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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
(FSBEI HE SOGMA, Ministry of Health of Russia)

Department of Internal Medicine No. 1

METHODOLOGICAL MATERIALS

In educational practice “Research work (obtaining primary skills in research work)”
basic professional educational program of higher education
– specialty programs in specialty 31.05.01 General Medicine, approved 24.05.2023

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Methodological materials are intended for training 1st year students (2nd 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 “Research work (obtaining primary skills in research work)”

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CONTROL

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

Studying the basics of general nursing is of paramount importance for the training of doctors of any specialty. This is due to the fact that nursing is a therapeutic measure and it is impossible to distinguish between the two concepts of “treatment” and “care”, since they are closely interrelated, complement each other and are aimed at achieving a single goal - the patient’s recovery. Patient care is of particular importance in the work of medical and preventive institutions in connection with the introduction into health care practice of two-level service, in which direct care and treatment of patients is carried out by a doctor and a nurse. In the process of learning general nursing, the student must theoretically master the meaning of nursing, the nature of the work of medical personnel in medical institutions, the types 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 responsibilities of a nurse, as well as the regime and principles of patient care in the therapeutic department, the rules of room and bed hygiene, 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 training in clinics is the work of students at the patient’s bedside as junior medical staff under the supervision of a teacher and senior nurses in the department, emergency department, and intensive care wards. Classes in general nursing 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 general medicine, pediatrics, and medical-prophylactic faculties. The instructions have been revised according to the curriculum. Methodological developments for each topic of practical classes are presented taking into account a unified methodological system: defining the purpose of the lesson from the point of view of what the student should know, what to 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 for the final control of the level of knowledge; tasks for self-preparation and self-control; Control of mastering practical skills is usually used as a final control. The proposed manual, of course, cannot replace the corresponding sections of the manual and monographs, but it allows you to obtain the basic information necessary for orientation at the patient’s bedside and facilitates a more in-depth study of the course of general patient care.

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 the personal hygiene of the patient are consolidated. The last lesson is carried out in the form of certification of students in practical skills in general nursing in accordance with the regulations on certification of students.

GOALS AND OBJECTIVES OF THE DISCIPLINE:

1. Teach students the basic principles of medical ethics and deontology.
2. To familiarize with the work of junior and nursing staff in medical institutions, with the sanitary regime, maintaining medical records and the principles of the protective regime.
3. Train students in caring for the sick and carrying out sanitary treatment.
4. Teach how to use medical equipment and instruments, accurately carry out medical prescriptions.
5. To teach the peculiarities of caring for patients with dysfunction of the respiratory system, cardiovascular system, and digestive organs.
6. To familiarize students with the features of caring for patients with impaired renal and urinary system function.
7. Teach students how to care for seriously ill, dying patients, ascertaining death and handling a corpse.
8. To form a medical worker of high professional culture.

The general nursing program for medical students, carried out at the departments of propaedeutics of internal diseases, aims to train students in qualified patient care, the basic principles of medical ethics and deontology, as well as the ability to use medical equipment and instruments.

The student must know:

- principles of organizing the work of medical institutions;
- arrangement and equipment of hospital medical departments;
- organization of work of junior and mid-level medical personnel;
- types of sanitary treatment of patients;
- methods of transporting patients;
- principles of therapeutic nutrition according to dietary tables;
- types of fevers;
- mechanism of actionsimple physiotherapeutic procedures;
- principlesuse 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 documentation;
- carry out sanitary treatment of medical and diagnostic premises of a medical institution;
- carry out anthropometry of patients;
- transport patients;
- feed seriously ill patients using tubes, through a gastric fistula, parenterally;
- measure temperature and record it on a temperature sheet;
- master the simplest methods of physical influence on the patient's body;
- use different methods of drug administration;
- provide individual care for patients with respiratory diseases, provide 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 culture of sputum to determine microflora and

sensitivity to antibiotics;
- master the technique of caring for patients with impaired function of the cardiovascular system (determining pulse, blood pressure). Get acquainted with the organization of work of medical personnel in the cardiology department and intensive care unit;
- master the general care of patients with dysfunction of the digestive organs (know the technique of gastric lavage, 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 technique of providing first aid for food poisoning;
- learn how to care for patients with impaired renal and urinary tract function. Get acquainted with the technique of catheterization of the bladder, measure daily diuresis;
- master the method of collecting urine for testing for general analysis, glucosuric profile, sugar and acetone in daily urine;
- know the peculiarities of the work of medical staff in intensive care units;
- master the peculiarities of caring for seriously ill and dying patients;
- be able to ascertain biological death and handle a corpse;
- provide first aid in emergency conditions;

Basic knowledge required to study the discipline:

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

SUBJECT1: ORGANIZATION OF WORK OF MEDICAL INSTITUTIONS: DEVICE, EQUIPMENT AND MODE OF RECEIPT AND MEDICAL (THERAPY) DEPARTMENT OF A HOSPITAL, SANITARY TREATMENT OF A PATIENT (FULL AND PARTIAL) TREATMENT OF A PATIENT WHEN DETECTING PEDICULOSIS. TRANSPORTATION OF PATIENTS.

Educational goal: acquaintance with the basics of medical ethics and deontology.

Lesson equipment: medical equipment for the emergency department, therapeutic departments, general nursing workshop, stadiometer, medical scales, measuring tape, tables and diagrams on the topic.

The student must know:

1. Importance of nursing.
2. The role of medical personnel in treatment and patient care.
3. Responsibilities and tasks of a nurse.
4. Moral character and legal responsibility of a medical worker.
5. Personal hygiene of medical personnel (hand washing, appearance, individual wardrobes).
6. Outpatient and hospital types of medical institutions. Their tasks, structure, equipment.
7. Reception department. Reception of the patient and his registration. Medical history, filling out the passport part. Anthropometry.
8. Sanitary treatment of the patient upon admission (cutting hair, nails, performing a hygienic bath)
9. Transporting the patient to the ward.
10. Construction and equipment of wards and 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 routine. Organizing visits to patients.

The student must be able to:

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

Plan and organizational structure of the lesson.

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

    1. Main typesmedical and preventive institutions.
    2. Organization of their work: structure and equipment
    3. Structure and functions of the reception department.
    4. Reception of the patient and his registration.

5. Sanitary treatment of the patient (full and partial) upon admission (cutting hair, nails, performing a hygienic bath).
6. Treatment of the patient when pediculosis is detected.
7. Anthropometry.
8. Transporting the patient to the ward. Types of transportation.
9. Organizationwork 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 routine. Organizing visits to patients.
eleven.Introduction to the SOGMA Clinical Hospital.

6. Monitoring and correction of the final level of learning material (solving situational problems).

Questions to control the initial level of knowledge.

1. What is general nursing?
2. The importance of general care as a therapeutic factor.
3. Basic tasks and principles of general nursing?
4. Main types of medical institutions? Their structure and tasks performed?
5. Design and equipment of the therapeutic department of the hospital.
6. What does the hospital's therapeutic department regime include?
7. What areWhat are the main objectives of the medical and protective regime?
8. What types of individual patient regimen do you know?

RESPONSIBILITIESAND TASKS OF MEDICAL PERSONNEL.

Nursing is an integral part of the healing process. Timely recognition of diseases, correct treatment and good care ensure the patient's recovery. In her work, the nurse is obliged to follow the orders 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 a patient to the department, checks the quality of sanitary treatment of the patient, shows the admitted patient his room and bed, and, if necessary, participates in transferring him from a stretcher to a bed or accompanies him to the bed;
2) introduces admitted patients to the internal rules and department regulations, monitors their compliance;
3) monitors the sanitary condition in the wards, the regularity of their ventilation (at 7-8 o'clock, 14-15 o'clock, 21-22 o'clock) and air temperature (not lower than 18-20 ° C);
4) monitors patients' compliance with personal hygiene rules and the regularity of changing bed and underwear;
5) measures body temperature in patients and enters measurement data into a temperature sheet; calculates pulse and respiration rates, daily amounts of urine and sputum; carries out anthropometry of the patient;
6) participates in the doctor's rounds, informs him about the condition of the patients and their compliance with the regimen;
7) records the doctor's instructions on prescription sheets and strictly follows them (dispenses medications, performs injections, administers cupping, mustard plasters, enemas, leeches, etc.);
8) collects biological material for sending to the laboratory (urine, sputum, feces, etc.);
9) prepares patients for various studies and transports them to diagnostic facilities

binettes;
10) monitors compliance with medical nutrition of patients, monitors products;
11) monitors the proper maintenance of medical equipment and furniture;
12) maintains on-post medical documentation: draws up a portion requirement, makes a selection of medical prescriptions from the medical history, fills out a request for medications, draws up a summary of the patients' condition, fills out a sheet for registering bed capacity, a journal for registering drugs of list A and B, a journal for prescriptions and transfers duty;
13) in emergency cases, provides pre-hospital emergency care;
14) conducts sanitary educationwork among patients.

The ward nurse is assisted by a nurse in caring for the sick, duties its following:
1) changing bed linen for an admitted patient and providing him with an individual glass and spoon;
2) providing patients on bed rest with a bedpan or bed pad;
3) regularly changing underwear and bed linen (at least once a week) in patients with a general regime and daily changing the bed in seriously ill patients, and if the linen of such patients is soiled with feces, replacing it with clean ones;
4) washing, wiping or bathing seriously ill patients under the supervision of a guard nurse; skin, hair, nail care for patients in serious condition;
5) daily cleaning of the sanitary unit, bathroom, corridor and staircases of the department;
6) delivery of the biological material under study (stool, urine, sputum, etc.) to the laboratory.

OUTPATIENT AND HOSPITAL TYPES OF HEALTH INSTITUTIONS

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, antenatal clinic) and inpatient (hospitals, clinics, sanatoriums, hospitals).

Clinic -an outpatient treatment and preventive institution, which includes doctors' offices for the main clinical profiles: therapy, surgery, gynecology, neurology, eye diseases, and in some clinics for narrow profiles: endocrinology, orthopedics, urology, etc. The clinic 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, physical therapy room, treatment rooms for performing injections, applying cupping, etc. The clinic also includes a registration desk, office rooms and a number of utility rooms.

Outpatient clinic -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 village, small industrial enterprise or rural area. In addition to the doctor, the outpatient clinic includes a paramedic, a midwife, nurses and orderlies.

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

Dispensaries—special specialized outpatient institutions that carry out all work using the dispensary method (patient care
with certain types of diseases—tuberculosis, skin and venereal diseases, etc.). Along with treatment and prevention, the dispensary provides patronage to patients. According to the specifics of their work, dispensaries are divided into anti-tuberculosis, oncology, dermatovenerological, psychoneurological, etc.

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

Women's consultation -a medical and preventive institution that 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 and preventive institution in which, in addition to inpatient treatment of patients, teaching and research work is carried out.
Sanatorium —inpatient facility where follow-up treatment of patients is carried out. Typically, 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.

Based on their nature and capacity, hospitals are divided into a number of groups.

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

By task:1.district; 4. regional;
2. urban;5. republican;
3. marginal;

By bed capacity. Depending on the number of beds, hospitals are divided into categories. The main structural units of the hospital are: admission department; hospital with specialized departments or wards; auxiliary departments (X-ray, pathology, laboratories, etc.); pharmacy; kitchen; administrative and other premises.

STRUCTURE AND FUNCTIONS OF THE ADMISSION DEPARTMENT. PAPERWORK. SANITARY TREATMENT AND TRANSPORTATION OF PATIENTS. ANTHROPOMETRY

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

may be received routinely (as directed by clinics) or delivered by ambulance.

The reception area consists ofa number of premises, taking into account the admission and discharge of patients:

1) the lobby is a waiting area for patients and their relatives. The hospital's cloakroom, reception and information desk are located here;
2) examination rooms—boxed or simply isolated from each other;
3) sanitarya passageway consisting of a dressing room, a shower-bathtub, and a dressing room;
4) isolation ward for placing patients with an unknown diagnosis;
5) chambers for storing clothes;
6) treatment rooms, operating room and dressing room—for medical procedures;
7) X-ray room and laboratory;
8) doctor's office;
9) restroom with washbasin.

In large hospitals, the emergency room, in addition to those listed above, may have the following rooms: diagnostic wards, anti-shock ward, ward for patients with myocardial infarction, trauma roompoint.B in the emergency room, the nurse registers patients; fills out the title page of the medical history for each incoming person (form 003y), enters information about the patient in the patient admission register (form 001y) and the alphabetical journal (for the help desk), where he indicates the last name, first name, patronymic, year of birth, date of admission to the department. The actions of the doctor and nurse in relation to patients are strictly differentiated depending on the nature of the disease and the patient's condition. If the patient is admitted in an unconscious state, information about him is obtained from relatives or accompanying persons. If there are no documents and it is impossible to obtain information about a patient who is in an unconscious state, his admission is recorded in a journal with a description of the main external signs, and the data about him is 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 quickly as possible. The emergency room should have everything necessary for emergency and emergency medical care. In cases where a child under 16 years of age is admitted unaccompanied or the patient is transported by ambulance due to injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify relatives.

After registration, the patient is sent to an examination room, where he is examined by a doctor, and, if necessary, instrumental and laboratory research methods are performed (fluoroscopy, electrocardiography, blood tests, urine tests, etc.). If it is impossible to establish a diagnosis, the patient is isolated and consultations with medical specialists are organized. If, after examination and observation of the patient by a doctor, no data for hospitalization are established, the patient is sent home, which is recorded in the hospital refusal log. In some cases (if an infectious disease is suspected), as prescribed by the doctor, the nurse takes a swab from the throat or nose.

To take a smear 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 the spatula, and runs the swab along 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 slightly back, then lifts the tip of the patient's nose with his left hand, and with his right hand inserts a sterile swab with a slight rotational movement into the lower nasal passage on one side, then on the other, after which he also places the swab in the test tube. The latter is sent with 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 emergency 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 a single-room
a precise sanitization system, where women are washed in turn, and then men; in other hospitals there is a two-stream system, which ensures parallel and simultaneous sanitization of both men and women, which reduces the length of their stay in the emergency department.

The sanitary checkpoint has an examination room where the patient is undressed and prepared for a hygienic bath. It has a couch, cabinets for clean linen and bins for dirty laundry, a table with the necessary items for shaving, cutting hair, soap, two pots with the inscriptions “clean” and “dirty” washcloths. After each patient, washcloths are placed in a pan and boiled. For washing the bath - special sponges and brushes, which are used to wash the bath after each patient. The air temperature must be at least 25℃. In the examination room, the patient is undressed and an inventory of property is drawn up 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, wash the head well 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, the head is washed well with warm water and rinsed with a 6% vinegar solution. To destroy nits, use table vinegar heated to 27-30℃, soak a cotton swab in it, moisten your hair with it and tie your head with a headscarf for 15-20 minutes. If there are lice in the linen, it is placed in an oilcloth bag moistened with one of the available disinfestation agents (4). Emulsion of DDT, hexochloran, 0.5% solution of karbofos, 1% solution of acetophos or metaphos and sent to the disinsection chamber. You can also destroy lice in linen by ironing them with a hot iron on both sides through a damp cloth. It must be remembered that the average duration of a hygienic bath is 20-30 minutes at a temperature of 35-36℃. 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 due to health reasons, a shower is prescribed. To do this, place a bench under the shower on which the patient sits. For patients in moderate condition, wipe the body with a damp towel moistened with one of the disinfecting 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 emergency department should be reduced to a minimum; after sanitary treatment, the patient is sent to the department of the hospital corresponding to his illness. The path to the ward should be direct and short. If the patient’s condition is extremely serious, without sanitary treatment, they are sent to the intensive care unit for emergency medical care.

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 satisfactory condition are sent to the ward accompanied by a medical worker. In some cases, it is advisable to transport the patient to the department in a wheelchair. Seriously ill patients are transported to the department on a stretcher mounted on a special gurney. Each gurney should be equipped with a clean sheet and blanket 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 leg end of the stretcher is raised. Seriously ill patients, who cannot even move, are transferred 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: instructions indicating products allowed and prohibited for transfer to patients, portion holder.

Food products for patients must be accepted from visitors under the supervision of the department's nurse, who has a list of patients indicating the number of the dietary table received by each of them. In the resting places of patients, in the emergency department and in places where packages are received, instructions are posted indicating the products that are permitted and prohibited for distribution to patients. Each department should organize proper storage conditions for products, especially perishable ones. The nurse should systematically check the bedside tables and refrigerators in which patients' food is stored. It is strictly forbidden to store perishable food in the wards.

Monitoring the sanitary condition of bedside tables.

Students should know that every day the nurse prepares a portion ration for the patients, which he hands over to the head nurse of the department, and she, in turn, sums up the number of diets and sends the portion ration to the kitchen. Based on these portions, food is prepared in the kitchen. Buckets and pans for food should always be kept clean and have lids. The dishes are placed on special movable heated tables and brought warm to the ward. Considering that most patients have no appetite, it is necessary to give the dishes a beautiful, appetizing appearance. The dining room environment should be calm. For hospital institutions, a minimum of four meals a day is 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 or sick clothes 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-soda solution. For washing floors and wet cleaning, separate rags and labeled containers must be provided. The use of equipment and cleaning rags for other purposes is strictly prohibited. Cleaning equipment should be stored in its designated place. Sanitary units must be washed with a 0.5% solution of clarified bleach (0.5 liter jar of 10% bleach solution per 1 bucket of water). Taking cleaning equipment out of the bathroom is not allowed. After washing the bathroom, the rags must be rinsed in tap water and then in a 0.5% solution of clarified lime, soaked for 30 minutes. To wash toilets and vessels, you need to have kvacha 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-soda solution, and then with a clarified bleach solution and, finally, rinsed with hot water. A washcloth for washing a bathtub should be kept in a solution of clarified bleach and, after use, boil for at least 15 minutes from the moment of boiling. Oilcloths and examination couches are wiped twice with a rag moistened with a 1% chloramine solution and a 0.5% bleach solution. Door handles, tables and other objects are wiped separately daily with the above disinfectant solutions.

