nurse do?
Stop introducing water into the rectum. Insert gas tube. Call a doctor.

5. The patient was prescribed a medicinal enema. Task: What kind of preliminary enema is needed? You must first put a cleansing enema.

6. Does a patient with stomach ulcer develop severe heartburn?

Task: What should I give him? Drinking soda or Bourget mixture.

7. A patient with peptic ulcer of the stomach developed frequent black liquid stools. Task: Behavior of a nurse?

Put the patient to bed, put cold on the stomach, call a doctor, call a laboratory assistant to determine the general blood test, and then repeat the hemoglobin test in an hour.

8. When taking gastric juice with a thin probe, streaks of blood appeared in one of the test tubes. Task: What needs to be done? Be sure to consult with your doctor.

9. The patient was given a probe for duodenal sounding, but bile does not flow from it. Task: What should the nurse do?

The nurse must go with the patient to the X-ray room, where behind the screen check the location of the probe (olives).

10. A patient with gastric ulcer developed severe pain in the epigastric region. Task: What is the nurse's tactics?

The nurse should call the doctor. It is strictly forbidden to administer any painkillers.

11. The patient was prescribed cholecystography.
Task: How to properly prepare the patient for the study?

Three days before the study, the patient is prescribed a diet with carbohydrate restriction, carbolen, dill water. The night before, it is advisable to eat a teaspoon of honey. On the day of the study, do not eat or drink water until intravenous
cholecystography.

12. The patient is scheduled for irrigography. Task: How to properly prepare him for this study?

Three days before the study, the patient is prescribed a diet with carbohydrate restriction, carbolen, dill water. On the eve of the study, the patient does not eat from the second half of the day. In the evening, a cleansing enema is given. In the morning, three hours before the study, they begin to put a cleansing enema "up to clean water" (approximately 3-4).

Topic of abstracts (UIRS)

1.Emergency care for gastrointestinal bleeding.
2. Endoscopic examination of the gastrointestinal tract. Indications, contraindications, technique.
3. Types of enemas (cleansing, siphon, medicinal, drip, nourishing, oil). Indications and contraindications for their use. Execution technique.
4. X-ray examination of the gallbladder and biliary tract with oral and parenteral administration of contrast agents. Indications and contraindications. Research preparation technique.
5. Alcohol and the gastrointestinal tract.
6. Diet therapy of patients with diseases of the stomach (gastritis, peptic ulcer). Characteristics of diets.
7. General characteristics of the diet in diseases of the liver and gallbladder. Diet.
8. Diet No. 1a - indications for its use, general characteristics. Diet.
9. Diet number 2 - indications for its use, purpose of appointment, general characteristics, diet.

Final control of knowledge of students' skillsis carried out by independent performance of the above skills, under the supervision of a teacher.

TEST CONTROL.

1. Distinctive signs of peritoneal pain are: a) cramping or aching character;
b) sharp, cutting character; c) clear localization;
d) indefinite localization, diffuse pain; e) increased pain during movement;
f) Pain is accompanied by tension in the muscles of the abdominal wall.

2. What is the danger of persistent, indomitable vomiting?
a) violation of the electrolyte balance of the body; b) dehydration of the body;
c) involvement in the pathological process of the peritoneum;
d) tears of the mucous membrane of the esophagus and stomach, followed by bleeding.

3. What measures should be taken with flatulence? a) the introduction of a gas outlet tube;
b) restriction of foods rich in fiber and starch in the diet; c) the use of activated carbon, carminative herbs;
d) gastric lavage;
e) the use of enzyme preparations.

4. What are the symptoms of gastrointestinal bleeding? a) vomiting with blood clots (hematenesis);
b) black tarry stools (melena); c) discolored stool;
d) lowering blood pressure; e) tachycardia;
e) cyanosis;
g) pallor of the skin.

5.What diseases are most commonly associated with gastrointestinal bleeding? a) inflammation of the gastric mucosa;
b) violation of the motor function of the stomach;
c) malignant tumors of the stomach;
d) erosive and ulcerative lesions of the stomach;
e) rupture of varicose veins of the esophagus and stomach.

6. What measures should be taken in case of gastrointestinal bleeding? a) ensuring complete rest;
b) cold on the stomach;
c) the introduction of vikasol, calcium chloride;
d) urgent X-ray and endoscopic examination of the gastrointestinal tract
e) setting a siphon enema;
e) setting a cleansing enema; g) gastric lavage.

7. Contraindications for gastric lavage:
a) gastric bleeding;
b) late period after chemical burns of the pharynx, esophagus; c)
violation of cerebral circulation;
d) myocardial infarction;
e) narrowing of the outlet section of the stomach;
f) chronic renal failure with the development of uremic gastritis.

8. Why is it inappropriate to use cabbage decoction as a secretion stimulator during fractional gastric sounding?
a) decoction is contraindicated in certain diseases;
b) the decoction is too weak a stimulant of gastric secretion; c) the decoction is
too strong a stimulant of gastric secretion.

9. How to check the correct position of the duodenal probe? a) the
introduction of air through the probe;
b) X-ray control;
c) the introduction of a stimulator of contractions of the gallbladder through the probe.

10. As a stimulator of the motor activity of the gallbladder with duodenal sounding, the following are used:
a) 33% magnesium sulfate solution;
b) histamine;
c) 25% magnesium sulfate solution;
d) 40% glucose solution;
e) heated vegetable oil; e) meat
broth.

11. What is the purpose of chromatic duodenal sounding?
a) for more accurate differentiation of duodenal contents from gastric; b) for more
accurate differentiation of portion A from portion B;
c) in order to have a normalizing effect on bile secretion.

12. Indications for cleansing enemas:
a) stool retention;
b) poisoning;
c) prenatal period;
d) ulcerative lesions of the colon;
e) the first days after operations on the abdominal organs;
f) preparation for X-ray and endoscopic examinations of the colon; g) intestinal bleeding.

13. What is the purpose of hypertonic enemas? a) for the
introduction of fluid into the body;
b) for emptying the intestines with atonic constipation; c) to
empty the intestines with spastic constipation; d) to combat
edema.

14. In what cases are siphon enemas used? a) for the
diagnosis of intestinal obstruction;
b) for the treatment of intestinal obstruction;
c) for the purpose of introducing fluid in case of dehydration of the body;

d) before setting medicinal mysms; e) in case
of poisoning.

15. What tip is inserted into the rectum when setting siphon enemas? a) plastic or
glass, 10-12 cm long;
b) rubber, 10-12 cm long; c)
rubber, 20-30 cm long;
d) a thick gastric tube or intestinal tube.

16. What amount of washing liquid should be prepared for setting a siphon enema?
a) 1-1.5 l;
b) 50-100 ml
c) 5-6 l;
d) 10-12 liters.

17. Medicinal enemas:
a) are most often microclysters;
b) are used to administer drugs. well absorbed in the large intestine;
c) are used for local effects on the mucous membrane of the rectum and sigmoid colon;
d) are used to treat intestinal obstruction.

18. Features of preparing the patient for x-ray examination of the stomach: a) always on the
day of the study on an empty stomach;
b) obligatory cleansing enema the day before; c)
be sure to have a slag-free diet.

19. Features of preparing the patient for cholecystography:
a) on the day of the study on an empty stomach;
b) obligatory cleansing enema in the evening before and in the morning on the day of the study;
c) it is obligatory to take an iodine-containing radiopaque preparation 15-17 hours before the
study;
d) obligatory "fatty" breakfast with butter before taking a radiopaque preparation.

20. Features of preparing the patient for irrigoscopy:
a) on the day of the study on an empty stomach;
b) obligatory cleansing enemas the evening before, as well as in the
morning on the day of the study;
c) be sure to take 30 g of castor oil before lunch on the eve of the study;
d) conducting a preliminary test for the tolerability of a radiopaque preparation; e) the
introduction of atropine 30 minutes before the study.

21. Features of preparing the patient for ultrasound examination (sonography) of the abdominal
organs:
a) adherence to a slag-free diet for several days;
b) taking adsorbents (activated carbon, carbolene) for several days before the study;
c) on the day of the study on an empty stomach;
d) cleansing enema on the eve of the study;
e) taking laxatives on the eve of the study

TOPIC 13. OBSERVATION AND CARE OF PATIENTS WITH IMPAIRED FUNCTIONS OF THE KIDNEY AND URINARY TRACT

Target: deontological principles of caring for patients with diseases of the kidneys and urinary tract and conducting urological manipulations.

Lesson equipment: patient observation sheets for recording daily urine output, urine collection jars, labels, urinals (male and female), disinfectants, soft and hard catheters, urological or therapeutic department equipment, phantoms.

The student must know:

1. Observation of urination: frequency, nature. diuresis measurement.
2. Taking urine for examination and sending it to the laboratory. Preliminary toilet of the patient.
3. The method of collecting urine for examination for general analysis, according to Nechiporenko, according to Addis-Kakovsky, according to Zimnitsky, for diastasis, for the determination of sugar and acetone, glucosuric profile, bacteriological examination.
4. urinals. Disinfection, storage and delivery to the patient.
5. Measures for urinary retention, calling reflexes to urinate.
6. Bladder catheterization. Types of catheters. Implementation technique.
7. Preparing the patient for X-ray examination.
8. Cystoscopy, chromocystoscopy. Washing the bladder.
9. General care of critically ill patients with kidney disease.
10. Peculiarities of care for elderly and senile patients.

The student must be able to:

1. Measure daily diuresis and evaluate the data obtained.
2. Collect urine for analysis and send it to the laboratory.
3. Wash away the patient (reinforcing the skill).
4. Catheterize the bladder with a soft catheter.
5. Give the patient a urinal, disinfect it (reinforcing the skill).
6. To carry out the prevention of bedsores (reinforcing the skill).
7. Help with acute urinary retention, cause a reflex to urinate.
8. Prepare the patient for an X-ray examination of the urinary organs.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. List the symptoms characteristic of patients with diseases of the kidneys and urinary tract.
2. Observation of urination: frequency, nature, measurement of diuresis.
3. Change in the quantity and quality of urine excreted:

- Daily diuresis - the total amount of urine excreted by a person during the day (SD = 1000-1800 ml)
- Oliguria - urine output of 500 ml per day.
- Anuria is the complete cessation of urine flow to the bladder.
- Ischuria is urinary retention due to the inability to empty the bladder.

- Polyuria - an increase in daily diuresis (DM more than 2 liters)
- Nocturia is the predominance of nocturnal diuresis over daytime.
- Enuresis is urinary incontinence.

4. Diuresis, its violations. Urinary disorders:
- Dysuria - disorders of urination.
- Pollakiuria - increased urination. (more than 6 times a day)
- Stranguria - difficulty (painful) urination.
- Ishuria - his delay.
- Tenesmus - frequent and often fruitless urge.

5. Emergency care for acute urinary retention.

6. Taking urine for analysis and sending it to the laboratory. Preliminary toilet of the patient.

7. The method of collecting urine for research:
- Clinical analysis of urine.
- Urinalysis according to Nechiporenko
- Urinalysis according to Addis-Kakovsky
- Urinalysis according to Zimnitsky
- Folgard test
- Urinalysis for the determination of sugar and acetone
- Urinalysis for diastasis
- Glucosuric profile
- Bacteriological examination of urine

8. Bladder catheterization. Types of catheters. Technique. Possible complications.

9. Preparation of patients for instrumental studies of the urinary tract. syst.

10. Observation and care of patients with urinary retention.

11. Observation and care of patients with urinary incontinence.

12. Peculiarities of care for elderly and senile patients.

6. Demonstration of practical skills: bladder catheterization technique.

7. Independent work of students in the department.

8. Discussion of the results of independent work.

9. Control and correction of the final level of assimilation of educational material. (solution of situational problems).