Therapeutic and protective regime

Medical and protectivemodeprovides the patient's physical and mental

peace. The main component of the medical and protective regime is strict adherence to the daily routine and complete mutual understanding between the patient and medical staff. A properly constructed regimen involves good rest, regular nutrition, medical supervision, and timely completion 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 provides care, feeds the patient and makes sure that he does not get up.

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

With semi-bed rest, the patient is allowed to walk to the toilet. Under general conditions, the patient is allowed to walk around the department.

Patients are required to comply with the department's regime, stay in the ward during the doctor's rounds, i.e. after breakfast and before lunch, and strictly follow the recommendations given by the doctor. During quiet time, patients should remain in bed, and after lights out, maintain silence in the ward and department. Patients should be warned not to bring illegal products, especially alcoholic beverages.

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

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

Tests-tasks for final control.

1. List the responsibilities of junior medical staff.

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

2. Clean the premises in a timely manner.

3. Monitor compliance with the internal regulations for treatment. institutions.

4. Observe the rules of personal hygiene of patients.

5. Observe the principles of deontology (carefully and 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. Clinic. 2. Outpatient clinic. 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 identify pediculosis

2. Hair and nail cutting.

3. Shaving.

4. Washing in the shower or hygienic bath.

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

*Answer:*1. In satisfactory condition, walk.

2. Lying on a stretcher.

3. Sitting on a wheelchair.

4. Lying on a gurney.

5. The technique of placing the patient on a stretcher, climbing up and down stairs, shifting

lifting the patient from the stretcher to the bed.

*Answer:*1. The stretcher is placed perpendicular to the couch, its head end approaches the foot end of the couch. 3 or 2 (rarely) orderlies shift. They lift the patient simultaneously with coordinated movements, together with him they turn 90º towards the stretcher and place the patient on the stretcher. In the absence of an elevator, seriously ill patients are lifted on stretchers by 2 or 4 people walking out of step. The patient is carried up the stairs 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 transferring from a stretcher to a bed, the stretcher is placed either perpendicular To

bed, either parallel or close to the bed.

6. What should be understood by the regime of a medical institution?

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

7. What does the regime of a medical institution consist of?

*Answer:*1. From temperature conditions, lighting and ventilation.
2. Sanitary regime.
3. Personal hygiene of patients and medical personnel.
4. Internal regulations.

8. What should be the optimal temperature in the room?

*Answer:*20°C.

9. What kind of cleaning should be done?

*Answer:*Regular, moist

10. How should wet cleaning of premises be done?

*Answer:*1. Warm water and soap.
2. Disinfectant solutions.

11. What disinfectants should be used for wet cleaning?

*Answer:*1. Clarified solution of bleach 10%, 1%, 0.5%.
2. 1% chloramine solution.
3. 3% Lysol solution.
4. A solution of ammonia (rarely).

SUBJECT2. ORGANIZATION OF THE WORK OF THE NURSE POST.

Educational goal:acquaintance with the basics of medical ethics and deontology.

Lesson equipment:medical equipment 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. Moral character and legal responsibility of a medical worker.
5. Personal hygiene of medical personnel (hand washing, appearance, individual wardrobes).
6. What is medical ethics and deontology?
7. Basic requirements for personal hygiene of a nurse.
8. About the design and equipment of the nursing station in the department.
9. Are there sanitary and hygienic requirements for the nurse's post?

10. Main types of medicaldocumentation in the therapeutic department.

The student must be able to:

- work with medical documentation;
- carry out sanitary treatment of medical and diagnostic premises of a medical institution;
- carry out anthropometry of patients;
- transport patients;

Plan and organizational structure of the lesson.

1. Greetings.
2. Monitoring student attendance at classes.
3. Introductory speech by 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. Responsibilities and tasks of medical workers.
    5. Moral and legalresponsibility of medical personnel. Code of Conduct.
    6. Personal hygiene of doctors (hand washing, appearance).
    7. Organization of the work of a nurse's post.
    8. Equipmentand organization of the work of the treatment room.
6. Monitoring and correction of the final level of learning material (solving situational problems).

PATIENT CARE AS A HEALING FACTOR. ROLE OF MEDICAL STAFF IN TREATMENT AND CARE OF PATIENTS

Nursing is an integral part of the healing process. It includes the implementation of medical prescriptions, hygienic maintenance of the patient and the premises where he is located (ward, room), keeping the bed clean, providing assistance during meals, physiological functions, preparing for the performance of therapeutic and diagnostic procedures, and organizing the patient's leisure time.

Most diseases are accompanied by a limitation of physical activity and therefore patients often require outside care. The nursing staff shares a place with the doctor at the patient's bedside, and if the doctor treats, the nurse provides care. There are cases when nurses nursed seemingly hopeless patients thanks to strict adherence to doctor's orders (injections, dispensing medications, giving enemas, etc.), strict adherence to dietary, drinking and hygienic regimes, creation of favorable physical and psychological conditions. The famous gynecologist V.F. Snegirev in the conference room of the clinic, next to the portraits of outstanding scientists N.I. Pirogov and Ch. Darwin, hung a portrait of nanny Makarova with an inscription that she had seen a thousand operated patients. At the same time, poor care and a nurse's careless attitude towards her direct duties can not only delay the patient's recovery, 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 the people for whom it is done.

It must 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 doctor's office,

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

The student must know the science of the relationship between the doctor and the patient, the duty and responsibilities 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 self-sacrifice, 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 dedication, but also on deep knowledge; a reputable doctor is, first of all, a knowledgeable doctor. Hippocrates emphasized that only serious training is the basis for the successful work 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 mature fruits."

The authority of the doctor in the eyes of the patient is largely based on his attitude towards the patient, sensitivity, and participation in suffering. When starting work in a clinic, students should remember that the first impression on the patient is made by the appearance of the doctor. When talking 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 in a negative way.

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

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

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

For every 25-30 beds in the department there is a nursing station. The nurse's post should be located close to the wards she serves. The post is equipped with a table for storing medical records, a chair for a nurse, a cabinet for medicines and medical instruments, a safe for storing medicines of 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 panel from the wards, a telephone, a desk lamp and a sink with a tap for washing hands. If the department does not have a separate treatment room for injection, then the post should have a table for preparing injections, containers with sterile material and a set of instruments for performing injections. The nurse's workplace must be kept in exemplary order.

The work of the nursing station is structured depending on the hospital routine.

One of the important points in the work of a nurse is the transfer of duty. She has no right to leave her post if a replacement does not show up. The nurse who came on shift, together with the sister who finished work, walk around the wards, check the sanitary condition of the department, and pay special attention to the seriously ill. The nurse on duty reports changes in the condition of these patients over the past shift, sets out the scope of prescribed and completed medical prescriptions, as well as prescriptions that still need to be completed during the upcoming shift.

The nurse passing on duty conveys to the nurse starting duty:

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

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

3) a journal for recording and using narcotic drugs, where both nurses sign for the delivery and administration of narcotic drugs;
4) a prescription log, in which the prescribed manipulations, injections, laboratory and instrumental studies are written out from the patient's medical history;
5) register of toxic and potent drugs;
6) log of reception and transfer of duties, which indicates the total number of patients, their movements, the number of seriously ill and feverish patients; urgent appointments; quantity and technical condition of medical instruments and care items. In this journal, both nurses put their signatures on acceptance and delivery of duty.

In the morning before returning to duty, the nurse fills out a sheet recording the movement of patients and hospital beds (form 007u), the head nurse duplicates this data in the register of admission and discharge of patients, in which the patient's passport data, diagnosis, number of bed days spent in the hospital are noted. hospital, medical history and sick leave number.

In the morning, the nurse writes out, based on medical prescriptions, a requirement for the patients' meals, i.e., a portion plan (form 1-84), in two copies: for the catering department and the pantry. The portion plate contains an indication of the number of patients on each diet and, in addition, the names of the patients and the name of the products issued additionally or on the fasting day. Each department keeps logs with a list of patients who need laboratory or instrumental research methods, as well as those who need consultation from various specialists
(neurologist, urologist, psychiatrist, etc.).

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

It consists of: a) passport part; b) patient complaints, medical history and life history; 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 data on 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, radiological, 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 or report the results of laboratory tests.

Remember!The main types of nursing medical documentation: the cover page of the medical history, the sheet of medical prescriptions, the procedural and temperature sheets, the portion holder, the journals "Accounting for and using narcotic drugs" and "Receiving and handing over duty"

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

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

The treatment room is available both in hospitals (hospitals, clinics, hospitals) and in outpatient clinics (clinic, medical unit). A bright, well-lit and ventilated room, equipped with cold and hot water, is allocated for the treatment room. The walls and floor of the treatment room should be convenient for mechanical cleaning. Each treatment room, regardless of its size, must have a sink equipped with cold and hot water mixers. The sink is placed closer to

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

The treatment room must have the following equipment: a cabinet or table for storing instruments and medications; sterilization boxes (boxes) with sterile dressings (bandages, cotton wool, etc.), syringes, needles and intravenous infusion systems, with a set of ready-made sterile instruments for paracentesis and pleural puncture; disinfection boiler for instruments and syringes; distiller; tabletop centrifuge; bactericidal lamp; stands for long-term infusions; racks for clean tubes used for blood collection; blood typing kit; refrigerator for storing serums, blood and medicines; stools or screw chairs; table for medical documentation; plastic aprons to protect the clothing of medical personnel; enameled basins for soaking dirty tools and cleaning hands; buckets for dirty material with pedal and lid; wooden benches; a table for intravenous injections and a couch covered with oilcloth; electric suction

The treatment nurse's working day begins with an inspection and wet cleaning of the treatment room. The procedural nurse checks whether the staff on duty used the office at night. She throws the used and contaminated dressing material into buckets for dirty material, and washes the used medical instruments, syringes, and droppers. Then he performs wet cleaning of the room. After this, the treatment nurse puts on a sterile gown, carefully hides the hair under a cap and sanitizes the hands. Then he looks through the list of patients who need to take blood that day, give intravenous injections, put in IVs 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. After this, the procedural nurse makes intravenous infusions prescribed by the doctor and prepares for intravenous drip infusions (fills the system for intravenous infusions with the necessary medications and places it on a stand) and only after that puts droppers in the patients. Seriously ill patients are served first, whenever possible.

If necessary, the procedural nurse prepares medical instruments for performing thoracentesis or paracentesis, assists the doctor during these medical procedures and monitors the patient's condition. Replenishes the supply of medications in the treatment room with the older nurse.

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

The treatment room contains the following medical documentation:

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

10) instructions for providing first aid for anaphylactic shock and for sanitizing the treatment room;
11) table of antidotes used for acute poisoning;
12) journal for registering general cleaning of the treatment room.
A 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 final knowledge control.

1. What is general nursing?
2. The importance 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 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 structure and equipment of the nursing station in the department.
9. What sanitary and hygienic requirements apply to the nurse's post?
10. List the main types of medical documentation.
11. Tell us about the working hours of the nursing station in the department.
12. What are the rules for working and maintaining medical records?
13. By whom and how are receptions and assignments carried out?
14. List the manipulations performed in the treatment room.
15. What does the work schedule in the treatment room consist of?
16. What sanitary and hygienic requirements are imposed on the treatment room and the personal hygiene of the nurse working in it?
17. List the equipment of the treatment room.
18. What types of treatment room documentation do you know?

TEST CONTROL.

1. How do the concepts of “care” and “treatment” relate to each other?
a) care and treatment are different concepts; treatment is carried out by a doctor; care is provided by nursing and junior medical personnel;
b) care and treatment are identical concepts, since both treatment and care aim to achieve the patient’s recovery;
c) care is an integral part of treatment.

2. What does "special care" mean?
a) care that is carried out especially carefully; b) care carried out in special conditions;
c) care that requires the presence of certain specialists; d) care that includes additional measures, determined by the specifics of the disease.

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

4. A patient came to the emergency department without medical referral documents and suddenly felt unwell.

What will your tactics be?

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 medical referral 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 have a hygienic bath?

Can i; b)
it is
impossibl
e;
c) possible after excluding acute surgical disease.

5. A patient was brought to the emergency department with suspected gastrointestinal bleeding (3 hours ago he vomited contents like "coffee grounds"). Feels subjectively satisfactory and can move independently.

How to transport a patient to the department?

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

c) only on the roller.

SUBJECT3. MEDICALDOCUMENTATION IN THE THERAPEUTIC DEPARTMENT AND ADMISSION ROOM.

Educational goal:acquaintance with the basics of medical ethics and deontology.

Lesson equipment:medicalequipment 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. Moral character and legal responsibility of a medical worker.
5. Organization of the work of the therapeutic department.
6. Main types of medicaldocumentation in the therapeutic department.
7. Reception department. Reception of the patient and his registration.
8. Main types of medical documentation in the emergency department.
9. Operating hours of the treatment room.
10. Types of treatment room documentation.

The student must be able to:

- work with medical documentation;
- carry out sanitary treatment of medical and diagnostic premises of a medical institution;
- carry out anthropometry of patients;
- transport patients;

Plan and organizational structure of the lesson.

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

    1. Moral and legal responsibility of medical personnel. Code of Conduct.
    2. Organizationwork of the therapeutic department.
    3. Types of medical documentation.
    4. Decordocumentation in the reception department.
    5. Reception of the patient and his registration.
    6. Medical documentation of the treatment room.

6. Monitoring and correction of the final level of learning material (solving situational problems).

ISSUES OF DEONTOLOGYAND MEDICAL ETHICS IN DOCTOR TRAINING

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

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

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

In the literature one can find various definitions of the goals of medical deontology. Typically, medical deontology was defined as the doctrine of the principles of behavior of medical personnel aimed at maximizing the usefulness of treatment and eliminating the harmful consequences of inadequate medical knowledge, actions, etc.

The main issues of deontology were: the relationship between the doctor and the patient, iatrogeny, or diseases associated with healing, the ethics of managing severe and hopeless patients, including issues of euthanasia, healing in the age of the scientific and technological revolution, medical confidentiality, 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, qualitative changes occurred in medicine. It was invaded by high technologies, which led to great achievements in biology and genetics. Healing has risen to a higher level. Medicine has become accessible to people that was previously inaccessible. Her power has increased. It became possible to "repair" a person like a machine, like a mechanical creature. As a result, there was a threat of loss of morality, mercy, and compassion for the patient that had been developed over centuries. The relationship between doctor and patient has become increasingly similar to the relationship between 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 doctor and 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 doctor and patient and is called bioethics or biomedical ethics. Bioethics has not completely replaced the deontology of the doctor. It preserved many sections of deontology, although others, qualitatively new ones, appeared.

To date, there is no complete agreement among scientists about what the main issues of bioethics are. Nevertheless, the main ones, 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 confidentiality), the patient's informed consent to examination and treatment , death and dying (including euthanasia), problems of reproductive technology, caring for children and the mentally ill and a number of others.

The relationship between doctor and patient is deeply unique.

In many countries around the world, doctor-patient relationships prefer to be built on a legal basis.

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

I. *Paternalistic*(from the word "father" - pater) the fatherly care of a doctor for a 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 ways. Attitudes towards life, work, the environment and even relatives, etc. change. A serious illness leads to great changes in the human psyche. Causes deep feelings, anxiety 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 word of a doctor is no less healing than medicine.

When conducting a round, talking in the ward, and during any communication with patients, the doctor must always remember the second side of the impact of words on a 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 consequences of a doctor's negative influence on a patient are called iatroge-
niya.

Unfortunately, in a number of cases, iatrogenism arises due to the callousness of the doctor,
insufficient
sufficient general culture, indifferent attitude towards the performance of his medical duty.

II. **Modern engineering relationship model**- the disease is considered as a breakdown of a mechanism, a mechanical engineer repairing the breakdown (the 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 technology in the last years of the 20th century (tomography, ultrasound, organ transplantation, etc.). But this model is fraught with the danger that the doctor acts more for his own corporate purposes than for the interests of the patient. These include proposals for the selfish purposes of expensive examinations, medications, 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. Model of relationship between doctor and patient, collegial 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 collegial model requires the physician to address all aspects of examination and treatment

were decided only on the basis of providing the patient with detailed information about these methods, and his consent to carry them out.

Today, our legislation is trying to introduce the relationship between doctor and patient into the legal framework, and the law advocates the mandatory nature of all provisions of informed consent.

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

*"Citizens' right to information about health status"*and states: "Every citizen has the right, in a form accessible to him, to receive available information about the state of his health, including information about the results of the examination, the presence of the disease, its diagnosis and prognosis, treatment methods, associated risks, possible options for medical intervention, their consequences and the results of 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, relationships such as informed consent are now prescribed for Russian doctors by law.

In this case, it is assumed that informing the patient about his illness has the goal of involving the patient in an active fight against the disease. In addition, informed consent allegedly divides the burden of responsibility for 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 significantly important for the doctor - it increases his legal protection, protects him from the possibility of unfair actions of the patient in the event of complications.

However, from a moral perspective, written consent cannot be considered the best. It is precisely the rock on which the trusting relationship between doctor and 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 the possible immediate tragic outcome. The law requires that the patient be given truthful information about his diagnosis and prognosis, no matter how severe they may be. 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 may be was.

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

Of course, the principle of informed consent cannot simply be dismissed. Many modern diagnostic and treatment methods are highly aggressive and can lead to a number of undesirable consequences. And their necessity, first of all, must be seriously justified and explained to the patient. The model of informed consent is also a legal protection for the doctor in the event of any surprises arising during the examination and treatment, or 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 physician ethics and deontology, and now bioethics, is the so-called euthanasia.

Euthanasia -This is a teaching about 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 does not have the right to meet the patient's request and help him die easily. The doctor is not an assistant to death, but a fighter for life. Recorded in the "Oath"

ve" of Hippocrates: "I will not give anyone the deadly means they ask from me, and I will not show the way for such a plan." However, the question turned out to be 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 passing laws allowing euthanasia. In Norway, active euthanasia was legalized in 2001. In many American states, passive euthanasia is allowed at the request of the patient.

What should a doctor do in this situation? Euthanasia comes into conflict with the moral beliefs of many doctors, their upbringing in the system of life values, and the "Hippocratic Oath," finally. In addition, the wide acceptance of euthanasia, its legislative consolidation, can affect the deepest moral and legal institutions of humanity (dishonorable relatives, large fortunes, the emergence of a rich 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 physician deontology, and now bioethics, is medical confidentiality. 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 the doctor, there are some that the person would not disclose to anyone under other conditions. And the patient believes all this to the doctor, because, as the ancient Indian philosophers taught: "You may not trust your father, mother, or 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, it will be useful in its treatment. The doctor is obliged to justify the patient's trust 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 confidentiality should be understood as the ethical (and legal) prohibition of disclosing information about the illness, intimate and family life of the patient, which is entrusted to the doctor by the patient himself or his relatives, comes from other sources, etc. In fact, the need to maintain medical confidentiality is part of the bioethical concept of "protecting patient privacy."

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

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

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

61 of these Fundamentals."

Article 61."Information about the fact of seeking 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 to whom information constituting medical confidentiality was transferred in accordance with the procedure established by law bear disciplinary, administrative or criminal liability for the disclosure of medical confidentiality in accordance with the legislation of the Russian Federation and the republics within the Russian Federation."

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

But we teach our students the need to maintain medical confidentiality starting from the 2nd year. Apparently, a well-known principle applies 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 refusal of medical confidentiality, absolutely unpunished violation of the law on medical confidentiality.

Article 131- according to which causing moral harm is a jurisdictional act. If the disclosure of a secret leads to serious consequences, the victim has the right to judicial protection, and the perpetrators may be prosecuted.

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

The strength should be considered that all these people seem to appeal to mercy, stand up for human life, for human rights. All religious supporters of the ban on abortion argue their positions by the inadmissibility of interference in this God-ordained law of man.

Article 36*"Fundamentals of the legislation of the Russian Federation on protecting the health of citizens";*called *"Artificial termination of pregnancy"*and it says: "Every woman has the right to independently decide the issue of motherhood. Artificial termination of pregnancy is carried out at the request of the woman, for up to 12 weeks of pregnancy, and for social reasons - for up to 22 weeks of pregnancy.

So-called reproductive technologies are currently becoming one of the most pressing problems in bioethics. Reproductive technologies are the use of the results of high scientific and technological achievements to solve 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 options for IVF 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 (egg). and sperm) material.

All reproductive technology procedures entail a number of ethical and legal issues. Russian legislation solves the legal side of the problem quite reasonably. Article 35 of Section VII, "Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens" states: "Every adult woman of childbearing age has the right to artificial insemination and embryo implantation.

Information about artificial insemination and embryo implantation, as well as the identity of the donor, constitutes 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, much more) children. How to deal with this? What will be the consequences of such fatherhood 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 moral and legal terms?

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

Surrogacy causes great 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 the "customers." They are trying to solve this issue legislatively, but this does not solve many problems.

One of the most controversial reproductive technologies is cloning. In the last years of the outgoing 20th 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 cloning?

They take an egg from a woman, remove the nucleus from it, and then implant a nucleus from her own somatic cell. After this, the gamete thus formed is awakened to division and again transplanted into the woman's uterus. Having delivered such a fetus, the woman will give birth to "herself." A gamete can be created from the somatic cells of its children, then it will give birth to copies of them, etc.

In connection with all this, there were fierce debates all over the world on the admissibility and impermissibility of human cloning. By the end of 2000, 27 states had adopted strict laws prohibiting human cloning. However, there are scientists in the world who do not agree with these laws and continue to conduct research.

Medical experiment also now acts 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 carry risks and burdens.
2. Medical research involving human subjects can only be carried out if the importance of the purpose of the research outweighs the associated risks and burdens to the subject. If there is a reasonable likelihood of benefit from its results.
3. voluntariness and awareness of participants in the research project.

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

These positions are reflected in the Russian "Fundamentals of Legislation on the Protection of Citizens' Health." Article 43: "Methods of diagnosis, treatment and medicines that are not approved for use, but are being reviewed in accordance with the established procedure, can be used in the interests of curing the patient only after receiving his voluntary written consent. A citizen cannot be forced to participate in medical research.

Academician Yuri Lopukhin notes the versatility of ethical problems in medical

experiment, scientific research work and that control over the conduct of a medical experiment should be ensured by ethical committees working at medical institutions, in the Russian Academy of Medical Sciences, and 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 for the patient, and act as a guarantor of research in accordance with the above recommendations of the Declaration of Helsinki.

Here we cannot help but touch upon the issues of medical experimentation on animals. In recent decades, many countries have developed ethical guidelines for conducting such experiments. These rules require a convincing justification for the feasibility 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 body part 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 effects on humans and animals.

The scientific and practical field of medicine, transplantology, which is rapidly developing in our time, also poses very big ethical problems.

In the USA, experts believe that the issue cannot be resolved on the basis of "who waits for how long." First of all, transplantation should be performed on 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. Nowadays, the opportunity to get to these centers for a patient living outside the territories where they are located is virtually zero. Transplants can only be done on a commercial basis. A kidney transplant costs 5-6 thousand dollars and more, a heart transplant, for example, at the Institute of Transplantology of the Russian Federation - 90 thousand dollars (Doctor, 1999, No. 6). Insurance funds do not pay for such operations, and regional health ministries do not have that kind of money. Therefore, the possibility of getting a transplant for a person living outside the regions where the centers are located is negligible.

The financial cost figures cannot but raise another serious ethical and legal issue in bioethics. This question can be formulated as follows: "How moral is it to spend such funds on transplantation?" This problem is formulated differently as follows: "The problem of fair distribution of resources in medicine."

All over the world, many bioethics issues are resolved through National Bioethics Committees. We need to take the first steps in this direction - create a commission - an ethical committee, which is obliged to deal with these issues, and if it works in full force, all interested parties will be able to receive help from it.

We need to deepen our knowledge and that of our students in matters of bioethics. Apparently, the curricula should include issues of medical ethics and bioethics, and according to a cross-cutting program.

A number of relationships have become 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 remembers medical traditions, ethics, and deontology of the doctor. But we must remember that law and justice do not replace morality in healing.

LEGISLATIONAND REGULATIONS

1. International Code of Medical Ethics (morality, ethics), (importance of preserving human life).
2. Document of the World Medical Assembly (1975) (morals, ethics).
3. Ethical Statements of the American Medical Association (1964) (Service to 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 the achievements of biology and medicine, personal integrity and other rights, human priority, equal access to medical care, professional standards, private life, genome, scientific research, removal of organs and tissues prohibition, violation of the provisions of the convention.
6. Declaration of Helsinki of the World Medical Association, new standards for medical research (2000).
7. Fundamentals of the legislation of the Russian Federation on protecting the health of citizens (1998).

In the emergency room, the nurse registers patients; fills out the title page of the medical history (form 003y) for each incoming person, enters information about the patient in the patient admission register (form 001y) and the alphabetical journal (for the help desk), where he indicates the last name, first name, patronymic, year of birth, date of admission to the department. The actions of the doctor and nurse in relation to patients are strictly differentiated depending on the nature of the disease and the patient's condition. If the patient is admitted in an unconscious state, information about him is obtained from relatives or accompanying persons. If there are no documents and it is impossible to obtain information about a patient who is in an unconscious state, his admission is recorded in a journal with a description of the main external signs, and the data about him is 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 quickly as possible. The emergency room should have everything necessary for emergency and emergency medical care. In cases where a child under 16 years of age is admitted unaccompanied or the patient is transported by ambulance due to injury or loss of consciousness that occurred outside the home, the emergency room nurse is obliged to notify relatives.

After registration, the patient is sent to an examination room, where he is examined by a doctor, and, if necessary, instrumental and laboratory research methods are performed (fluoroscopy, electrocardiography, blood tests, urine tests, etc.). 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, no data for hospitalization are established, the patient is sent home, which is recorded in the hospitalization refusal log.

The treatment room contains the following medical documentation:

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

A 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 doctor and patient;
b) a wide range of issues of duty, morality and professional ethics of medical workers;
c) iatrogenic diseases.

2. A patient has been diagnosed with a malignant tumor of the stomach, at a stage where it can be radically removed surgically. 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 undergo surgery, try to convince the patient of the need for surgery.

3. What are the responsibilities of the head nurse of the department?
a) performing the most responsible nursing procedures;
b) monitoring the work of ward nurses, issuing requests for medications;
c) control over the provision of hard and soft equipment and bed linen to the department.

4. What manipulations are performed in the treatment room?
a) injections;
b) puncture of the pleural cavity; c) placing jars, mustard plasters; d) taking medicinal baths;
d) determination of blood groups.

5.What medical documents do ward nurses keep? a) duty handover log;
b) certificate of incapacity for work;
c) a notebook of medical prescriptions; d) portioners;
e) card of a person leaving the hospital.

6. A patient sent for hospitalization was found to have body lice in the emergency department. Your actions?
a) refuse hospitalization to the patient;
b) wash the patient again with soap in the bath, send the patient's clothes and underwear to the disinsection chamber;
c) carry out sanitary treatment, including cutting the scalp hair (if possible), lubricating the hair with a mixture of kerosene and sunflower oil, then washing the hair using 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 referred the patient to an infectious diseases hospital, where, after a more thorough examination, a diagnosis of an abdominal (gastralgic) form of myocardial infarction was established. How would you rate the initial actions of health workers?

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

8. The nurse, having mixed up the outwardly similar bottles, administered a large dose of insulin to the patient 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 accidental mistake.

9. A young woman's father died of a myocardial infarction several months ago. His death was very difficult for him. From specialized literature I soon learned that there may be a hereditary predisposition to myocardial infarction. I began to notice unpleasant sensations in the left half of my chest, and I began to fear dying from heart disease. She sought medical help. What disease can be expected in the patient?

a) iatrogenic disease;
b) most likely, an iatrogenic disease with elements of neurosis (cardiophobia), but the patient needs additional examination;
c) severe heart disease.

SUBJECT4. PERSONAL HYGIENE OF PATIENTS.

Educational goal: teach students polite, attentive treatment of patients in accordance with the principles of medical ethics and deontology.

Lesson equipment: specialized workshop, functional bed, sets of underwear, bed linen, bedpan, 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. Setting up a functional bed.
2. Preparing the bed. Change of underwear and bed linen in seriously ill patients.
3. Care for the oral cavity, ears, eyes, nose, hair.
4. Skin care and prevention of bedsores.
5. Washing the sick. Douching.
6. Use of a rubber circle, vessel, urinal.
7. Skin care for bedsores.

The student must be able to:

1. Change underwear and bed linen, prepare the bed for the patient.
2. Care for the hair, ears, eyes, and oral cavity of seriously ill patients.
3. Carry out sanitary treatment of patients (hair cutting, 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, wiping the skin with one of the

disinfectant solutions).
6. Clean the sick.
7. Provide vessels, urinals, and disinfect them.
8. Transfer the sick.
9. Prevent bedsores.
10. Treat the oral cavity of seriously ill patients.

Plan and organizational structure of the lesson.

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

    1. Position of the patient in bed.
    2. Setting up a functional bed. Various devices to create a comfortable position for the patient.
    3. Preparing the bed. Change of underwear and bed linen.
    4. Care for the oral cavity, ears, eyes, nose.
    5. Hair care. Method of washing hair in bed.
    6. Skin care, daily toilet. Washing. Douching.
    7. Prevention of bedsores.
    8. Use of a bedpan or urinal. Disinfect them.

6. Monitoring and correction of the final level of learning material.

Tests-tasks for initial control of knowledge

1. How often should bed linen be changed for patients?
*Answer:*Once a week.
2. How often should bed linen be changed for a seriously ill patient?
*Answer:*As it gets dirty.
3. Name ways to change sheets for seriously ill patients.
*Answer:*1. By rolling the patient from side to side. In this case, the dirty and clean sheets roll up in the longitudinal direction.
2. Sequentially raising the head, chest, torso, legs, roll up the dirty sheet in the transverse direction and simultaneously straighten the clean one.
3. They remake the bed, transferring the patient onto a gurney.
4. Name the methods for transferring weak and seriously ill patients from stretchers to beds 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 orderlies. Some people support their head, neck and upper chest with their right hand, while others place their hands under the lower back and hips.
3. Three orderlies. One holds the patient's head, neck and upper chest, the second puts his hands under the lower back and upper thighs, the third supports the thighs and legs.
5. Name the ways to install a stretcher in relation to the bed when transferring a seriously ill patient.
*Answer:*1. At a right angle.
2. Parallel.
3. Consistently.
6. What is the sequence for changing a shirt for a seriously ill patient?

*Answer:*1. Slightly raising the upper part of the body, collect the shirt from the back to the neck.
2. Raising the patient's arms, remove the shirt over the head.
3. They free the arms from the sleeves, and first of all the healthy one. 4. Put on a clean shirt in the reverse order: on the sore arm,
then onto the healthy one, then over the head and then straightened onto the body.

7. List methods for caring for the skin of patients in a hospital.
*Answer:*1. Hygienic bath. 2. Shower. 3. Rubbing. 4. Washing.
8. What is the frequency of wiping and washing in seriously ill patients?
*Answer:*Daily 1 – 2 times.
9. What is the frequency of taking a hygienic bath or shower for hospital patients?
*Answer:*Once a week, if condition allows.
10. Indicate the places where bedsores form.
*Answer:*1. Sacrum. 2. Shoulder blade area 3. Heels 4. Back of the head
5. Elbows 6. Area of the ischial tuberosities.
11. What reasonscontribute to the formation of bedsores?
*Answer:*1. Poor patient care.
2. General exhaustion.
3. Disease of the cardiovascular system with circulatory failure.
4. Disease of the central nervous system.
5. Diabetes.
12. Name the early signs of bedsore formation.
*Answer:*Skin redness.
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 entire body daily, wash areas contaminated with urine and feces with soap and water and wipe with camphor alcohol.
3.Monitor the cleanliness of bed and underwear; there should be no folds on it; for this it is necessary to remake the patient’s bed 2 times a day.
4. Userubber circle.
5. Changing the position of the patient's body in bed during the day.
6. If the patient's skin is red, lubricate it 2 times a day with a 5 or 10% solution of potassium permanganate.

PERSONAL HYGIENE OF THE PATIENT AND HIS POSITION IN BED

Compliance with the rules of personal hygiene, keeping the room and bed clean create conditions for a 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 treating seriously ill patients. The sicker the patient, the more difficult it is to care for 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 technique of manipulations and master their implementation.
*Remember!*Proper care for seriously ill patients is the shortest path to their recovery.

Preparing the patient's bed.

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

Due to the fact that the patient spends most of the time in bed, it is important that it is comfortable and neat, that the mesh is well stretched and has a smooth surface. A mattress without bumps or depressions is placed on top of the mesh. A mattress consisting of separate sections is very comfortable for caring for patients. The mattress cover should be cleaned and ventilated more often 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 or bunch up.

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.

Using a functional bed and other devices to create a comfortable position for the patient.

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

Due to the fact that the patient spends a lot of time in bed, organizing 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 ease of wiping and disinfection.

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

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

The mesh on the bed should be well stretched and have a flat surface. A mattress pad without bumps or depressions is placed on top of it. A mattress consisting of separate parts is very convenient for caring for patients. A bedside table is placed near the bed. It is level with the bed so that the patient can easily use it.

Seriously ill patients use mobile bedside tables that can be used during meals.

Monitoring the appearance and condition of the patient.

*Material equipment:*thermometer, scissors, soap.

Students should know that the ward nurse cares for patients 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 this data in history.
diseases.

The nurse monitors the cleanliness, silence and order in the wards, and the patients' compliance with the rules of personal hygiene (skin care, oral care, cutting hair and nails); take care of the timely supply of patients with everything necessary for care and treatment, monitor the timely administration of hygienic baths, change of underwear and bed linen, and take part in carrying out sanitary educational work among patients. She ensures a thorough examination of weak patients, assists them in washing, feeding, gives them something to drink, washes their eyes, mouth, and ears as needed, and prevents the formation of bedsores.

Skin care, daily toilet.

*Material equipment:*disinfectant solution (camphor alcohol, cotton wool, clothes
colum
n) Skin care plays an important role in caring for patients, especially seriously ill patients.
due to the fact that it plays a protective role, participates in thermoregulation and metabolism.

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

Walking patients take a hygienic bath once a week.

Patients on bed rest must wipe their skin daily with a disinfectant solution (camphor alcohol or another solution: 1-2 tablespoons of vinegar, cologne or alcohol per 0.5 liter of water).

Technique for wiping the skin: moisten one end of the towel with a disinfectant solution, wring it out lightly and wipe the neck, behind the ears, back, front surface of the chest and armpits. Particular attention is paid to the folds under the mammary glands, where obese women and very sweaty women can develop diaper rash. Then the skin is wiped dry in the same order. The patient's feet are washed once or twice a week, and nails are cut short as needed.

With poor skin care and a sharp weakening of the body in places with a small amount of subcutaneous fatty tissue and prolonged pressure from the bed, violations of the integrity of the skin, so-called bedsores, appear on the skin. 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 peeling of the epidermis; in severe cases, not only the entire thickness of the soft tissue to the bones, but also the periosteum, as well as the superficial layers of the bone substance can undergo necrosis. Infection sometimes leads to sepsis and causes death in patients.

Care for hair, ears, eyes, oral cavity.

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

Hair care.