Tests-tasks to control the initial level of knowledge of students.

1. List the symptoms characteristic of patients with diseases of the kidneys and urinary organs.

1. Pain in the lumbar region, radiating down the ureter, groin, genitals; pain behind the pubis and in the region of the sacrum and pain in the urethra.
2. Urinary disorders.
3. Changes in the quantity and quality of urine excreted.
4. Edema, mainly on the face.

2. What do you know about dysuric disorders?

1. pollakiuria.
2. Stranguria.
3. Ishuria.

3. What do you know about changes in the amount of urine produced?

1. Polyuria 2. Oligouria. 3. Anuria. 4. Nocturia

4. What is the procedure for collecting urine for general analysis?

1. Urine is taken in the morning immediately after sleep.
2. Before this, it is necessary to treat the external opening of the urethra with warm water.
3. Women take urine from the "middle portion".
4. Urine utensils should be thoroughly washed and dried.
5. Urine is sent to the laboratory no later than 1 hour after collection.

5. List the types of bladder catheters.
1. Soft (rubber). 2. Elastic (semi-rigid). 3. Metal (hard).

6. Name the possible complications during catheterization of the bladder.
1. Introduction of infection.
2. Damage to the mucous membrane of the urethra, bladder.
3. Urethral fever.

7. What is the preparation of patients for X-ray examination of urinary organs?
1. For 2-3 days the patient should be transferred to a diet with the exclusion of gas-forming products.
2. With flatulence, carbolene is prescribed.
3. The night before and in the morning before the study, a cleansing enema is given.

8. What causes acute urinary retention? 1, 2, 3.
1. Adenoma, prostate cancer or acute prostatitis.
2. Urethral stricture.
3. Urethral stones.

Final control of students' knowledge.

1. Describe the procedure for collecting urine for laboratory testing.
2. How to determine the daily diuresis and evaluate its data?
3. Describe the procedure for bladder catheterization and show on a phantom.
4. What are the possible complications of catheterization and how to avoid them?
5. What types of urinals do you know? Show how to use them (on a phantom).
6. How are urinals disinfected?
7. What is the first aid for acute urinary retention?
8. What is the emergency care for renal colic?
9. How to prepare a patient for an X-ray examination of the urinary organs?
10. Features of general care for severe patients with kidney disease.

TEST CONTROL.

1. What diuresis disorder is called nocturia? a) decrease in the amount of daily urine less than 500 ml; b) an increase in the amount of daily urine more than 2 liters; c) the predominance of nighttime diuresis over daytime; d) increased urination.

2. What is the purpose of using a three-glass sample in the study of urine?
a) clarification of the part of the urinary system (urethra, kidneys, bladder), which is the source of hematuria or leukocyturia;
b) assessment of the concentration function of the kidneys;
c) counting the number of formed elements (erythrocytes, leukocytes, cylinders) in the urine according to the Kakovsky-Addis method.

3. How urine is collected for research according to the method. Nechiporenko? a) during the day every 3 hours;
b) within 10 hours (from evening to morning);

c) once in 3 hours;
d) an average portion of morning urine.

4. What is the advantage of the Nechiporenko test compared to a general urinalysis?
a) allows you to better assess the concentration function of the kidneys;
b) allows you to more accurately identify latent forms of inflammatory diseases of the kidneys (for example, pyelonephritis);
c) makes it possible to better evaluate the effectiveness of treatment;
d) makes it possible to identify pathogens and determine their sensitivity to antibiotics.

5. What results of the Zimnitsky test indicate a decrease in the concentration function of the kidneys?
a) the predominance of nighttime diuresis over daytime;
b) a large range of indicators of the relative density of urine in individual portions (for example, 1.007-1.029);
c) the presence of at least one portion of urine with a relative density below 1.010; d) monotonically low relative density of urine in all portions.

6. What are the features of the preparation of patients with excretory urography? a) on the eve and day of the study, a cleansing enema;
b) taking castor oil on the eve of the study;
c) observance of a slag-free diet before the study; d) taking a contrast agent on the eve of the study.

7. What is emergency care for renal, colic? a) an ice pack on the lumbar region;
b) a heating pad on the lumbar region or a hot bath
c) the use of antispasmodics (for example, baralgin); d) the use of anticholinergics (for example, atropine); e) the use of diuretics.

8. What are the most common symptoms of chronic kidney disease? a) arterial hypertension;
b) arterial hypotension; c) pain in the lumbar region; d) urinary retention;
e) swelling.

9. In the treatment of patients with chronic renal failure, it is recommended: a) limiting the intake of salt;
b) a decrease in the content of proteins in the diet; c) restriction of fluid intake;
d) control over the level of arterial pressure and edema; e) the use of antispasmodics and anticholinergics.

10. What diseases and conditions are accompanied by acute urinary retention? a) tumors or adenomas of the prostate gland;
b) renal failure;
c) compression of both ureters (for example, by a tumor); d) after operations on the abdominal organs;

e) postpartum period.

11. To eliminate acute urinary retention, apply:
a) bladder catheterization; b)
cystostomy;
c) subcutaneous administration of
prozerin; d) subcutaneous
administration of atropine;
e) the use of antispasmodics (no-shpy, baralgin);
f) irrigation of the external genital organs with warm water.

12. For urinary incontinence, we recommend:
a) using a urinal;
b) inhalation of adiurecrin into the nasal
cavity; c) a thorough toilet of the skin;
d) control over the cleanliness of underwear and bed linen;
e) the use of a heating pad on the lumbar region;
e) subcutaneous administration of proserin.

TOPIC 14. FEATURES OF CARE FOR THE SERIOUSLY ILL AND AGONING.

educational goal: deontological moments when caring for the seriously ill and agonizing, carrying out resuscitation measures. Questions of medical deontology and ethics in ascertaining death, handling a corpse, talking with relatives.

Lesson equipment:

1. Patient monitoring sheets.
2. Intensive care and resuscitation department equipment: functional bed, vessels, urinals, rubber circle, disinfectants, bed and underwear, equipment for oxygen therapy and resuscitation.
3. Phantom "Vasya" for training in resuscitation.
4. Sets for emergency manipulations: venesection, venipuncture. intra-arterial injection of blood and its substitutes.
5. Inviolable fund of pharmacological agents for emergency care.

The student must know:

1. General rules for the care of seriously ill and agonizing. Their position in bed, prevention of bedsores, oral care, monitoring of all physiological functions.
2. The concept of resuscitation. Signs of clinical death.
Technique of providing first aid in case of clinical death.
3. Features of the work of medical staff in intensive care units. Individual post.
4. Care of the sick during fever, delirium and hallucinations, in an unconscious state.
5. Care of the dying.
6. Features of care for seriously ill elderly and senile age.
7. Signs of biological death. Corpse handling.

The student must be able to:

1. Monitor the various functions of a seriously ill patient.
2. Provide first aid in case of clinical death.
3. Ascertain death and handle the corpse.

4. Feed the seriously ill (reinforcing the skill).
5. Change underwear and bed linen for a seriously ill person (reinforcing the skill).
6. Examine the oral cavity of a seriously ill patient and perform processing (reinforcing the skill).
7. To carry out the prevention of bedsores (reinforcing the skill).
8. Submit a vessel, a urinal (reinforcing the skill).

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech of the teacher. Target setting.
4. Homework assignment.
5. Control and correction of the initial level of knowledge:

1. Features of care for severe and agonizing patients. Their position in bed, prevention of bedsores, oral care, monitoring of all physiological functions.
2. Border states between life and death: (Terminal states)
- Predagonal state
- Terminal pause
- Agony
- clinical death

3. Signs of clinical death. First aid technique.
4. The concept of resuscitation. Describe resuscitation measures:
- Heart massage (indirect and direct)
- Artificial ventilation of the lungs (artificial respiration "mouth to mouth" and "mouth to nose")

5. The concept of "biological death", its statement.
6. List the main actions of the medical staff in handling the corpse.
7. Resuscitation departments and principles of their work.
8. Features of the work of medical staff in intensive care units.
9. Resuscitation and first aid for poisoning.
10. - // -when drowning.
11. - // -with heat and sunstroke, electrical injury.

6. Familiarization with the equipment and work of the intensive care unit.
7. Independent work of students in the department.
8. Control and correction of the final level of assimilation of educational material.

Questions to control the initial level of assimilation of educational material

Option 1

1. What is agony?
*Answer:*Agony is a terminal state of the organism, a reversible stage of dying with a deep dysfunction of the cerebral cortex with simultaneous excitation of the centers of the medulla oblongata (respiratory failure, slowing of cardiac activity, loss of consciousness, convulsions).
2. What is a preagonal state?
*Answer:*Disorder of hemodynamics and respiration, drop in blood pressure, depression of consciousness, increase in oxygen starvation.
3. What is a terminal pause?
*Answer:*The sudden cessation of breathing and the extinction of corneal reflexes last from a few seconds to 3 minutes.

4. Describe the signs of clinical death.
*Answer:*The period after the cessation of breathing and heartbeat, the patient's condition is reversible within 4-6 minutes.
5. What is the organization of intensive care units?
*Answer:*Currently, there are three main types of organization of the intensive care service: multidisciplinary intensive care units, highly specialized intensive care units (burn trauma, heart attack, nephrology and intensive care and intensive care units at individual hospitals.
6. What is intensive care?
*Answer:*This is the urgent implementation of emergency manipulations and therapeutic measures prescribed by the doctor at a high professional level and constant monitoring of the patient.
7. What resuscitation manipulations should a nurse in the intensive care unit know?
*Answer:*To master the technique of performing artificial respiration and chest compressions.
8. Personal hygiene of severe and agonizing patients.
*Answer:*In the morning: wipe the teeth and tongue, rinse the mouth, wash the face, wipe the whole body, wash the patient, regularly take measures to prevent bedsores.
9. Care items for the critically ill.
*Answer:*Drinkers, feeding tubes, heating pads, enemas, rubber vessel, oilcloth, rubber circle, headrests, ice packs, gas tubes, oxygen bags.
10. "Individual" nursing post. When is he appointed?
*Answer:*Patients who are in an excited state (with delusions, hallucinations), and those who are agonizing are assigned a post of the most experienced and highly qualified nurses.
11. Statement of biological death.
*Answer:*Complete cessation of breathing, lack of pulse and blood pressure, pallor. relaxation of the muscles, disappearance of the luster of the eyes, cooling of the body, dilated pupils and their absence of reaction to light, stiffness of the muscles of the body after 6-8 hours.
12. Physiological departures of severe and agonizing patients.
*Answer:*Put a rubber vessel under the buttocks, oilcloth under the sheet, change dirty linen immediately (in these patients paralysis of the sphincter of the rectum and bladder often occurs).