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

Method of washing 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 a raised platform is placed. While soaping, you should warm the skin under your hair well. Then rinse them well and wipe them dry, after which they comb them thoroughly. After washing the hair, especially for women with long hair, the nurse puts a towel or scarf on the head to prevent the patient from hypothermia.

Ear care.

Walking patients wash their ears daily during their morning toilet routine. For patients who have been in bed for a long time, the nurse periodically cleans the ears to prevent wax from accumulating, which can cause hearing loss.

If a cerumen plug has formed, it is removed as follows: a few drops of a 3% solution of hydrogen peroxide are instilled into the ear, and then the plug is removed with a cotton swab. If a large number of wax plugs accumulate, the ear is syringed using a large syringe (Zhanet syringe with a capacity of up to 150 ml) or a rubber balloon. The patient is seated in front of him sideways so that the light source illuminates the ear. It hurts in my hands -

The patient is given a tray, which he presses to the neck under the auricle, then the nurse with his left hand pulls the auricle back and up, and with his right hand he inserts a syringe into the external auditory canal, directing a stream of solution along the upper rear wall under high pressure.

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

Eye care.

Eye rinsing is done in cases where there is discharge that sticks the eyelashes together. The eye is washed with a sterile gauze swab soaked in a warm solution of 3% boric acid. For eye diseases, drops are instilled and eye ointments are rubbed in. The 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 nurse's hands should be thoroughly washed and wiped with alcohol.

*Burying technique:*slightly pull back 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, with gentle finger movements, rub it over the mucous membrane.

Oral care.

Walking patients brush their teeth every morning and evening and hygienically rinse the mouth with lightly salted water (1/4 teaspoon of table salt per glass of water) or a weak solution of potassium permanganate after meals. Seriously ill patients cannot brush their teeth on their own, so after each meal the nurse must wipe the patient’s mouth. To do this, you need to 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 this, the patient rinses his mouth well; sometimes in seriously ill patients, inflammatory changes occur in the oral mucosa - stomatitis. In such cases, a medicinal effect on the mucous membrane in the form of an application or irrigation is necessary.

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

Irrigation is carried out using an Esmarch mug, a Janet syringe or a rubber bulb. A kidney-shaped sachet is given into the hands, which is brought to the chin to allow the washing fluid to swell. The nurse pulls back the left and right cheek with a spatula, inserts the tip and irrigates the oral cavity. With the pressure of the jet, food particles, pus, etc. are mechanically washed away. 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 furatsilin 1:5000.

Washing the sick.

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

It is necessary to know that patients who are in bed for a long time, who do not take hygienic baths every week, as well as those suffering 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). To wash, you need to have a jug, a forceps and sterile cotton balls. Most often women are washed away.

When washing, place a bedpan under the buttocks. The patient should lie on her back, with her legs bent at the knee joints and slightly apart at the hips. Take a jug with a warm disinfectant solution in your left hand and pour it on the external genitalia, and a cotton swab, clamped in a forceps, is directed from the genitals to the anus (from 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 tampon so as not to carry infections from the anus into the bladder. Washing should be done from an Esmarch 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 much easier. The situation is the same.

Providing a vessel, a urinal, disinfecting them.

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

Patients who have been in bed for a long time must be given a bedpan to empty their bladder and bowels. Bedpans can be enameled, rubber, earthenware, they have an elongated or round shape and are equipped with lids. Clean, disinfected bedpans are stored in sterile nests in washrooms. Before serving to the patient, the vessel is rinsed with hot water. The junior nurse lifts the patient's sacrum with one hand, and with the other carefully moves the bedpan under the buttocks.

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 to the toilet room. The patient is washed and the anus area is wiped dry with cotton wool. The contents of the vessel are poured into the toilet. The vessel is washed well with hot water and "Hygiene" powder or
"News". After this, the vessel is disinfected with a 2% solution of chloramine or a 0.5% solution of clarified bleach.

Weak patients with a small subcutaneous fatty 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 from contact with secretions, which is prevention of bedsores. The rubber bed should not be placed directly on the sheet, but an oilcloth should be placed under it. It should not be inflated too tightly. It is necessary to lay a bedding between the buttocks, sacrum and the inflatable ring.

In weakened and seriously ill patients, when the bladder sphincter relaxes, urinary incontinence occurs: it flows out in small quantities or drops. The patient cannot regulate the act of urination. If the patient is in bed, a rubber bed is placed on him) and a urinal is given
(glass or enamel). The urinal for men has a tube raised upward ("duck"), and for women it ends with a funnel slightly lowered downwards. For walking patients suffering from urinary incontinence, there are lightweight urinals, which are a lightweight reservoir attached to the body with tapes.

Urine bags must be washed daily with hot water and soap 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 bedsores:

1. It is necessary to turn the patient on his side several times a day, if his condition allows.
2. Every day you need to shake the sheets several times so that there are no crumbs in the bed.
3. There should be no folds or patches on bed linen and underwear.
4. Patients who remain in bed on their back for a long time should have an inflatable rubber circle placed in 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 available, wipe the skin with a towel moistened with warm water, then wipe it dry, rubbing it lightly.
6. When skin hyperemia 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 bubbles appear, they are lubricated 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 cloth moistened with a 1% solution of potassium permanganate.

Caring for 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 rinsing the bladder).

Urinary incontinence: Patients with urinary incontinence soil bed linen and underwear and it begins to smell of urine, which negatively affects the other 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, which must be emptied periodically. The patient should toilet several times a day and wipe the perineal area dry, frequently change his bed and underwear. You need to limit your fluid intake. Walking patients suffering from urinary incontinence must use permanent urinals, which are rubber bags of various shapes. They are placed on the external genitalia and attached to the belt. The accumulated urine is periodically poured out, the urine bag is thoroughly washed and reattached. Particular care should be taken to monitor timely urination in patients with spinal injuries, since pelvic organ paralysis manifests itself in impaired spontaneous 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 body's needs, such food provides a minimum of residues for the formation of feces. Every morning, their intestines are emptied with an enema.

Such patients periodically lie on a rubber bed or on a specially equipped bed. Such patients require frequent washing, drying, and 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 (model) how to change linen,

Thus, students begin work knowing that changing underwear and bed linen is

This is done regularly, at least once a week, after a hygienic bath. In some cases, linen is changed additionally as needed. Under no circumstances should you dry laundry on central heating radiators and then give it to the patient again. Dirty linen is collected in oilskin bags and immediately taken out of the room. Before being sent to the laundry, the laundry must be kept in a specially designated room in bins or chests. A nurse, with the help of a junior nurse, should change bed linen, especially for seriously ill patients.

Depending on the patient's condition, there are different ways to change bed linen. If the patient is allowed to walk, he can change the bed linen himself with the help of a junior nurse. When the patient is allowed to sit, he is transferred from the bed to a chair, and the younger nurse makes his bed. The technique of changing bed linen for a bedridden patient is more complex. To do this, roll up the dirty sheet from the side of the head and legs and carefully remove it. A clean sheet, rolled up like a bandage on both sides with rollers, is carefully placed under the sacrum.
patient and then straighten it towards the head and legs. There should be no scars, patches, or folds on the sheet.

Another method: the patient is moved to the edge of the bed, the dirty sheet is rolled up lengthwise in the form of a bandage, in its place a clean sheet is straightened, onto which the patient is transferred, and on the other side the dirty sheet is removed and the clean one is straightened.
Changing bed linen for seriously ill patients should be done with great care and skill.

When changing underwear for seriously ill patients, the nurse should place her hands under the patient's sacrum, grab the edges of the shirt and carefully bring it to the head, then raise both of the patient's arms and move the rolled up shirt at the neck over the patient's head. After this, the patient's hands are released. Dress the patient in the opposite direction: first, 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 (vests) 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 sick one. Put the shirt on the sore arm, and then on the healthy one.

Control questions

1. List the basic requirements for the patient's personal hygiene.
2. What are the features of caring for seriously ill patients?
3. How is the patient's morning toilet performed?
4. What is your daily skin care routine?
List the measures necessary to prevent bedsores.
5. How can you change bed linen and underwear for a seriously ill patient?
6. What is the care for a patient's hair? How to properly wash a patient's hair in bed?
7. What is the daily hygiene of the mouth, ears, nose and eyes in seriously ill patients?
8. What measures should be taken when bedsores appear in seriously ill patients?

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

TEST CONTROL

1. What contributesthe 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 of patients with pediculosis in the department.

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

3. How oftenshould wet cleaning of the wards be carried out? a) daily;
b) as necessary;
c) as needed, but at least twice a day.

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

5. For what purpose are patients with diseases of the cardiovascular system who suffer from severe shortness of breath recommended to take a semi-sitting position in bed?
a) it is more convenient to feed in this position;
b) blood stagnation 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 moved easily and quickly;
c) makes it easier for medical staff to perform their treatment and care functions

7. How often should underwear and bed linen be changed? a) once every 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 form only when the patient is positioned on his back, stomach or side;
b) can, in the area of the ischial tuberosities;
c) they cannot, because when sitting, a large layer of subcutaneous fat and muscle tissue remains between the bony protrusions and the mattress.

9. Why should the backing ring not be inflated too much? a) it will quickly fail;
b) it will be difficult for it to give a stable position in bed; c) it must change its shape with the patient's movements.

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

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

11. A seriously ill patient experiences increased fragility and mild hair loss. Does he need to comb his hair?
a) necessarily and as often as possible;
b) try not to comb your hair at all;
c) comb as usual, but use a wide comb.

12. A patient with pneumonia receiving penicillin developed white deposits on the oral mucosa. What should I do?
a) strengthen oral care;
b) take a smear from the oral mucosa for bacteriological examination; c) recommend that the patient brush his teeth more often;
d) recommend that the patient 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 solution is not retained in the conjunctival cavity;
c) a large amount of fluid adversely affects the condition of the conjunctiva.

14. Should the patient tilt his head back when he has a nosebleed?
a) yes, because this will stop the bleeding faster;
b) should be recommended only for very severe nosebleeds;
c) not necessary, since the bleeding will not stop; blood will flow down the back wall of the nasopharynx, which makes it difficult to correctly assess the dynamics of bleeding.

SUBJECT5: NUTRITION FOR PATIENTS.

Educational goal: teach students how to tactfully treat patients when cleaning wards, utility rooms, and when feeding seriously ill patients.

Lesson equipment: sippy cups, probes for therapeutic nutrition, microenemas, medical equipment of the therapeutic department, stands, tables on the topic.

The student must know:
1. Construction and equipment of wards.
2. General and sanitary regime of the therapeutic department.
3. Internal routine. Organizing visits to patients.
4. Types of therapeutic nutrition.
5. Artificial nutrition of patients: using tubes, through a gastric fistula, parenterally.
6. Organization of the work of a nurse's post.

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

3. Feed seriously ill patients and provide drinking water from a sippy cup.

Plan and organizational structure of the lesson.

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

1. Goals and objectives of diet therapy.
   Dietetics is the study of rational nutrition for healthy and sick people.
2. Basicprinciples of therapeutic nutrition.
3. Types of therapeutic nutrition.
4. Characteristics of dietary tables.
5. Organization of catering.
6. Distributing food to the sick.
7. Monitoring patient visits and transfers. Monitoring the sanitary condition of bedside tables.
8. Feeding the seriously ill.
9. Types of feeding of patients: a) active
   b) passive
   c) artificial
10. Artificial nutrition. Indications for its use. Types: a) enteral(probe)b) parenteral
11. Methods of artificial feeding of patients: a) through a tube
    b) through a gastric fistulac) nutritional enema
    d) intravenous administration of medicinal substances e) subcutaneous administration of medicinal substances
12. Feeding patients using nutritional enemas.

6. Introduction to the therapeutic department, food distribution.
7. Independent work in the wards.

Questions to control the initial level of knowledge

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

2. Name the methods of artificial feeding of patients.
Answer: 1. Through a probe.
2. Nutrient enema.
3. Through a gastric fistula.
4. IVadministration of medicinal substances.
5. SC introductionmedicinal substances.

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

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

b) for liver diseases?
c) for diseasesstomach? d) for
kidney diseases?
*Answer:*1. 10 table (diet 10)
2. 5 table.
3. 1 table.
4. 7 table.

NUTRITION FOR PATIENTS

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

Dietetics is the study of rational nutrition for healthy and sick people. The diet determines the diet, composition and quantity of food. Diet therapy aims to restore metabolic disorders, influence the disease process, eliminate foods that have a harmful effect on diseased organs, and all this improve the condition of patients.

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

We should not forget about 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 patients who are on the same diet should be combined.

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. Each diet (treatment table) has therapeutic indications, which are taken into account by the attending physician.

DIET No. 1a

INDICATION: peptic ulcer of the stomach and duodenum during a period of sharp exacerbation (in the first 8-10 days of exacerbation); acute gastritis and exacerbation of chronic gastritis in the first 2 days.

GENERAL CHARACTERISTICS: sharp limitation of chemical and mechanical stimuli of the mucous membrane of the receptor apparatus of the upper gastrointestinal tract; substances that remain in the stomach for a long time, stimulants of gastric secretion. Small meals - 7 times a day, table salt up to 8 g per day.

LIST OF RECOMMENDED DISHES: slimy soups made from cereals (oatmeal, pearl barley, rice, semolina) with the addition of egg-milk mixture, cream, butter. Steamed meat and fish soufflés, purees from lean meats, poultry and fish without fascia, tendons, or skin. Puree porridges made from oatmeal, semolina, rice, buckwheat with the addition of milk or cream. Soft-boiled eggs, steam omelettes, dishes made from beaten egg whites. 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. Milk tea is not strong, rosehip infusion with sugar. Butter and olive oil are added to prepared dishes.

PROHIBITED: dishes and side dishes made from vegetables, mushrooms, bread and bakery products, lactic acid products, spices, snacks, coffee.

DIET No. 1 6

INDICATIONS: exacerbation of gastric and duodenal ulcers (10-20 days of illness), acute gastritis (2-3 days).

GENERAL CHARACTERISTICS: moderate mechanical, chemical and thermal sparing compared to table 1a. Small meals 6-7 times, table salt up to 8-10 g per day

LIST OF RECOMMENDED DISHES: to diet 1a products add crackers from premium white bread, thinly sliced and not browned; lean meats, poultry and fish without tendons and skin, chopped steamed or boiled meatballs, dumplings, etc.

DIET No. 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 an exacerbation.

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

LIST OF RECOMMENDED DISHES: yesterday's wheat bread, dry biscuit. Soups based on a mucous decoction with the addition of pureed boiled vegetables and cereals, egg-milk mixture, and cream. Low-fat varieties of fish, meat and poultry are mainly minced, steamed or boiled in water. Boiled and pureed vegetables (mashed potatoes, steam soufflés). Puree porridges (except wheat) with the addition of milk or cream, 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 decoction with sugar. Butter and vegetable oil (olive, sunflower).

PROHIBITED: white cabbage, turnips, radishes, rutabaga, radishes, sorrel, spinach, onions, garlic, mushrooms, legumes, spices and coffee.

DIET No. 2

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

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

LIST OF RECOMMENDED DISHES: day-old wheat bread, 1-2 times a week a limited number of savory buns or baked pies. Soups in low-fat meat and fish broth with various cereals (except millet), vermicelli, and vegetables. Lean varieties of meat and poultry, boiled in pieces or chopped, fried without breading. Lean fish, chopped into pieces, boiled, baked, fried without breading. Vegetables boiled, stewed and baked in pieces, in the form of puree, vegetable casseroles. Crumbly porridge (except millet and pearl barley) in water with the addition of milk.

Soft-boiled eggs, steamed, baked and fried omelettes, dishes made from beaten egg whites. Jelly, 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. Unleavened milk only in dishes, fermented milk products (acidophylline, kefir), fresh, non-acidic 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 rose hips, black currants. Butter and sunflower.

PROHIBITED: legumes and mushrooms.

DIET No. 3

INDICATIONS: chronic intestinal diseases with a predominance of constipation during periods of mild exacerbation and remission.
GENERAL CHARACTERISTICS: increase in diet foods that enhance motor function. Meals 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; if well tolerated, black bread (table bread, Orlovsky, rye) is allowed. Soups with weak low-fat meat, fish broth, and vegetable broth (mostly with vegetables). Lean meat - beef, veal, chicken, etc. Lean fish (pike perch, bream, navaga, cod, carp, pike) boiled, steamed, jellied, in pieces, sometimes chopped. A variety of vegetables: raw and boiled for side dishes, in the form of salads, vegetable casseroles (beets, carrots, tomatoes, pumpkin, etc.). Crumbly porridges (buckwheat, pearl barley). Soft-boiled eggs or in the form of steam omelettes, no more than 2 eggs per day. Fresh, ripe, sweet fruits and berries are raw and in increased quantities in dishes. Milk in dishes and for tea. Acidophilus, kefir, fermented baked milk, yogurt, etc. Mild cheese. Tea, rosehip decoction, sweet fruit juices (especially plum, apricot), vegetable (tomato, carrot, etc.). Butter and olive oil in dishes.
PROHIBITED: vegetables rich in essential oils (turnips, radishes, onions, garlic, radishes, and mushrooms.)

DIET No. 4

INDICATIONS: acute and chronic intestinal diseases during periods of profuse diarrhea and severe dyspeptic symptoms.
GENERAL CHARACTERISTICS: sharp limitation of mechanical and chemical irritants of the mucous membrane and receptor apparatus of the gastrointestinal tract with the exclusion of foods and dishes that enhance intestinal motor function. Meals are divided into 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 made from a weak, low-fat meat or fish broth with the addition of mucous infusions, steamed or boiled meat or fish dumplings, meatballs, and egg flakes. Steamed or boiled meat and fish cutlets, dumplings, meatballs, soufflé from boiled meat or fish. Lean meat, chopped, boiled or steamed, Poultry and fish, lean, natural or chopped, boiled or steamed. Puree porridge in water or low-fat meat broth (rice, oatmeal, buckwheat, semolina). Eggs (if well tolerated) no more than 2 eggs per day in the form of steam omelettes. Kissels, jelly from blueberries, bird cherry, ripe pears and other berries and fruits rich in tannins. Natural tea, black coffee, water cocoa, rosehip, blueberry, bird cherry infusion.
LIMITED: sugar up to 40 g, butter 40-50 g, cream.
PROHIBITED: pasta, milk, vegetable fiber, sauces, spices, smoked meats, snacks, pickles, legumes.