Option 2

1. What is the treatment of the skin of a severe bed patient?
*Answer:*Rubbing the skin is carried out with some kind of disinfectant solution (camphor alcohol, vodka, cologne, special solution).
2. How is a patient fed if he cannot raise his head?
*Answer:*A rubber tube of small diameter is put on the end of the drinker. It is introduced into the patient's mouth, the drinker is raised and lowered slightly, then the food in the volume of one sip evenly enters the mouth.
3. Prevention of bedsores.
*Answer:*Changing the position of the body, timely change of underwear, putting a rubber circle under the sacrum, rubbing the skin with a disinfectant solution (alcohol, cologne, etc.).
4. What should a nurse be able to examine in seriously ill patients?
*Answer:*Pulse, blood pressure, respiratory rate, determine the state of consciousness, take into account diuresis, body temperature, the nature of the skin.
5. Features of care for the seriously ill.
*Answer:*Constant monitoring of their appearance, pulse rate, and blood pressure levels. The bed should be clean and comfortable. It is desirable to isolate patients in a single or double room and regularly carry out the prevention of bedsores.

6. Feeding the seriously ill.
*Answer:*Feed should be frequent, in small portions, trying to satisfy the desire of the patient within the prescribed diet, use drinkers for liquid food.
7. Nutrition of patients 6 unconscious.
*Answer:*Nutrients are administered by drip: in / vein or through the rectum.
8. What is the "inviolable fund" of pharmacological agents in the intensive care unit?
*Answer:*These are drugs needed for intensive care: hydrocortisone, norepinephrine, insulin manitol, gemodez, strophanthin, repolyglucin, preserved blood.
9. Care of agonizing patients.
Answer:"Individual" nursing post, the nurse constantly monitors the patient's condition, cares for him, fulfilling all the doctor's prescriptions.
10. Hygienic regime in the intensive care unit.
*Answer:*The staff completely changes clothes, puts on a mask, special slippers and shoe covers. Sinks, soap, towels are available in each room, for hand disinfection, a 0.5% solution of chloramine or diocyte 1:5000 is used. There should be bactericidal lamps, boxes with appropriate conditions for working with infectious patients.
11. Care of the seriously ill in a state of mental arousal.
Answer:"Individual" nursing post, net near the bed, strengthening of the limbs, relentless supervision of the nurse.
12. Changing underwear, wiping the skin with camphor alcohol, measuring body temperature, drinking regimen, monitoring pulse, blood pressure and respiratory rate, using an ice pack. Answer: Care of severe febrile patients.

Option 3

1. What should an intensive care unit nurse be able to do?
*Answer:*A nurse should have the necessary minimum technical and laboratory skills, be able to use anesthesia machines and oxygen plants, prepare instruments, and care for seriously ill patients, if necessary.
be able to perform artificial respiration and chest compressions.
2. Maintenance of the table for intravenous injections in the intensive care unit.
*Answer:*Sterile vessel (50 ml) with isotonic sodium chloride solution or distilled water for diluting drugs, jars with sterile balls in alcohol, sterile wipes, injection needles, syringes with a capacity of 20, 10, 5, 2, 1 ml, sterile and ready for drip infusion system.
3. Principles of work of a nurse in the intensive care unit.
*Answer:*The nurse should continuously monitor the patient, his condition, skin, pulse, blood pressure, respiratory rate. Clearly keep documentation of hours, taking into account diuresis and stool.
4. Where are the belongings and valuables of the deceased?
*Answer:*Things must be handed over to the warehouse or given to relatives against receipt,
5. Rules for the treatment of the corpse.
*Answer:*The exact time of the patient's death is stated by the doctor in the medical history. The corpse is undressed, laid on its back with limbs extended, the lower part is tied up, the eyelids are lowered, covered with a sheet and left in bed for 2 hours. After the formation of cadaveric spots, the nurse writes on the thigh of the deceased the last name, first name, patronymic, case history number, duplicating all this on the direction to the morgue, where the diagnosis and date of death are indicated. The body is taken to the morgue for an autopsy.
6. Rules for handling the corpses of people who died from especially dangerous infections.
*Answer:*The corpses of persons who died from cholera, plague are wrapped in sheets moistened with a solution of sublimate or kcarbolic acid, then placed in tightly closed coffins; on the

the bottom of which is laid with a thick layer of sawdust, peat or other substances capable of absorbing cadaveric secretions and burned along with the personal belongings of the deceased.
7. Deontology in the work of a nurse in the intensive care unit.
*Answer:*A nurse should be calm, self-possessed, neatly dressed, and her actions should be clear and confident, at a high professional level.
8. Artificial respiration "mouth to mouth" (tactics of a nurse).
*Answer:*The maximum tilt of the patient's head back. The nurse is on the side of the patient. With one hand, she squeezes the wings of his nose, with the other slightly opens her mouth by the chin, inserts an air duct into the patient's oral cavity, pushing back the tongue and epiglottis, takes a deep breath and presses her lips against the air duct, then an energetic sharp exhalation. This is done until the patient's spontaneous breathing appears.
9. Artificial respiration "mouth to nose" (tactics of a nurse).
*Answer:*This blowing of air is made into the nasal passages of the patient. To do this, the nurse closes the patient's mouth with her palm or presses the lower lip to the upper one. It is combined with an indirect heart massage (12-15 times per minute one vigorous blowing for 4-5 chest compressions). While maintaining heart rate, the frequency of breaths should be 20-25 per minute.
10. Indirect cardiac massage.
*Answer:*The task is to restore blood circulation in the body, that is, to maintain blood circulation in vital organs in the absence of cardiac activity. The patient should lie on a hard surface, expose the region of the heart. Nurse on the side of the patient
- one palm is placed on the lower third of the sternum, the other - on the first. The massage is carried out 50-60 times per minute with energetic sharp pressure on the patient's sternum (with the whole weight of his body) so that the sternum moves towards the spine.
by 3-4 cm. Massage is effective if large vessels pulsate in the rhythm of massage, breathing is restored, cyanosis disappears, dilated pupils constrict.
11. Direct cardiac massage.
*Answer:*Direct cardiac massage is performed by a doctor (opening the chest, exposing the heart).
12. Artificial ventilation of the lungs.
*Answer:*It is indicated not only when spontaneous breathing stops, but also with its gross violations, especially in the preliminary and agonal state. The most effective and reliable method of restoring breathing is long-term artificial ventilation of the lungs with the help of an apparatus.