DIET No. 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 liver sparing. Strong stimulants of gastric and pancreatic secretion (extractive substances, foods rich in essential oils), fried foods containing products of incomplete breakdown of fat (acroleins and aldehydes), refractory fats, foods rich in cholesterol and purines are excluded.
High carbohydrate content. Small meals 5-6 times a day, table salt 8-10 g per day.
LIST OF RECOMMENDED DISHES: yesterday's wheat and rye bread, crackers,

dry biscuit. Vegetable broth soups with various cereals and vegetables, dairy, fruit. Lean varieties of meat and poultry - boiled, baked after boiling. Low-fat fish, boiled or steamed, in pieces and chopped. Vegetables and greens in raw, boiled and baked form (salads, vinaigrettes), non-acidic sauerkraut. Dishes made from egg whites (steamed and baked egg white omelettes, snowballs, meringues). Various sweet varieties of berries and fruits, fresh and dried, in their natural form and in dishes. Sugar, honey, marmalade, marshmallows, toffee, jam, pastille. Fresh milk in its natural form and in dishes, fermented milk drinks, fresh cottage cheese, cheese. Eggs in dishes. Tea and coffee, weak with and without milk; fruit, berry, vegetable juices, rosehip decoction. Butter and vegetable oil (do not fry, add to prepared dishes).
PROHIBITED: turnips, radishes, radishes, sorrel, spinach, onions, garlic, mushrooms, spices, cocoa.

DIET No. 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 with 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 based on a slimy broth with pureed cereals and vegetables with the addition of an egg-milk mixture and butter, or on a vegetable broth with well-cooked cereals (rice, semolina) and finely chopped vegetables (potatoes, carrots, zucchini, etc.) , vermicelli.
Steamed meat cutlets, meat soufflé. Low-fat boiled fish, steam soufflé made from it. Boiled, steamed, pureed vegetables. Various porridges (except millet and pearl barley) made with water and with the addition of milk. Steamed and baked protein omelettes, snowballs, meringues. Jelly and mashed compotes, jellies, mousses. Soufflé made 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. Teas and coffee with milk, rosehip infusion, fruit and berry juices from sweet varieties of berries and fruits mixed with hot water. Butter and vegetable oil are used only in dishes.
PROHIBITED: snacks, spices, cabbage, turnips, radishes, sorrel, spinach, cocoa.

DIET No. 6

INDICATIONS: gout, uric acid diathesis, oxaluria.
GENERAL CHARACTERISTICS: limiting foods rich in purines, oxalic acid, calcium, limiting proteins, fats, carbohydrates. Meals 3-4 times, table salt up to 6-8 g.
LIST OF RECOMMENDED DISHES: lean 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, radishes, mushrooms.
PROHIBITED: offal (liver, kidneys, lungs, brains), meat broth, meat of young animals (lamb, veal, chickens, piglets), tea, coffee, cocoa, chocolate, sharp cheeses, canned food, sausages.

DIET No. 7

INDICATIONS: acute nephritis, during convalescence, chronic nephritis with minor changes in urine sediment.
GENERAL CHARACTERISTICS: restrictions on protein and table salt to 3-5 g; liquids -

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

DIET No. 7a

INDICATIONS: acute nephritis, exacerbation of chronic nephritis with pronounced changes in the urine.
GENERAL CHARACTERISTICS: limiting salt to 1-2 g and liquid to 600-800 ml, protein, maximum fortification of the diet through the introduction of fruit and vegetable juices and the addition of vitamin C.
LIST OF RECOMMENDED DISHES: the same products as in diet No. 7, but meat and fish are limited to 50 g per day.
PROHIBITED: soups.

DIET No. 8

INDICATIONS: obesity.
GENERAL CHARACTERISTICS: limit energy value by 20-50% (depending on the degree of obesity and physical activity) mainly due to carbohydrates and fats with an increase in the amount of protein. Limit table salt to 3-5t and liquid to 1 liter. Meals 5-6 times.
LIST OF RECOMMENDED DISHES: yesterday's plain 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 (low fat). Raw fruits and berries and juices from them. Tea and coffee.
LIMIT: butter, sour cream, potatoes. PROHIBITED:
flavorings.

DIET No. 9

INDICATIONS: diabetes mellitus.
GENERAL CHARACTERISTICS: diet excluding water-soluble carbohydrates, limiting animal fats. The diet helps eliminate metabolic disorders caused by insufficient amounts of insulin in the body. Meals 4-5 times, table salt 12 g per day.
LIST OF RECOMMENDED DISHES: plain rye bread, xylitol cookies. Vegetable broth soups with vegetables and cereals. Buckwheat and oatmeal porridge. Potatoes, zucchini, cucumbers, etc. No more than 2 eggs per day. Lean meats, poultry, fish...
Compote with xylitol, 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, xylitol).
LIMITED: legumes, cereals, pasta.

DIET No. 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 impairment of the nitrogen excretory function of the kidneys.
GENERAL CHARACTERISTICS: moderate restriction of proteins, fats and carbohydrates under conditions

yah mode with limited mobility. Limit intake of table salt to 4-7 g (the norm for a healthy body is 12-15 g), liquid to 1-1.2 l, and for edema - 0.8 l.
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, boiled and baked. Oatmeal and buckwheat porridge, puddings and casseroles. Protein omelet. Vegetable vinaigrettes and salads (except 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, radishes, garlic, onions, legumes. LIST OF RECOMMENDED DISHES: meat, fish, bread and cereal products.
RESTRICTED: milk and dairy products, vegetables, savory snacks, spices, etc. PROHIBITED: fatty dishes from meat, fish, pastry, brains, kidneys, liver, liver sausage, salty snacks, canned food, alcohol, caviar.

DIET No. 11

INDICATIONS: pulmonary tuberculosis, exhaustion and decreased reactivity of the body, during the period of convalescence, after infectious diseases, anemia, various suppurative processes. Meals 5 times, table salt up to 12-16 g.
GENERAL CHARACTERISTICS: diet with increased energy value, increased 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, and eggs.
PROHIBITED: poultry meat (duck and goose).

DIET No. 13

INDICATIONS: acute infectious diseases, postoperative period (except for abdominal operations).
GENERAL CHARACTERISTICS: limitation of proteins, fats, carbohydrates, chemical and mechanical irritants of the mucous membrane and the receptor apparatus of the gastrointestinal tract. Food is predominantly liquid with limited plant fiber, milk, and snacks. Meals 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. Meat puree soup in a slimy broth. Soft-boiled eggs, omelet. Porridge pureed. Fruit and berry juices, fruit drinks, jelly. Butter.

DIET No. 14

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

DIET No. 15

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

fruit and berry juices. Butter and vegetable oil.

DIET No. 16

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

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

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 usually includes one type of food (fruit, cottage cheese, milk, etc.) and is most often characterized by reduced calorie content. For example, for 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 in portions for 5-6 doses. Complete fasting is a very responsible and far from safe measure; it can only be used in specialized departments and according to strict indications. It is especially unacceptable to use therapeutic fasting on your own, without the constant supervision of a doctor. Cases of severe complications have been described, for example, profuse bleeding from acute ulcers of the stomach and duodenum, which arose against the background of long-term “therapeutic” fasting, carried out independently, at home.

In the organisationBoth medical workers and catering workers take part in the nutrition of hospitalized patients.

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 draws up portion tables (Fig.), which indicate the total number of patients receiving a particular medical nutrition table.

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 draws up portion tables (Fig.), which indicate the total number of patients receiving a particular medical nutrition table.

Based on the summation of the data from all portioners in the catering unit, the required number of required dishes is prepared.

Form N 1-84

(name of institution)

Portion holder

for feeding the sick_____200____year

1. Information about the presence of patients
as of ————Human _____200__year

Name of pa-lat (departments) and nutrition standards	Numbe r of patients	Including diets										

Rice. Portion maker.

General day-to-day management of the nutrition of patients (usually in large hospitals) is carried out by a nutritionist, who is responsible for the correct preparation and use of therapeutic diets. The dietitian, in addition, provides advisory assistance to department doctors regarding the most optimal choice of medical nutrition table. Direct management of the work of the catering department (quality control of products, their storage, food preparation, delivery to departments, etc.) is assigned to the hospital's nutritionist. Prepared food is distributed only after a sample is taken by the hospital doctor on duty.

Control questions.

1. List the goals and objectives of diet therapy.
2. Give a brief description of dietary tables.
3. How is food distributed to the sick organized?
4. How are seriously ill patients fed?
5. List the types of artificial nutrition and 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 protein content should predominate;
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 its protein content?
a) yes, since 1 g of protein 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 predominantlyused as a plastic material.

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

4. What recommendations for creating a diet 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 preparing a diet for a patient with peptic ulcer disease?
a) frequent, split meals;
b) restriction of fluid intake;
c) mechanical and chemical sparing;
d) reducing the calorie content of the diet;
e) increasing the protein content in the diet; f)
organization of fasting days.

6. What recommendations for creating a diet would you give to a patient with chronic renal failure?
a) reducing fluid intake; b) increasing fluid
intake;
c) reducing the protein content in the diet; d) increasing
the protein content in the diet.

7.List the functions of a dietician in organizing the nutrition of patients: a)
preparing portions;
b) control of the menu layout;
c) taking a sample;
d) advisory assistance to department doctors in matters of clinical nutrition; e)
control of the correct preparation and use of therapeutic diets.
8.What are the functionsDieticians when organizing meals for patients?
a) drawing up portions;
b) taking a sample;
c) monitoring the quality of products and their storage; d) control of the
delivery of prepared food to the departments.

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

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

12. What is parenteral nutrition?
a) nutrition that is provided artificially; b) administration of
mixtures of a certain composition for nutritional purposes;
c) administration of various substances for the purpose of nutrition, bypassing the gastrointestinal tract.

SUBJECT6: BODY TEMPERATURE AND ITS MEASUREMENT.

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

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

The student must know:

1. Storing thermometers and disinfecting them.
2. Basic methods of measuring temperature. Necessary measures to ensure correct temperature measurement.
3. Measurement time. Registration of temperature measurement results
4. Age-related characteristics of temperature reactions.
5. Caring for febrile patients.

The student must be able to:

1. Measure body temperature.
2. Record the measurement results on the 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 by the teacher. Target setting.
4. Homework assignment.
5. Monitoring 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 a person's body temperature.
3. Storing thermometers and disinfecting them.
4. Thermometry. What processes does a person's body temperature depend on?
5. Basic methods of measuring temperature. 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-related characteristics of temperature reactions.
10. Fever, types of fevers by temperature height, duration, nature of temperature fluctuations.
11. Types of fevers in graphic representation.

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. Monitoring and correction of the final level of learning material (solving situational problems).

Tests-tasks to control the initial level of knowledge.

1. What methods are there for measuring body temperature?

*Answer:*Body temperature can be measured with a mercury medical thermometer with a Celsius scale, an electric thermometer, or a liquid crystal thermometer.

2. Why medicalis the thermometer called maximum?

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

3. How; should I store a medical thermometer?

*Answer:*The medical thermometer is stored in a glass, at the bottom of which cotton wool is placed, and 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 and 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 reservoir is in contact with the body on all sides.

4. Durationmeasurements 15 minutes.

5. Record the readings on the temperature sheet.

5. How many times and at what time of day is body temperature measured in a 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: in the morning from 36 to 36.4°, in the evening from 36.6 to 37°.

8. Within what limits can morning and evening temperatures fluctuate in a healthy person? Answer: Morning and evening temperatures fluctuate within a degree.

9. What is a rise in temperature called?

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

10. What are the options for temperature drop?

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

11. In which parts of the body can temperature be measured?

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

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

*Answer:*Rectal temperature compared to axillary temperaturedepression higher by 0.5-1°.

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

1) constant fever (febris continua):the temperature is usually high, lasts a long time, daily fluctuations are noted within 1°C, usually within the range of 38-39°C. Occurs in lobar pneumonia, typhus and typhoid fever;

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

3) intermittent or intermittent (febris interremittens),fever: temperature rises to 39-40°C and above, followed by a rapid (after several 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) relapsing fever (febris recurrens):a sudden rise in temperature to 40°C or more is followed by a drop 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) undulant fever (febris undulans): There is an alternation of a constant increase in temperature with a gradual drop to normal and below normal, followed by a period without fever. Then there is 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 drop. This temperature occurs with lymphogranulomatosis, brucellosis;

6) perverted 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 daily temperature fluctuations of varying magnitude and duration. This temperature occurs with rheumatism, dysentery, influenza, etc.;

8) hectic fever, or wasting fever (febris hectica): Temperature fluctuations during the day from 2 to 5 °C with a rapid drop to normal and below. This drop in temperature is accompanied by debilitating weakness with profuse sweating. It is observed in severe forms of tuberculosis, sepsis and lymphogranulomatosis.

During most fevers there are 3 stages:

1) ***Temperature rise stage:***characterized by a predominance of heat production over heat transfer. Cooling of the surface layer of the skin reflexively causes trembling, and the feeling 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.
When the temperature rises, breathing and heart rate usually increase: when it increases by 1°C, it usually increases by 8-10 beats, and breathing by 4 respiratory movements per minute;

2) ***Constantly elevated temperature stage:***characterized by increased heat production compared to its release;

3) Temperature drop stage:characterized by a decrease in heat production and an increase in heat output. When the temperature drops to normal values, a difference may occur. 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.

CARE FOR PATIENTS WITH FEVER.

Febrile patients require care that takes into account changes in body temperature and condition.

A rapid increase in body temperature (the stage of increasing temperature) is characterized by chills, i.e. a feeling of cold and trembling in the muscles, and may cause headaches and aching pain throughout the body. During this period, it is necessary to create peace for the patient, put him to bed

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

After the chill, a feeling of heat appears throughout the body (the stage of constantly elevated temperature); the higher the temperature and the more pronounced its fluctuations, the more exhausted the patient is. During fever, toxic products are absorbed into the blood, to remove 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 kept 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. Table salt is limited in the diet, which leads to increased diuresis. For a severe headache, place an ice pack on the forehead, a cold compress, or wet wraps.

In case of 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 petroleum jelly, a 10% solution of borax in glycerin, or baby cream. A very high body temperature can be accompanied by darkness in the creature, delirium, and sometimes acute symptoms of excitement. Such patients require constant monitoring by a nurse; monitoring of pulse rate, breathing and blood pressure levels 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 often found in febrile patients, a cleansing enema is given. Physiological functions must be performed by seriously ill patients in bed, therefore it is necessary that bedpans and urinals are provided to the patient in a timely manner.

The period of temperature decrease occurs in different ways. The temperature can drop critically, that is, quickly, from high to low numbers (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, and the pulse becomes thread-like. 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. If there is excessive sweating, change bed and underwear. At the very beginning of the crisis, a doctor is called to the patient and a nurse urgently carries out his orders. If necessary, substances that increase blood pressure are administered: mezaton, caffeine, cordiamine, sulfocamphocaine.

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 body temperature fluctuation 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 temperature that is slightly higher 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 groin fold.
7. What criteria are used in the interpretation of fever curves?
*Answer:*Feverish increases in body temperature vary in height, duration and nature of fluctuations.
8. What are the three main periods during 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:*In case of heart failure, with a critical drop in temperature after fever and with hypothermia.
10. What types of fevers do you know based on temperature?
*Answer:*Low-grade (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:*Fleeting (increase in 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, wave-like, depleting, perverted.
13. What is the care for patients depending on the period of fever?
Answer: First period- warm heating pads to the feet, give the patient warm tea, 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 fluids, take care of the toilet and oral cavity; monitor 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. Main types of fever.
2. Classification of fevers by duration.
3. First aid for patients. With an acute rise in temperature.
4. Hypothermia, its types
5. Caring for patients with hyperpyretic fever.
6. Care and provision of first aid to febrile patients during various periods of fever.
7. Emergency first aid for a critical drop in body temperature.
8. Hypothermia, etiology and first aid.

Questions for final knowledge control.

1. How to properly store medical thermometers?

2. What requirements must be observed when measuring body temperature?
3. Temperature sheet and filling it out correctly.
4. What are the types of fevers?
5. What are the features of caring for febrile patients?
6. What options for reducing temperature in febrile patients do you know?
7. What are the symptoms of a crisis and what is 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) emotionalloads;
d) infectious diseases.

2. For what purpose is it recommended to wipe the armpit dry before measuring temperature?
a) for hygienic reasons;
b) so that the thermometer is in a more stable position; c) to avoid obtaining underestimated measurement results.

3. The patient's body temperature, measured in the rectum, is 37.1 ℃. How can you characterize this temperature?
a) as normal temperature;
b) as a moderately high temperature; c) as low-grade fever.

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

5. What indicators are reflected in the temperature sheet?
a) graphical 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 temperature curve, pulse curves, respiratory rate, results of medical rounds.

6. For 2 weeks, the patient's morning temperature remains within the range of 36.0-36.5ºC, and the evening temperature – 37.5-38.0ºC. What type of fever does the patient have?
a) laxative,relapsing; b) depleting, hectic;
c) perverted, incorrect d) intermittent.

7. Why is persistent fever now rare in lobar pneumonia? a) the microflora causing the disease has changed;
b) the reactivity of the patient's body has changed;
c) antibacterial therapy is actively used from the first days of the disease.