Tests-tasks to control the initial level of knowledge of students.

1. Indications for resuscitation (heart massage and mechanical ventilation).
*Answer:*Statement of the state of clinical death no later than 5-6 minutes from the moment of its onset.
2. Name the signs of clinical death.
1. Loss of consciousness and reflexes (including corneal).
2. Stopping breathing.
3. No pulsation of the carotid arteries, cardiac arrest.
4. BP is not determined.
5. The maximum expansion of the pupils and the absence of their reaction to light.
6. Deathly pale complexion.
7. Dropping of the lower jaw.
8. Involuntary urination and defecation.
9. Seizures.
10. Decrease in body temperature.

3. List the stages of resuscitation.

*Answer:*1. The first stage of non-specific (pre-medical) resuscitation.
2. The second stage of specific (medical) resuscitation.

4. The purpose of the first (pre-medical) stage of resuscitation.

*Answer:*Maintain blood circulation to ensure the minimum need for vital organs (brain, heart) in oxygen and make it possible to restore their functions.

5. Activities of the first stage of resuscitation.

*Answer:*1. Provide air access by tilting the patient's head.
2. Indirect (closed) heart massage.
3. Artificial ventilation of the lungs according to the method "mouth to mouth", "mouth to nose".

6. Rules for external cardiac massage.

*Answer:*1. Put the patient on a hard base.
2. The patient's belt and shirt collar are unbuttoned.
3. The palm of the right hand is placed on the lower third of the sternum, perpendicular to its axis, 1.5-2.5 cm above the xiphoid process.
4. Perform rhythmic sharp pressure on the area of the sternum (its body) at the rate of 60 per minute, pushing the sternum by 3-4 cm.

7. Hand position during external cardiac massage.

*Answer:*The arms are outstretched, the right palm "cross to the cross" on the left.

8. Rules for artificial lung ventilation.

*Answer:*1. Tilt the patient's head back as much as possible, putting his hand under his neck.
2. Perform maximum blowing of air into the mouth (holding the nose) or into the nose (holding the mouth) of the patient at the rate of 16 per minute.

9. The ratio of the number of massage pressure on the region of the heart and ventilation blows "mouth to mouth" and "mouth to nose".

*Answer:*5:1.

10. Signs of the effectiveness of heart massage.

*Answer:*1. Constriction of the pupils.
2. The disappearance of the deathly pallor of the face.
3. The appearance of a pulse on the carotid artery when pressing on the sternum.
4. Emergence of new types of electrocardiographic artifacts.

11. Within what time the effectiveness of resuscitation measures is the highest.

*Answer:*Within the first 1.5-2 minutes. from the onset of clinical death.

12. Signs of effective ventilation of the lungs.

*Answer:*1. Raising and lowering the chest during artificial ventilation.
2. Sensation of resistance in the lungs as they expand.
3. The sound of air escaping when exhaling is heard.

13. List the signs of biological death.

*Answer:*1. Lack of heartbeat, pulse, respiration, pupillary response to light.
2. Clouding and drying of the cornea of the eye.
3. Symptom "cat's eye".
4. Cooling of the body and the appearance of cadaveric spots.
5. Rigor mortis.

Situational tasks

1. Name the conditions that determine the severity of the disease and require intensive monitoring and resuscitation.

*Answer:*Acute cardiovascular failure. precomatose state. Shock. All unconscious states. States of sharp mental excitement. Feverish conditions (with high body temperature).

2. The patient's breathing is disturbed: noisy, large, with opening of the mouth, throwing back

heads. Pulse 20 beats per minute, blood pressure - 20 mm. rt. Art., loss of consciousness, stiff neck and general tonic convulsions, involuntary urination and defecation. Body temperature - 35.6 ° C. Describe this condition.
Answer: Agony.

3. The patient lost consciousness, stopped breathing and cardiac activity for four minutes. After resuscitation, the restoration of cardiac activity and respiration is noted. Name the state in which the patient was for four minutes.
Answer: clinical death.

4. How should an intensive care unit be equipped and why?
Answer: An electrocardiograph, a heart monitor, a defibrillator, an anesthesia machine, respirators for artificial respiration, a mobile X-ray unit, a nursing table with sterile instruments for massive blood transfusion and emergency resuscitation to the patient. An inviolable fund of pharmacological agents for emergency care in a number of urgent conditions.

5. How to feed the seriously ill (unconscious)?
Answer: Liquid and high-calorie foods (milk, cream, broths, raw eggs) are given through a probe inserted through the nose or mouth, or nutritional enemas are given through the rectum.

6. What examinations should be carried out by a nurse when caring for seriously ill and agonizing patients?
Answer: Inspection of the skin, mucous membranes, measurement of body temperature, counting the pulse, respiration, measurement of blood pressure. Take into account the daily drinking regime, diuresis, stool.

7. Tactics of a nurse in caring for patients with psychomotor agitation.
Answer: "Individual" nursing post, constant monitoring, control of pulse, blood pressure, bed fencing, fixation of limbs, feeding and control of physiological functions.

8. Tactics of the nurse in the care of febrile patients.
Answer: Constant observation, change of linen, wiping the skin with alcohol, personal hygiene of the patient, drinking regimen, measurement of body temperature, strict administration of drugs by the hour, control of pulse, blood pressure.

9. Signs of biological death. Who ascertains the death of the patient?
Answer: Complete cessation of breathing, lack of pulse, blood pressure, palpitations, pallor, relaxation of the muscles, drooping of the lower jaw, disappearance of the shine of the eyes, loss of sensitivity, cooling of the body, dilated pupils, lack of their reaction to light. Biological death ascertained by the doctor.
10. Which patients are indicated for resuscitation and which ones?
Answer: Cardiac arrest - indirect heart massage, then artificial respiration. Respiratory arrest - artificial respiration. Cardiac and respiratory arrest - cardiac massage and artificial respiration.