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

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

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

11. What patient care measures should be used in the second stage of fever (the stage of maintaining maximum temperature?
a) warm the patient, cover him with heating pads;
b) monitor pulse and respiration rates, blood pressure levels; c) monitor the state of the central nervous system;
d) take care of the oral cavity.

12. What patient care measures should be taken when the temperature drops critically?
a) carefully monitor the state of the cardiovascular system (pulse rate and its filling, blood pressure level, etc.);
b) change underwear and bed linen in a timely manner; c) monitor the condition of the oral cavity;
d) warm the patient and give him hot tea; e) carry out the prevention of bedsores.

TOPIC 7:SIMPLE PHYSIOTHERAPEUTIC PROCEDURES.

Educational goal:teach students how to tactfully treat patients when placing cups, mustard plasters, compresses, using a heating pad, an ice pack, and performing water procedures.

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

The student must know:

1. Mechanism of action, preparation of the patient and method of placing cups, mustard plasters, warming compresses, heating pads, ice packs. Indications and contraindications for these manipulations. Activities after the procedure.
2. Method of placing leeches and removing them. Caring for patients after removing leeches. Storing leeches. Indications for their use.
3. Water procedures, preparation of therapeutic baths, local baths (hand, foot,

sedentary).

4. Monitoring patients during the procedure and providing first aid for complications.
5. Features of performing simple physiotherapeutic procedures for elderly and senile patients.

The student must be able to:

1. Place jars, mustard plasters, compresses.
2. Prepareand apply a heating pad.
3. Apply an ice pack.
4. Apply a compress.
5. Prepare a healing bath.

Plan and organizational structure of the lesson.

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

1. Compresses, types of compresses:
- What is the mechanism of action of a warming compress?
- Indications and contraindications.
- Preparationpatient technology of applying a compress.

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

3. Warmer:
- What is the design of heating pads?
- For what purpose is a heating pad prescribed?
- Indications and contraindications.
- Method of using a heating pad.

4. Mustard plasters:
- What is the mechanism of action of mustard plasters.
- List the indicationsto the use of mustard plasters.
- Rulesstorage of mustard plasters.
- Name the signssuitability of mustard plasters.
- Where can you put mustard plasters?
- Indications and contraindications.
- Name the sequencesetting mustard plasters.
- Methodology for placing mustard plasters for hypertension.

5. Banks:
- What is the mechanism of action?
- What accessories are needed to set up the jars?
- Indications and contraindications.
- Rules for placing cans.

6. Bleeding. Indicationsand contraindications.

7. Leeches:
- What is the purpose of medicinal leeches?

- How does placing leeches affect blood pressure?
- How are they stored?
- On what areas of the body can leeches be placed?
- What areas of the body should they not be placed on?
- Rules for placing leeches.
- What are the complications after their placement?
- When can you reapply leeches?

8. Hydrotherapy (Balneotherapy):

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

9. Execution Featuressimple physiotherapeutic procedures for elderly and senile patients.

7. Independent work of students in the department with patients.
8. Discussion of the results of independent work.
9. Monitoring and correction of the final level of learning material (solving 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 of essential mustard oil on the skin of the patient, irritating the skin and dilating blood vessels.
2. List the indications for the use (staging) of mustard plasters.
*Answer:*1. Pain. 2. Pneumonia 3. Bronchitis 4. Spasm of blood vessels.
3. Rules for storing mustard plasters.
*Answer:*1. In a dry and dark place 2. No more than 11 months.
4. Name the signs of suitability of mustard plasters.
*Answer:*1. Pungent smell of mustard oil. 2. Notcrumbles...
5. Where can you put mustard plasters?
*Answer:*On all parts of the body except the palms and soles.
6. Name the sequencesetting mustard plasters.
*Answer:*1. Moisten mustard plasters in warm water (not more than 45°).
2. Shake off and apply to the desired area of the body for 10-15 minutes.
3. Having removed the mustard plasters,wash the skin with warm water and wipe dry.
7. Contraindications for placing mustard plasters.
*Answer:*1. Skin diseases.
2. Bleeding.
3. High skin sensitivity to mustard.
4. Heat.
8. Staging techniquemustard plasters for hypertension.
*Answer:*1. On the back of the head (“mustard collar”) and on the calf muscles
2. Mustard plasters are applied to gauze moistened with water and wrung out to extend the thermal effect.

Banks.

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

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

2. Indicationsto the use of cans?

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

3. Contraindications for cupping.

Answer:.1. Pulmonary hemorrhages.
2. Pulmonary tuberculosis.
3. Tumors of the chest organs.
4. Skin diseases and severe sensitivity.
5. Sudden exhaustion of the patient.
6. A state of general strong excitement with convulsions.

4. How to cookjar for use?

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

5. Rules for placing cans.

*Answer:*1. Wrap absorbent cotton around a metal rod 12-15 cm long.
2. Moisten it with alcohol, but not too much.
3. Insert a burning tampon into the jar and quickly place the jar against the body.
4. Keep on the body for 15-20 minutes.

6. How to remove cans?

*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 you do after removing the cans?

*Answer:*1. Wipe the skin with Vaseline. 2. Dress the patient warmly and cover him with a blanket.

Leeches

1. What is the purpose of medicinal leeches?

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

2. How does applying leeches affect blood pressure?

*Answer:*After placing 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 areas of the body should leeches not be placed?

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

5. Rulesplacing leeches.

*Answer:*1.Usually 6 to 12 leeches are placed.
2. The patient's position is supine.
3. .Shave the skin at the site of suction, wash, dry and wipe.
4. Moisten the suction area with sweet water
5. Leechtake it with tweezers and place it in the test tube with the head end towards the hole
6. Place the leech at the desired location and wait until it sticks.

6. How long should you keep leeches?

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

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

Compresses.

1. What is the mechanism of action of a warming compress?
Answer: Long-term dilation of skin and underlying blood vessels, a rush of blood to a given area, resorption of the process and reduction of pain.
2. List the contraindications for applying compresses.
Answer: Skin disease.
3. What layers does a warming compress consist of?
Answer: 1. A piece of clean, dense but hygroscopic cloth, soaked in 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. What is the durationwarm compress?
Answer: No more than 12 hours.

Warmer.

1. What is the purpose of a heating pad?
Answer: 1. To resolve the inflammatory process.
2. To warm the body.
3. Jacques painkiller.
2. Contraindications to the use of a heating pad.
Answer: 1. Acute inflammatory processes in the abdominal cavity.
2. Tumors.
3. Bleeding
4. Bruises on the first day.
3. What kind of heating pads do you know?
Answer: 1. Rubber. 2. Electrical 3. Chemical.
4. How to serve 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 the plug well.
4. Cap the heating pad with a stopperdown, check for leaks.
5. Wrap the heating pad in a towel and place 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 24 hours, but every 20-30 minutes it is removed for 10-15 minutes.

HYDROTHERAPY

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

Baths

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

*Preparing a bath.*The bath is filled immediately before taking it to avoid cooling. The amount of water is determined by the size of the bath, the volume of the person's body and the degree of desired immersion.

Use a mixer to fill the bathtub with water. If it is not there, then to avoid the accumulation of steam in the bathroom, first pour cold and then hot water. Using a water thermometer (without removing it from the water), the water temperature is determined. When immersing the patient in the bath, a towel is placed under the head and a stand is placed at the feet (to prevent the body from sliding towards 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, or a sharp increase in pulse and breathing appear, it is necessary to stop the procedure and call a doctor.

The temperature of the baths varies as follows: cold - 24-27℃, cool - 28-33℃, indifferent (without the feeling of heat and cold) - 34-36℃, warm
- 37-39℃, hot - 40℃ and above.

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

*Hot baths*used for chronic joint diseases, diseases of peripheral nerves (radiculitis, polyneuritis), metabolic disorders (obesity, gout), and attacks of renal colic.

*Cool baths*used for neuroses with depression, apathy, and 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 wipes himself with a terry towel, then rest for about 30 minutes. Time for 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 lunch.

In addition to general baths, half-baths are used. They are easier to tolerate and are used in weakened patients. There are hand and foot baths. These baths are used to treat the hands, feet and adjacent joints. The technique for performing them is very simple - the patient immerses the hand or foot in the prepared water. Hand and foot baths are hot (40-42℃), warm (35-38℃) and cold (10-12℃). Hot and warm baths are used for chronic diseases of small joints of the hands and feet (their duration is 20-30 minutes) in order to enhance blood circulation and the resorption effect. Cold baths are indicated for acute inflammatory processes, fresh trauma (bruise, sprain, etc.) in the area of the hands and feet. Their duration is 5-10 minutes.

*Sitz baths*refer to local hydrotherapy procedures. Cold (10-15℃) short-term sitz baths are prescribed for intestinal sluggishness (atonic constipation), sexual weakness, urinary incontinence; warm (37-38℃) 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℃) lasting 10-15 minutes - for renal colic. Sitz baths are contraindicated in acute inflammatory processes, pregnancy, tendency to uterine bleeding.

currents.

Medicinal baths. Due to the presence of essential oils in the pine extract, pine baths have a beneficial effect on the nervous system and upper respiratory tract with their refreshing aroma. Prescribed for neuroses with increased irritability, stage I hypertension. When using pine extract in powder form, add 2 tablespoons per bath, liquid pine 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, stirred thoroughly 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 effects. Starch baths have an enveloping effect and reduce skin irritations. They are used at a water temperature of 36-37°C, for a duration of 30-40-60 minutes. After the bath, dry the body with a soft towel or sheet.

To prepare a bath with potassium permanganate, add a 5% solution of potassium permanganate to a bath filled with water at a temperature of up to 36-38°C (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 used mainly 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°C,
- warm - 35-37°C,
- cool - 24-31 °C,
- cold - below 24°C.

Souls are prescribed for the following conditions:

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

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

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

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

Control questions

1. List the indications and contraindications for placing mustard plasters, cupping, and leeches.
2. How to do it rightput mustard plasters? List possible complications.
3. What is the canning technique? List possible complications when placing cups.
4. On what areas of the body can leeches be placed?
5. What is the technique for placing leeches? List possible complications when using leeches.
6. What is the care for the patient's skin after removing leeches?
7. Indications and contraindications for applying compresses. What accessories are needed to apply compresses?
8. What is the technique for applying compresses?
9. In what cases are heating pads used and what is their structure?
10. How to properly use heating pads in patients?
11. How should an ice pack be given to a patient and when should it be used?
12. What is the method of performing baths (hand, foot, sitz, half-baths)?

Tests-tasks to control the final level of knowledge

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

*Answer:*Cupping, mustard plasters, compresses, ice pack, hydrotherapy

2. What accessories are needed to set up the jars?

*Answer:*A box for storing cans, which also contains alcohol, Vaseline, and cotton wool.

3. How should mustard plasters be installed?

Answer: 1.Check mustard plasters before use.

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

3. After removing the mustard plaster, quickly wipe the skindry and cover the patient warmly.

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

4. What is the technology for placing cans?

*Answer:*1. Place from 10 to 30 pieces in the patient's lying position.

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

3. The jar is held close to the body, a burning swab is quickly inserted into it, and then immediately applied to the patient's skin.

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

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

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

5. Types of compresses?

*Answer:*Warming (to resolve the inflammatory focus and reduce pain), cold (for bruises, injuries, bleeding). poultices (for local inflammatory processes in order to eliminate them as quickly as possible).

6. What is the technology for applying compresses?

*Answer:*warming 1. Initially, prepare a bandage from three layers of gauze, moisten it in a solution of vinegar with water and a 20° alcohol solution.

2. Then it is carefully applied to the area of the body and bandaged. The compress lasts 6-8 hours, but no more than 12 hours.

3. Contraindications:dermatitis, pyoderma, furunculosis.

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

*Answer:*The occipital region of the head, the sacral region, the region of the heart, the right hypochondrium, the back surface of the legs.

8. What is the technology for placing leeches?

*Answer:*1. The patient's position is lying down.

2. Shave the skin over the area where the leeches are applied and wipe dry.

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

4. Then apply the test tube to the desired location and wait for the leech to attach itself.

5. After this, the test tube is removed.

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

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

8. Contraindications: blood clotting disorders, skin diseases, anemia.

9. What are the complications after applying leeches?

*Answer:*Skin itching, bleeding, suppuration.

10. What is the design of heating pads? How to properly serve a hot water bottle?

*Answer:*Rubber tank with a capacity of 1-1.5 liters with a well-screwed cap. Fill 3/4 of the volume with hot water. The hot water bottle is wrapped in a towel and served.

11. What is the technique for using an ice pack?

*Answer:*An ice pack is placed on the appropriate area in a towel folded in four, and sometimes it is suspended if its load causes pain in the patient.

12. What are the benefits 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 to using a bath?
*Answer:*Severe general condition, fever, heart failure.
14. Types of medicinal 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 baths (hand, foot, sitz, half-baths).
3. Contraindicationsto hydrotherapy.
4. Types of compresses. Compress technique.
5. Cupping technique, complications when placing cups.
6. The use of leeches. List possible complications when using leeches.
7. When to use lotions and poultices.

Final control:carried out through 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. In what cases 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 whether a wet warming compress has been applied correctly? a) after 1-2 hours, remove the compress and check its condition;
b) after 1-2 hours, stick your finger under the compress and determine the condition of its inner layer; c) after 1-2 hours, ask about the patient's subjective feelings.

4. What areContraindications for using heating pads on the abdominal area?
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 injury;
d) angina attack;
e) myositis, radiculitis, neuralgia.

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

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

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

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

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

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

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

SUBJECT8. METHODS OF APPLICATION OF MEDICINESDRUGS, ENTERAL AND EXTERNAL ADMINISTRATION MEDICINES. INJECTIONS.

Educational goal: compliance with ethics and deontology when distributing drugs, responsibility of medical personnel for storing drugs of list "A" and "B".

Lesson equipment: cotton wool, bandage, wax paper, iodine tincture, ointments, plaster, eye drops, pipettes, spatula, powders, tablets, a cup for mixtures, sterilizer, syringes, needles, tweezers, disinfectant solution, systems, dummies, phantoms.

The student must know:

1. Storage of drugs of lists "A" and "B", products for external use.
2. Methods of administering medicinal substances.
3. Organization of distribution of powders, capsules, solutions, mixtures, drops. Patients taking medications in the presence of a nurse.
4. The use of external agents, rubbing ointments, lubricating the skin with iodine tincture, using patches, powders. Instilling drops into 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; distribute the medicine according to an individual scheme.
2. Apply ointments, lubricate the skin with iodine tincture, apply patches, powders. Place drops in ears, eyes, nose.

Plan and organizational structure of the lesson.

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

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

2. Methods of drug administration (externally, orally, parenterally)
3. Rules for discharge and organization of distribution of medications in the department.
4. Responsibility of medical personnel for storing drugs of lists "A" and "B", products for external use.
6. Forms of medications used externally (ointment, liniment, mash, aerosol, liquid)
7. The use of external agents, rubbing ointments, lubricating the skin with iodine tincture, using patches, powders, inhaling aerosols. Instilling drops into the ears, nose, eyes.
8. What are the forms of medicines used internally (infusion, decoctions, tablets, pills, mixture, powders, syrup)
9. Technologyenteral administration of medications.
10. What are the known dosage forms used for parenteral administration?
11. Processing stages:
1. Disinfection

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

12. Pre-sterilizationpreparation of syringes, needles.

13. Methods for sterilizing medical instruments:

- Dry heat sterilization;
- in a steam sterilizer;
- gamma – rays;
- boiling; gas; by burning.

14. Quality control of syringes and needles processing.

Technique for performing benzidine and orthodone tests (to detect hidden blood on instruments). Technique for performing a phenolphthalein test (to identify residues of contamination on instruments).

6. Organization of the work of the treatment room.
7. Familiarization with the storage of medications in the department.
8. Demonstration of practical skills in pre-sterilization of instruments.
9. Independent work of students in the department.
10. Discussion of the results of independent work.
11. Monitoring and correction of the final level of learning material.

1. ASEPTICA AND ANTISEPTICS.

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

b) cleaning the hands of the surgeon and nurse,
c) compliance with the rules and techniques when conducting an operation, research, etc.

ANTISEPTICS -a set of therapeutic and preventive measures aimed at destroying microbes in a wound or the human body as a whole.
There are: a) mechanical,
b) physical:
c) chemical
d) biological,d)
mixed.

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

2. DISINFECTION. ITS TYPES AND REMEDIES.

Disinfection -This is a set of measures aimed at the destruction of pathogenic and conditionally pathogenic microorganisms in environmental objects.
Distinguishtwo types of disinfection: focal and preventive.
*Preventive*carried out to prevent the spread of infectious diseases

more useful in medical institutions (timely cleaning of premises, boiling, etc.).
*Focal disinfection*is divided into final (after removing the source of the infectious agent) and current (in the presence of the patient; with the aim of immediately destroying the infectious agent)
When disinfecting, physical and chemical disinfectants are used. Physical means: mechanical cleaning, wet cleaning, washing, shaking out, airing. Thermal and radiant means: the use of high and low temperatures, irradiation with bactericidal ultrasound rays.

3. STERILIZATION AND ITS METHODS.

SterilizationThis is the destruction of all microorganisms, pathogenic and non-pathogenic, using physical and chemical means.
Sterilization is carried out using steam, air and chemical methods, as well as 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. USSR Ministry of Health No. 720. "On improving medical care for patients with purulent-surgical diseases and strengthening measures to combat nosocomial infections"
2. USSR Ministry of Health No. 408. "To reduce the incidence of viral hepatitis."
3. OST 42-21-2-85. "Sterilization and disinfection of medical devices"

5. MEDICALPRODUCTS TO BE DISINFECTED. DISINFECTION METHODS.

Honey. Products that do not have contact with the wound surface, blood, infectious drugs are subjected only to disinfection, 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 a 20% solution of baking soda (distilled water with sodium bicarbonate) exposure for 15 minutes.
II. Chemical
a) soaking in a triple solution, exposure for 15 minutes. Recommended for glass products and corrosion-resistant metals.
b) soaking in 3% chloramine solution for tuberculosis 5%, [exposure 4 hours], exposure 60 minutes.
c) soaking in 4% hydrogen peroxide solution [for tuberculosis 3% H_2O_2 - 3 hours, exposure 90 minutes.
d) soaking in 0.1% Dezoxona-1 solution, Exposure 30 minutes e) soaking in 1.5% Ca hypochlorite solution, 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 des. Solution.
a) 5% chloramine solution, Exposure 30 minutes b) solution "A-33", Exposure 10 minutes.