11. Rules for the treatment of the corpse. Tactics of a nurse when handling the corpses of people who died from especially dangerous infections.
Answer: Death ascertains the doctor and indicates in the history of the disease.
The corpse is undressed, laid on its back with unbent limbs, the lower

jaw, lower the eyelids, cover with a sheet and leave in bed for two hours. After the formation of cadaveric spots, the nurse writes on the thigh of the deceased: last name, first name, patronymic, case history number, duplicating these data on the accompanying note to the morgue. The body is taken to the morgue, where an autopsy is performed. The corpses of persons who died from cholera, plague are wrapped in sheets moistened with a solution of sublimate or carbolic acid, the coffin is tightly closed and burned along with the belongings of the deceased.

12. Deontology in the care of a nurse for severe, agonizing patients.
*Answer:*The nurse is the main person caring for such patients. Usually this is a nurse, whose professional skills must be impeccable, performing discipline at the height and personal qualities that correspond to complete dedication to the patient.

Topics of abstracts (UIRS)

1. "Borderline" states with death.
2. Emergency care for conditions bordering on death.
3. Care of seriously ill and agonizing patients, febrile and in a state of mental arousal.
4. Intensive care unit: equipment, purpose, staff, work of medical personnel.
5. Responsibilities of an Intensive Care Nurse.
6. "Biological" death and the rules for handling the corpse.
7. Deontological aspects in work with seriously ill and agonizing.
8. Feeding seriously ill patients in the intensive care unit.
9. Physiological functions of the seriously ill and agonizing.
10. Hygienic regimen when working with seriously ill and agonizing.

Test questions.

1. Describe the states bordering on death: agony, preagonal state, terminal pause, clinical death.
2. Features of care for the seriously ill and agonizing. febrile and in a state of mental excitement.
3. Describe the equipment of the intensive care unit.
4. Describe resuscitation measures: heart massage (indirect and direct), artificial ventilation of the lungs (mouth-to-mouth and mouth-to-nose artificial respiration).
5. The concept of "biological death", its statement.
6. List the main actions of the medical staff for handling the corpse (successively).

Final controlknowledge-skills of students is carried out by independent implementation of newly mastered skills, under the supervision of a teacher.

TEST CONTROL

1. What is meant by terminal state? a) the state of
clinical death;
b) agonal period; c) the
period of dying;
d) borderline between life and death.

2. What symptoms are reliable signs of biological death? a) cessation of breathing;
6) cessation of cardiac activity; c) the
appearance of cadaveric spots;
d) decrease in skin temperature below 20°C;

e) the appearance of rigor mortis.

3. Contraindications for resuscitation:
a) late terms (over 8 minutes) after the onset of clinical death; b) the presence of damage to organs incompatible with life;
c) renal and hepatic coma;
d) violation of cerebral circulation with loss of consciousness; e) the last stage of oncological diseases.

4. What are the most important conditions for the work of intensive care units? a) allocation of single rooms;
b) round-the-clock communication with the laboratory; c) organization of a separate entrance;
d) the allocation of "shock" chambers and "resuscitation rooms" for resuscitation;
e) equipping with monitoring equipment, artificial lung ventilation devices, defibrillators, pacemakers.

5. Why is it necessary to tilt the patient's head during artificial respiration?
a) to make it more convenient to attach the mouth of the resuscitator to the nose or mouth of the patient; b) to ensure the patency of the respiratory tract;
c) to create a good seal between the mouth of the resuscitator and the nose (or mouth) of the victim during artificial inspiration.

6. How to check the correctness of artificial respiration?
a) during artificial inhalation, the patient's chest should expand;
b) during the passive expiration of the patient, the chest should collapse;
c) during artificial inhalation, “inflation” of the patient’s cheeks should be noted.

7. What are the reasons for the insufficient effectiveness of artificial respiration?
a) the frequency of artificial respiration is not more than 12-14 per minute;
b) lack of airway patency;
c) poor sealing between the resuscitator's mouth and the patient's nose;
d) insufficient volume of air entering the respiratory tract of the patient.

8. In what cases is direct cardiac massage used? a) with the ineffectiveness of indirect heart massage;
b) if there are tools that allow opening the chest cavity of the patient;
c) if cardiac arrest or fibrillation occurred during surgery on the chest organs.

9. What position should the resuscitator's hands be in during chest compressions?
a) maximally extended in the wrist and elbow joints;
b) slightly bent at the elbow joints and maximally extended at the wrist; c) slightly bent at the elbows and slightly extended at the wrist.

10. What testifies to the effectiveness of chest compressions? a) a pulse appears on the carotid arteries;
b) pupils constrict;

c) pupils dilate;
d) blood pressure increases;
e) spontaneous breathing is restored.

11. What lesions of the respiratory organs occur in the first hours of poisoning? a) inhibition of the excitability of the respiratory center;
b) dysfunction of the respiratory muscles; c) toxic pulmonary edema;
d) toxic tracheobronchitis; e) toxic pneumonia;
e) violation of tracheobronchial patency.

12. What lesions of the cardiovascular system can be observed in case of poisoning?
a) acute cardiovascular insufficiency associated with inhibition of excitability of the vasomotor center and hypovolemia;
b) acute cardiovascular failure associated with weakening of the myocardium of the left ventricle;
c) toxic (pain) shock; d) cardiac arrhythmias.

13. What therapeutic measures should be taken in case of poisoning with ethyl alcohol?
a) gastric lavage;
b) subcutaneous administration of cordiamine and caffeine; c) forced diuresis;
d) carrying out hemodialysis;
e) carrying out hemosorption.

14. What kind of help should be provided for venomous snake bites? a) squeezing the first drops of blood from the wound;
b) cauterization of the bite site;
c) clamping the affected limb with a tourniquet;
d) cold to the bite;
e) application of specific anti-snake serum.

15. First aid for drowning:
a) removal of water from the respiratory tract of the victim;
b) removal of water from the stomach by introducing a probe; c) rocking the victim on a blanket or sheet;
e) artificial respiration; e) indirect heart massage.

16. Early signs of heat stroke:
a) general weakness, weakness;
b) headache;
c) nausea;
d) delirium, hallucinations, loss of consciousness;
e) increase in body temperature to 39-40 °C.

17. First aid for sunstroke:
a) move the victim to a cool place protected from the sun b) cold compress or ice pack to the head;

c) artificial respiration and indirect heart massage; d)
subcutaneous administration of cordiamine and caffeine.

18. First aid for electrical injury:
a) release the victim from the action of electric current; b) sprinkle
the victim with earth;
c) artificial respiration; d)
indirect heart massage.

19. Symptoms of the initial period of radiation damage:
a) general weakness, headache; b)
nausea, vomiting;
c) temperature increase;
d) increased bleeding;
e) signs of secondary infections; e)
the appearance of erythema.

20. First aid for radiation injury:
a) evacuation of the victim from the zone of radioactive
contamination; b) complete sanitization;
c) gastric lavage and cleansing enemas; d) blood
transfusion;
e) the appointment of antibacterial agents.

Mandatory practical skills

1. Preparation of working chlorine disinfection solutions.
2. Determining the height and weight of the patient's body.
3. Determining the circumference of the chest.
4. Counting the number of breaths.
5. Transportation of the patient on a wheelchair, on a stretcher-wheelchair and manually (on a stretcher).
6. Change of underwear and bed linen for a seriously ill patient.
7. Delivery of the ship.
8. Washing the patient.
9. Carrying out the toilet of the oral cavity.
10. Instillation of drops in the eyes and rinsing of the eyes.
11. The ability to lay eye ointment behind the lower eyelid from a tube and an eye spatula.
12. Instillation of drops in the ears.
13. Carrying out the toilet of the ears.
14. Nasal toilet.
15. Instillation of drops in the nose.
16. Measurement of body temperature and registration of measurement data in the temperature sheet.
17. Setting mustard plasters.
18. Cans setting.
19. Setting up leeches.
20. Setting a local warming compress.
21. Applying a cold compress.
22. Preparation and supply of heating pads to the patient.
23. Prepare and serve an ice pack to the patient.
24. Carrying out rubbing, rubbing, lubricating the skin with a drug.
25. Set in a syringe of a medicinal solution from an ampoule and a vial.
26. Breeding antibiotics.

27. intradermal injection.
28. subcutaneous injection.
29. Intramuscular injection.
30. Intravenous injection.
31. Filling the system for intravenous drip administration of medicinal substances.
32. Carrying out intravenous drip infusion.
33. Putting a tourniquet on the shoulder.
34. Providing first aid in case of sudden shortness of breath (suffocation).
35. Collection of sputum for laboratory testing.
36. Providing first aid for hemoptysis and pulmonary hemorrhage.
37. Carrying out oxygen therapy in various ways.
38. Ability to use a pocket inhaler.
39. Determination of the main characteristics of the arterial pulse on the radial artery.
40. Measurement of blood pressure.
41. Registration of the results of the study of arterial pulse and blood pressure.
42. Providing first aid for vomiting.
43. Carrying out an examination of the oral cavity.
44. Taking a smear from the throat and nose for bacteriological examination.
45. Carrying out gastric lavage with a thick probe.
46. Probing of the stomach with a thin probe. Carrying out a fractional study of gastric juice.
47. Carrying out duodenal sounding.
48. Insertion of a gas tube.
49. Setting a cleansing enema.
50. Setting a siphon enema.
51. Setting oil and hypertonic enema.
52. Administration of a medicinal enema.
53. Determination of water balance.
54. Collection of urine for laboratory research.
55. Carrying out a test according to Zimnitsky.
56. Catheterization of the bladder with a soft catheter.
57. Conducting an indirect heart massage.
58. Carrying out artificial ventilation of the lungs.

Educational and methodological support of the

discipline Recommended literature:

Main literature

1. L. S. Zalikina "General nursing", Medicine, 1984
2. V. X. Vasilenko, A. L. Grebnev "Propaedeutics of internal diseases." Medicine, 1982
3. Grebenev A.L., Sheptulin A.A., Khokhlov A.M. Fundamentals of General Nursing. -M.: Medicine, 1999.
4. Murashko V.V., Shuganov E.V., Panchenko A.V. General nursing.- M.: Medicine, 1989

additional literature

1. V. A. Komarov "Ambulance". Moscow, Medicine. 1979
2. V. V. Murashko “Program for general patient care in the clinic of internal diseases for students of medical and sanitary-hygienic faculties of medical institutes”. Moscow, 1984 p.
3. S. S. Ryabov "Care for patients with cardiovascular diseases." Leningrad, Medicine, 1987
4. V. I. Pokrovsky, I. G. Bulkina “Infectious diseases with nursing and basic

epidemiology". Medicine, 1985 p.
5. E. Ya. Severova with co-authors "Towards the formation of a reasonable deontological tactics by a doctor." Clinical med. 4, 1984
6. I. Ya. Shevchenko "Laboratory methods for the study of respiratory organs." Leningrad. Medicine, 1982
7. Mukhina S A., Tarnovskaya I. I. Atlas of manipulation technique (for medical schools). - M.: Medicine, 1995.
8. Mukhina S.A., Tarnovskaya I.I. General nursing (for medical schools). - M.: Medicine, 1989.

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