Before immersion, the products are disassembled or cut and completely immersed in disinfection.
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(OST 42-21-2-85) (Project No. 4089
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 the products completely immersed for 15 minutes.
3) Washing each product using a brush, cotton-gauze swab or brush in the 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) Rinse with distilled water - 0.5 min.
6) Drying with hot air at a temperature of 80-85% until the moisture completely disappears.
7) All honey must undergo pre-sterilization cleaning. products before their sterilization in order to remove protein, fat, mechanical contaminants, as well as medications. Detachable products must undergo pre-sterilization cleaning when disassembled.

(OST 42-21-2-85)

7 PREPARATION OF WASHING SOLUTION.

1) Perhydrol solution2 7.5%17..... ml.
Detergent "Lotus". "Progress", "Aina"."Astra" 5g .....
Watercasting978 ml. .....
or
Perhydrol solution33%15ml.....
Detergent “Lotus”, “Progress”, “Aina”."Astra" 5g.....
Waterdrinking980 ml. .....

2) Hydrogen peroxide solution6%80 ml. .....
Detergent “Lotus”, “Progress”, “Aina”,"Astra" 5g .....
Waterdrinking...915ml.....
or
Hydrogen peroxide solution3%160ml.....
Detergent "Lotus". "Progress", "Aina","Astra" 5g .....
Waterdrinking835ml.....

The cleaning 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. The temperature is not maintained during the washing process.

3) 0.5% solution "Biolot"
Detergent"Biolot" 5g .....
Waterdrinking995ml.....
The cleaning complex is used once. The temperature of the solution when immersing instruments in it is 45-50°C. The temperature is not maintained during the washing process.

(OST 42.21-2-85)

8. PRIMARY PROCESSING OF HONEY.
INSTRUMENTATION IN THE PROCEDURE OFFICE

1).NOT rinsing. Disinfection using one of the following methods: a) immersion in 3% chloramine solution for

60 minutes.

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

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

2) Rinse under running water for 0.5 minutes.

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

4) Rinse under running water for 0.5 minutes.

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

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

9. PREPARATION OF ALKALINE SOLUTIONS FOR PRIMARY PROCESSING OF HONEY. INSTRUMENTATION.

1) 1.5% alkaline solution

Detergent"Lotus" 15g .....

Waterdrinking.985 ml.....

2) 2% soda solution

Soda20g .....

Waterdrinking.980 ..... ml

3) 3% soda solution

SodaZO ..... G

Waterdrinking.970 ..... ml

10. PRIMARYHONEY CLEANING INSTRUMENTATION

In the washing center, syringes and needles are thoroughly mechanically cleaned of drug residues and blood.

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

2) Wash in detergent solution using cotton swabs (30 seconds for each syringe).

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

4) Rinse or boil in distilled water for 5 minutes. for the purpose of desalting. The 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 completely disappears.

(OST 42-21-2-85)

11. WHEN MEDICAL DEVICES ARE EXPOSEDSTERILIZATION.

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, during operation, come into contact with the mucous membrane and can cause damage to it, must be sterilized.

12. STERILIZATION METHODS. STERILIZATION MODES.

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

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

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

Sterilization is carried out in sterile boxes or double soft packaging made of calico and parchment.

The shelf life of sterility in such packaging is 3 days. In sterilization boxes with a filter - 20 days (instruments and materials are placed in sterilization boxes only in double soft packaging made of calico or parchment).

The sterility of the product in a container or package is maintained from the moment of opening only for 24 hours (be sure to indicate the date of opening of the container).

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

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

b) temperature - 160°C, holding time - 150 minutes, control test - sucrose.

Dry products are subject to sterilization.

Sterilization is carried out in paper packaging or without open packaging). The shelf life of the sterility of the product in packaging is 3 days, without packaging - it must 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

The hydrogen peroxide solution can be used within 24 hours from the moment of preparation, provided it is stored in a closed container in a dark place.

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

b) Sterilizing agent - 1% Dezoxon-1 solution. Holding time - 360 minutes, temperature not less than 20 C.

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

Sterilization is carried out by completely immersing the products in a solution for the duration of sterilization, after which the product is washed with sterile water.

The shelf life of a 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 may be subject to corrosion during operation, pre-sterilization cleaning, and sterilization. Tools with visible stains of corrosion, as well as with the presence of an oxide film, are chemically cleaned no more than 1-2 times a quarter.

1) Pre-rinse with running water for 0.5 min.

2) Soaking in solution:

vinegaracid 5g. .....

chlorideNa1g. .....

waterdistilled up to 100 .....

Temperature 20°C

3) Holding time:

Stainless steel scalpels - 2 min. instruments with an

oxide film - 3 min.

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

(OST 42-21'2-85)

14. QUALITY CONTROL OF PRE-STERIZATIONCLEANING HONEY. PRODUCTS USING AZOPYRAM AND PHENOLPHTHALEIN REAGENTS "AZOPYRAM TEST".

I. "AZOPYRAMICTRY".

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

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

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

Drink 3-4 drops of the working solution into the syringes and move the piston several times in order to moisten the inner surface of the syringe with the reagent, leave the reagent in the syringe for 0.5-1.0 minutes, after which the reagent is displaced onto a gauze pad.

The quality of cleaning of catheters and 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 pad.

1% of simultaneously processed products of the same name, but not less than 3–5 units, are subject to control.

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

If there are positive samples, all instruments are reprocessed.

II. PHENOLPHTHALEICTRY

The test products are treated with the working solution: wiped with swabs soaked in the reagent or a few drops of the reagent are applied to the test products 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 displaced 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 pad.

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 pad.

1% of simultaneously processed products of the same name, but not less than 3–5 units, are subject to control.

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.

If there are positive samples, all instruments are reprocessed.

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

15. SIGNIFICANCE AND MAIN OBJECTIVES OF CSO.

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

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

3) The center improves the culture and quality of medical care, frees up additional time for service personnel, and reduces syringe damage.

(OST 42-2 1-2-85)

16. DOCUMENTATION IN THE CSO.

1) Logbook for recording the operation of the sterilizer (steam or air).
2) Journal of bacteriological control of sterility.
3) Journal of the cassette sterilization regime.
4) Journal of receiving and issuing cassettes.

(Project No. 408 USSR Ministry of Health)

17. FREQUENCY OF MATERIAL SET FOR STERILITY, ITS VOLUME.

Bacteriological laboratories of healthcare facilities monitor the sanitary and hygienic regime (contamination of various objects and air) once a month, and linen, surgeons' hands and skin of the surgical field (selectively) are checked once a week.

The objects of research 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 the skin of the surgical field.

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

18 DISINFECTION OF SPATULA

1 Metal spatulas are boiled:
-2% soda solution – 15 min.
-Distilled water -30 min.
2 III wooden patellas are destroyed after use (burned in a specially designated container).

19. DISINFECTION OF MEDICAL THERMOMETERS

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 min c) triple (solution) - 45 min.
Store in a dry place.

20. DISINFECTION OF OIL CLOTHES ON DRESSING TABLES, EXAMINATION COUCHES, BEDS, OIL CLOTH APRONS

Wipe twice with a rag at intervals of 10-15 minutes, soaked 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% chloramine solution for 30 minutes

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

Wipe twice with a rag at intervals of 10-15 minutes, soaked in 3% chloramine solution or soak in 3% chloramine solution for 1 hour

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

23. DISINFECTION OF ENEMA TIPS.

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

24. DISINFECTION OF HAIR CLIPPERS.

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

25. DISINFECTION OF RUBBER HEATERS, ICE BUBBLES. Wipe twice with a rag at intervals of 10-15 minutes, soaked in the 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%, solution of detergent for 30 minutes of immersion.

27. DISINFECTION OF BEDBATS, URINARIES Immersion in 1% chloramine solution for 120 minutes.

28.DISINFECTION OF BATHTUBES, SINKES, 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 and deinfection - means "Sanita", "Shine" 0.5 g per 100 cm2 of surface. Wipe with a damp cloth, 2 times at intervals of 10-15 minutes.

29. DISINFECTION OF PANKS FOR USED DRESSING MATERIAL.

Wash in disinfectant solutions:
1. Chloramine B 0.75% with 0.5% detergent.
2. Chloramine 3% solution or 1.5% solution DSK HA (for blood contamination)

30. DISINFECTION OF PREMISES AND FURNISHING ITEMS. Wipe twice with a rag soaked in the 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 DISINFECTIONCLEANING MATERIAL

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

32 DISINFECTION OF SLIPPERS

1. Wipe with a swab moistened with 25% or 45% formaldehyde solution and vinegar solution until the inside is completely moistened.
2) Pack in a plastic bag for 3 hours.

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

33. RATE OF CHANGE OF UNDERCLEARN AND BED LINEN.

Underwear and bed linen are changed at least once every 7 days (after hygienic washing, as well as in case of contamination.

34. PROCEDURE FOR COLLECTING UNDER LINEN AND BED LINEN

1) Collected in cotton bags or containers with roofs
2) After changing the linen, they wipe down the objects and the floor in the disinfection room. Using chloramine B 1% solution or Ca hypochlorite 0.5% solution)
3) Sorting and dismantling of dirty linen is carried out in a specially designated room on oilcloth with the label “for dirty linen”.
4) Sorting of linen is carried out in special clothing (robe, cap, bhils, mask, oilcloth apron, gloves).
5) The room should have clean rags, a container for clean rags, a container for processing chests, oilcloths, aprons, a container for clean gloves, a container for dirty gloves, individual cleaning equipment, a container with disinfectants. solution for treating and cleaning the premises (chloramine B 1% solution, Ca hydrochloride 0.5% solution).

35. DISINFECTING MEASURES BEFORE THE PATIENT'S ADMISSION TO THE ROOM.

I. Bed, bedside tables, bedpan stands, wipe with a rag moistened with disinfectant. solution.
2 The bed is covered with bedding that has undergone chamber processing
3. The patient is provided with individual care items, which are immediately removed from the room after use and washed thoroughly.
4. After dischargedisinfects personal care items for the patient

36. DISINFECTION OF BEDDING AFTER RELEASE.

Disinfection in disinfection. chamber using the steam-formalin or steam-air method is performed after each patient is discharged (mattress, blanket, pillow).

37. CORRECT CLEANING IN SURGICAL DEPARTMENTS.

1. Cleaning is carried out at least 2 times a day using a wet method 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 post-operative purulentCOMPLICATIONSDaily cleaning is carried out using tactile disinfectants.
3. Cleaning of the operating unit, dressing rooms, treatment rooms and intensive care units, and the emergency room. CSO is carried out using the wet method. As a dis. solution is used: a.) chloramine B 3% solution. b) Ca hypochloride 0.5% solution

38. FREQUENCY AND PROCEDURE FOR GENERAL CLEANING OF THE OPERATING ROOM, DEPARTMENT. ANESTHESIOLOGY AND RESUSCITATION, DRESSING AND PROCEDURE.

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

ammonia solution).

4)After cleaning, turn on the ultraviolet lamps; for 2 hours.

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

1.Marking (department no. name of the room - measured by volume)

2.Separate storage of equipment for cleaning different rooms.

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

40. DISINFECTION OF HAND WASHING BRUSHES. 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.Rinsing with running water. 3. Immersion in the washing complex 4. Rinsing with running water.

5. Rinse in distilled water.

*6*Drying, sprinkling talcum powder on each pair of gloves and wrapping each glove separately in gauze. Then we put everything together in 2-layer calico and in bix (control test - benzoin).

For cleaning the room in an enema room, etc. soak gloves in water after use *1%*chloramine solution for 30 minutes, then dry and sprinkle with talcum powder.

42 RECYCLING CATHETERS.

1 Immersion in 3% chloramine solutionON60 min.

2 Rinse with running water and knead. 3 Immersion in the washing complex.

4 Rinse with running water.

5. Rinse in distilled water.

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

43. RAG PROCESSING. 1. Immersion in

one of the solutions for 60 minutes. 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 minutes.

44. QUARTZING MODE IN THE OPERATING, DRESSING AND PROCEDURE ROOMS.

Every two hours quartzing for 15 minutes. and ventilation - 15 min

45. ENSURING TIMELY DETECTION OF CARRIERS OF PATHOGENIC STAPHYLOCOCCUS AMONG MONEY. STAFF AT THE DEPARTMENT OF SURGICALPROFILE.

1. Full honey examination of new employees, including examination by a dentist, as well as bacteriological examination of the nasopharyngeal mucosa for the presence of pathogenic staphylococci

2. Head The department organizes screening for staphylococcus carriage once every six months; if it is detected among employees, treatment is carried out, and if a nosocomial infection occurs, extraordinary examinations and examinations are carried out.

46. TREATMENT OF HANDS AFTER EXAMINATION OF A PATIENT WITH PURULENT-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 (rinse inpelvis2 min.).

47. REGIME OF DISINFECTION BY CHEMICAL METHOD OF INSTRUMENTATION. SYRINGES, NEEDLES FOR TUBERCULOSIS

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

After which we carry out pre-sterilization treatment according to OST 42-2 I -2-85.

48 PREPARATION OF WORKING SOLUTIONS OF CHLORAMINE.SODA.

Concentration of working solutions (%)	Amount of 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
1	10.0	100.0
2	20.0	200.0
3	30.0	300.0
5	50.0	500.0
10	100.0	1000.0

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

Required concentration		1 l	3 l	5 l	8 l	10 l
by 10% solution	By 5% rr					
0.5%	0.25%	50 ml	150 ml	250 ml	400 ml	50 ml
1%	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 OF INTRODUCTION AND VENTILATION DEVICES.

IN and ventilator devices, both new and old, are subjected to treatment after each use: washing and disinfection in accordance with the instructions of pr. No. 720 of the USSR Ministry of Health.

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

a) Preparation - disassembling components, removing hoses, connecting tools, valve box covers, disconnecting and emptying condensate collectors, etc.

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

c) Rinsing under cold running water, why use warm water?

d) Soaking with complete immersion in the washing solution for 15-20 minutes. (0.5% hydrogen peroxide solution with 0.5% detergent solution)

e) Washing with a cotton-gauze swab (25-30 seconds for 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 components - immersion in one of the solutions a) 4%. hydrogen peroxide solution - 60min.6) 3% formaldehyde solution - 30 min c) chloramine solution -60min.g) 0.1% dezoxon-1 solution - 30 min.

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

After disinfection, the products are washed successively in 2 portions of sterile water, then dried and stored under aseptic conditions, the hoses are suspended.

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

3. Disinfection of components and individual components and blocks of IN and ventilator devices during

a] infection with Mycobacterium tuberculosis: 3%
hydrogen peroxide solution - 180 min.
1% deeoxon-1 solution - 30 min. 10% formaldehyde solution - 60 min.
5% chloramine solution 4 hours
boiling in distilled water - 30 minutes (blocks made of metal and heat-resistant plastics).

4. Disinfection of assembled IN and ventilator devices with a solution of formaldehyde in ethyl alcohol - 90 min.

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

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

1. Notify the attending physician or head of department

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

3. Highlight individual patient care equipment: dishes, thermometer, medical gowns. staff, a mat at the entrance to the ward, moistened with disinfectant. solution, clean rags for surface treatment, containers for disinfecting dishes, a vessel, a urinal.

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

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

6. Carry out daily thermometry, examination of the patient’s skin and mucous membranes, and stool for 35 days.

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

8. Current disinfection should be carried out in accordance with the requirement of Project No. 916 of the USSR Ministry of Health dated 04.09.83 “Sanitary and anti-epidemicregime of infectious diseases hospitals."

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

(Project No. 916 USSR Ministry of Health)

52. ACTIONS IN THE EVENT OF SUSPECTED ACUTE INTESTINAL DISEASE IN A PATIENT.

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

3.Select individual patient care equipment: dishes, thermometer, beaker, syringes, cleaning equipment marked “quarantine”, medical gowns. personnel, a vessel, a urine bag, clean rags for surface treatment, containers for disinfecting utensils, a mat at the entrance to the room, moistened with disinfectant. r-rum, etc.

4.Carry out wet cleaning of the room and care items using disinfectants. means: 1% chloramine solution. We disinfect dishes after each meal with \% chloramine solution or 0.5% Ca hypochlorite solution (60 ppm immersion).

5.Take samples of the patient’s stool: during the daytime, take them to the bacteriological laboratory. at night - in the emergency department.

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

7.Current disinfection is carried out in accordance with the requirements of Order No. 916 M3> USSR dated 09/04/83 “Sanitary and anti-epidemic regime of infectious diseases hospitals.”

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

(Project No. 916 USSR Ministry of Health)

53. PRIMARY ACTIONS WHEN DETECTEDA PATIENT WITH SUSPECTED PLAGUE, CHOLERA, SMALLPOX, HVL (HEMORRHAGIC VIRAL FEVER).

1. WITHOUT LEAVING THE ROOM WITH THE DOORS CLOSED!

Notify manager department and heads, to the doctor about suspicion of OI (particularly dangerous infections).

2. Request appropriate medications, honey. instruments, packing with protective clothing, spy prevention products (in the reception department), individual care items.

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

5. Post posts at the ward where the patient is located, at the entrance to the department and on the floor. 6. Prohibit patients from walking in the department where the patient is identified.

7. Temporarily stop admitting and discharging patients and admitting visitors. It is prohibited to remove things from the ward or transfer medical records to the archive until final disinfection is carried out.

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

9. If there are two patients in the ward, they, as contacts, are isolated in different rooms.

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

54. MEASURES AND MEANS OF PERSONAL PREVENTION FOR OI.

Before receiving protective clothing, health workers must temporarily cover their nose and mouth with a towel or mask. Before putting on protective clothing, exposed skin areas are treated:

- for plague - streptomycin solution (250,000 - 500,000 units)
- for cholera - tetracycline solution (200,000 units)
- for GVL and smallpox - 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.

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

63. INSTALLATION 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 coffins;
5. sterile cotton swabs;
6. tripod;
7. 70° ethyl alcohol;
8. 6% hydrogen peroxide solution;
9. 1% boric solution,
10. 1% protargol solution;
11. adhesive plaster for container packaging

64. PRECAUTIONS WHEN WORKING WITH BLOOD.

1. Med. personnel must undergo training before being allowed to work.
2. All manipulations during which contamination of the skin and mucous membranes with blood or serum may occur should be carried out with rubber gloves and a mask.
3. If the skin or mucous membranes are contaminated with blood, you should immediately:

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

4. The surface of work tables is treated with 3% chloramine solution if it becomes dirty during work and at the end of the working day.

65. TREATMENT OF DRESSING MATERIAL CONTAMINATED WITH BLOOD.

Discarded into a container with disinfectant. solution: 3% chloramine solution - 1 hour or 1.5% hypochlorite solution
Ca -1h.

66. SANITARY AND HYGIENICMODE IN BUFFET STORES

1. Food is provided to the sick by barmaids and housekeepers. honey. nurses in robes marked “for serving food.”
2. After each distribution of food, the pantry and dining room are cleaned in dressing gowns marked “for cleaning.” They use disinfectant. solutions: 1% chloramine solution or 0.5% Ca chlorite solution
3. Cleaning materials (buckets, mops) must be labeled “for the pantry.” After washing the floors, cleaning equipment is disinfected in 1% chloramine solution for 60 minutes, then rinsed in running water and dried.
4. The dishes are disinfected in 0.5% chloramine solution or 0.25% Ca hypochlorite solution or boiled for 15 minutes. followed by rinsing with running water.

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

6. Pantry staff must observe the rules of personal hygiene: before visiting the toilet, take off your robe, and after visiting, wash and disinfect your hands with 0.5% chloramine solution for 2 minutes.

(Project 720 Ministry of Health of the USSR)

67 SANITARY AND HYGIENIC REGIME IN ROOMS FOR PATIENTS WITH ANAEROBICINFECTION

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

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, a microbial association may consist of pathogenic clostridia or a mixture of pathogenic and low-pathogenic clostridia. and also from a mixture of clostridia with aerobic bacteria: staphylococcus, Escherichia coli, Proteus.

The main route of transmission of infection is contact. Infection can occur when the causative agent of gas gangrene comes into contact with damaged skin or mucous membranes with soil, dirty linen, clothing, as well as when using insufficiently sterilized instruments, syringes, needles, sutures and dressings.

For the treatment of patients with gas gangrene, separate rooms are allocated, if possible, with a special entrance, an operating room and a dressing room, equipped with supply and exhaust ventilation that is not connected to 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 room or OBN-ZOO at the rate of I irradiator per 60 m³ of room.

The patient in the emergency room undergoes (if possible) complete or partial sanitary treatment; takes a shower, cuts 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 stand (if any) are wiped with a rag generously moistened with a 6% solution of hydrogen peroxide with 0.5% detergent. The bed is made with bedding that has undergone chamber disinfection treatment according to the regime for spore forms of bacteria

Before washing, dirty laundry is disinfected by soaking and boiling in a 2% solution of soda ash (detergent) for 120 minutes from the moment of boiling.

The patient is given individual care items such as a spittoon, bedpan, etc., which are washed after use. After the patient is discharged, care items are disinfected.

To wash hands, toilets and patients use soap in small packages. After use, the dishes are freed from food residues, soaked in a 2% soda solution and boiled for 90 minutes. Then wash with running water and store in a closed cabinet.

The wards 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.) are marked and used strictly for their intended purpose. After use, autoclave at 2 kgf/cm³ (132℃ ± 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 purifiers (VOPR-0.9 HJUI VOPR-1.5)

The surgeon and treatment nurse put on a T-shirt and 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 generously in a 6% solution of hydrogen peroxide with 0.5% detergent.

The dressing material is used once, during surgery or dressing it is collected in a specially designated container, autoclaved at 2 kgf/cm³ (132C'C±2) for 20 minutes and destroyed.

Note: it is strictly forbidden to throw away the material without disinfection. Instruments used during surgery or dressing are collected in a container.

The operating room and dressing room are cleaned using a wet method at least 2 times a day using a 6% hydrogen peroxide solution with 0.5% detergent, using personal protective equipment: RU-60 type respirators and gloves. After disinfection, the room is washed with hot water. water and turn on bactericidal irradiators (OBN-150 or OBN-300) for 1.5-2 hours.

To conduct hyperbaric oxygenation sessions, single pressure chambers are used, installed in a specially designated barosalum

During the hyperbaric oxygenation session, the patient is given an individual bedding such as a small mattress and a headrest (in order to reduce the risk of infection spreading, the cover on the bedding is changed after each session. If this requirement cannot be met, the bedding is lined with oilcloth or perishable. After the procedure During the session, they change the covers and wipe the bedding with cloth moistened with a disinfectant solution.

Disinfection of the inner surface of the pressure chamber is carried out after each oxygenation session by wiping with a sterile rag soaked in a 6% solution of hydrogen peroxide 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% solution of hydrogen peroxide with 0.5% detergent. At the same time, wipe all objects and equipment with a rag soaked in a disinfectant solution and wipe dry. During breaks between hyperbaric oxygenation sessions, bactericidal irradiators are turned on

After the operation or dressing, all instruments, syringes, needles are immersed in a 6% solution of hydrogen peroxide with 0.5% detergent for 60 minutes or boiled for 90 minutes.

The subsequent procedure for pre-sterilization treatment of instruments and their sterilization is similar to that described in sections 6-12.

(Project 720 MZ USSR)

68. SANITARY AND HYGIENIC REGIME IN THE DEPARTMENT OF PURULENT SURGERY.

I. It is necessary to have spongy foam mats or rags for disinfecting shoes when entering and leaving the department, as well as the treatment room, dressing room, operating room, pantry, moistened with disinfectant. solution (1% chloramine solution or 0.5% Ca hypochlorite solution).

2 You must have honey. gowns, painted yellow, at the entrance to the medical department. staff of other departments, as well as at the exit from the medical department. staff of the department of purulent surgery.

3. Honey. The staff of the purulent surgery department works in gowns, masks and caps painted yellow. At the end of work, gowns, masks, and caps are changed.

4. Spontaneous movements of patients from ward to ward and exit to other departments are strictly prohibited.

5 Closed-type ultraviolet bactericidal irradiators are installed in the wards.

6. The purulent surgery department is cleaned at least 2 times a day and after changing linen using disinfectants (1% chloramine solution, 0.5% Ca hypochlorite solution).

COLLECTION ORGANIZATION. STORAGE AND DELIVERY OF SCRAP DISPOSABLE MEDICAL DEVICES MADE FROM PLASTIC MASSES

I. In institutions, organizations and enterprises of the country's health care system, appoint those responsible for the collection, storage and delivery of used disposable syringes.

2. After use, each syringe must be disinfected using disinfectant. Ras-

creations Immerse the product in a disinfectant solution after preliminary rinsing 2-3 times with the same solution in order to fill all cavities of the product with it. Filling the product with solution prevents it from floating.

3. To ensure the safety of personnel when performing work on disinfection of disposable medical products made from plastics, one should be guided by

"Rules for labor protection of workers of the disinfection department and for the maintenance of disinfection stations, disinfection departments, departments of preventive disinfection of sanitary-epidemiological stations, individual disinfection installations" in accordance with the "Regulations on the organization of work on occupational health and safety in the organization" Ghana, institutions, enterprises and organizations of the USSR Ministry of Health system", approved by the Order of the Ministry of Health. USSR dated August 30, 1982 No. 862.

The heads of structural units where the specified work is carried out are required to develop appropriate labor protection instructions for maintenance personnel.

4.The following products can be used to disinfect syringes:

Name of funds	**Solution concentration**	**Time decontamination vania**
Peroxidehydrogen	6% (according to LDV)	60 minutes
chloramine	5% (by drug)	60 minutes
Activated chloramine solution Neutral	0.5% (per drug)	60 minutes
hypochlorite Sulfochloramine	1.5% (by drug)	60 minutes
	0.5% (per drug)	60 minutes

The above disinfection of disposable 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 plastic syringes, the possibility of infection by pathogens of bacterial and viral infections, including AIDS and hepatitis B, is completely prevented.

Polypropylene: cylinder width, needle head, low pressure polyethylene: piston rod, protective cap.

The presence of metal or other inclusions is not allowed.

6. To exclude the possibility of reusing disinfected disposable plastic products, it is necessary to deform them. Why load separated products from homogeneous plastics into bins, having first covered the bottom of the bin with packing paper to prevent the fused syringes from sticking to the bottom and walls. Bixes should be loaded into the sterilizers available at the given medical institution:

— steam sterilizer at 132°—20 min. (provides deformation and sterilization), .

— air sterilizer at 180°—60 min. (provides disinfection and deformation).

7. Subsequently, the sintered mass from different bins is stored separately.

Tests-tasks to control the initial level of knowledge (Part I)

1. Where are the guard sister's medicines and medical equipment stored?

*Answer:*Medicines and medicine. inventory is stored in a special closet for the guard sister.

2. Where are the medications located in the guard nurse's closet?

*Answer:*Medicines are arranged in groups.

3. Name a group of medications 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 medications be stored?

*Answer:*Strong-smelling medications should be stored separately because their odors transfer to other medications.

5. How are medical equipment (dressing material, syringes, thermometers) stored?

*Answer:*Medical equipment is stored separately from medications.

6. Where are patient care items stored (bedspreader, enemas, etc.)?

*Answer:*Patient care items are stored separately from medications and equipment.

7. Where are poisonous drugs (narcotics, strychnine, arsenic, etc.) stored?

*Answer:*Poisonous medications are stored in cabinet "A" under lock and key or in a safe.

8. Where are potent medications (sleeping pills atropine, adrenaline, etc.) stored?

*Answer:*Potent medications are stored in cabinet "B".

9. How is the consumption of poisonous and potent drugs kept track of?

*Answer:*To record the consumption of poisonous and potent drugs, separate notebooks are kept, the sheets of which must be numbered and stitched.

10. Who is responsible for the prescription and consumption of drugs of groups "A" and "B"?

*Answer:*The doctor is responsible for the prescription and consumption of drugs of groups "A" and "B".

11. Where are perishable medicines (infusions, decoctions, ointments) stored?

*Answer:*Perishable medications are stored in the refrigerator.

12. How many days can sterile solutions prepared in bottles 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 spoilage of medicinal substances: 1) appearance of flakes, 2) change in color, 3) change in odor.

14. In what packaging should ready-made medications received from a pharmacy be stored?

*Answer:*Finished medications should be stored in the packaging in which they were dispensed from the pharmacy.

15. What should the sister do before giving medicine to the patient?

*Answer:*Before giving a medicine to a patient, you need to carefully read its name and dosage.

16. When should medications be given to patients?

*Answer:*16.1. Medicines must be distributed immediately before their use according to the procedure sheet.

17. What methods of drug administration are there?

*Answer:*1. External. 2. Enteral. 3. Parenteral.

18. What types of external use of medicines do you know?

*Answer:*1. Rubbing. 2. Lubrication. 3. Plaster. 4. Powdering or powdering.
5. Inhalation. 6. Instilling drops into 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 report this to your doctor immediately.

1. Train students in the cutaneous use of medications.

1. Application of medications should only be done on clean skin, using a clean instrument.
2. In the case of rubbing the ointment, the skin is first washed with soap, and then the medicine is rubbed in.
3. If the ointment is rubbed into the hairy parts of the body, the hair is shaved off.
4. To rub a skin area with a liquid medicinal substance, pour it into the palm of your hand and then rub it in.

2. Teach students how to take medications orally.

1. Convince that enteral drug administration 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 it is impossible to swallow, the medicine is administered in suppositories or an enema through the rectum

Questions to control the final level of educational material

Option 1

1. What are the methods of drug administration?
*Answer:*The medicine can be applied externally, taken orally, or administered parenterally.

2. Dosage formsmeans used externally.
*Answer:*Ointment,liniment, talkers, aerosol, liquid.

3. What are the forms of drugs used orally?
*Answer:*Infusion, decoctions, tablets, pills, mixture, powders, syrup.

4. What are the known dosage forms used for parenteral administration?
*Answer:*Solutions in ampoules, vials, special containers.

5. Stages of pre-sterilizationprocessing of medical instruments.
*Answer:*Medical instruments are pre-rinsed with running water, then soaked in a washing solution and treated in it using 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 in gauze and placed on napkins in a sterilizer, which is filled with cold distilled water or twice boiled with the addition of sodium hydrochloride and boiled.

7. How long does it take to sterilize instruments in departments?
*Answer:*In regular compartments, the boiling time is 45 minutes.

8. What are the tests for detecting occult blood on instruments?
*Answer:*Benzidine and orthodone tests.

9. Name the samples used to detect contamination residues on instruments.
*Answer:*Phenolphthalein test.

10. What is the duration of sterilization of instruments in the department where there is a patient with viral hepatitis?
*Answer:*Within 1.5-2 hours.

Option 2

1. Technology of external use of drugs.
*Answer:*Application of medications should always be done on clean skin with a tool and thoroughly washed hands.

2. Technology of enteral administration of medications.
*Answer:*The advantage of enteral drug administration is that: that various forms are used in a non-sterile form.

3. Who distributes medications?
*Answer:*It is performed only by a nurse and patients must take medications in her presence.

4. For what purpose is the prescription of the entire department sent to the head nurse?
*Answer:*The head nurse must check the correctness of the prescriptions and sign them with the head of the department, after which the pharmacy begins preparing the medications.

5. In what form do medications come from the pharmacy?
*Answer:*In a ready-to-use form.

6. What should you do before giving medicine to a patient?

*Answer:*You should carefully read the label on the packaging.

7. Where are the special cabinets for storing medicines and by whom are they controlled?

*Answer:*At the post of a nurse and controlled by guard nurses.

8. How should medications be placed on shelves?

*Answer:*It is advisable to arrange them in accordance with their appearance; larger dishes are placed in the back, and smaller ones in front. This makes it possible to read any label and take the right medicine.

9. On what reasons does the safety of drugs depend?

*Answer:*For many reasons: form (powders, tablets, mixtures), temperature and humidity of the room, lighting, quality of closure.

10. Which forms of medicines spoil the fastest?

*Answer:*Infusions and decoctions should be stored in a cool place, preferably in the refrigerator.

11. What should you remember 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 stored in ampoules be stored?

*Answer:*The duration of storage of sterile solutions (outside ampoules) depends on the period specified by the pharmacy.

Situational tasks

1. After sterilizing the syringe and needles, the nurse touched the needle. What needs to 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 internally. Is it dangerous? Answer: No.

3. The nurse supplied a sterilizer with medical instruments for sterilization, but did not carry out proper sterilization preparation. What should the nurse do to ensure proper sterilization?

*Answer:*Fulfill all these requirements for pre-sterilization treatment of instruments (rinsing, soaking, processing, etc.)

4. The nurse, having drawn the medicine into the syringe, put cotton wool on the needle. How does such a disorder threaten the patient?

*Answer:*In this case, it is unacceptable to apply cotton wool to the tip of the needle, since cotton fibers, once they get into the tissue, create conditions for abscess formation.

5. The number of abscess formations in the hospital is increasing. How can we explain this?

*Answer:*Poor pre-sterilization preparation of syringes or insufficient boiling and autoclaving. Insufficient skin treatment.

Abstract topics (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 and sensitization.

Control questions:

1. What are the rules for dispensing and recording medications in the department?

2. What are the general requirements for storing medicinal substances?

3. How to properly store and record potent and narcotic drugs?

4. What are the features of storing medicines infused with alcohol and containing

ether?
5. What are the rules and features of distributing medications in the department? Assignment sheet and rules for working with it.
6. List the methods of administering medications.
7. What methods of external use of medicinal substances do you know?
8. Describe the enteral route of drug administration.
9. What is the techniqueinsertion of rectal suppositories?

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

1. Application of iodine, powders, patches.
2. Applying ointment compresses.
3. Injecting drops into the eyes, ears, nose.
4. Distribution of medications according to an individual scheme.

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 signs are common to infusions, decoctions and solutions? a) all of them are 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 medications prescribed orally after meals? a) if they irritate the gastric mucosa;
b) if they participate in digestion processes;
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-heat 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-injectioninfiltrates and abscesses; d) disease with serum hepatitis.

SUBJECT9. TECHNIQUES OF SUBCUTANEOUS AND INTRAMUSCULAR INJECTIONS, TECHNIQUES OF INTRAVENOUS INJECTIONS, DROPPING INTRAVENOUSINFUSIONS.

Educational goal:compliance with ethics and deontology during parenteral administration of drugs; the need for accurate and timely implementation of doctor's orders; sensitive and polite treatment of patients when performing manipulations, treat each other and medical staff tactfully, and be able to keep professional secrets. Instilling responsibility in students while working in the treatment room and in the department.

Lesson equipment: cotton wool, bandage, wax paper, iodine tincture, ointments, plaster, eye drops, pipettes, spatula, powders, tablets, ampoules, a cup for mixtures, sterilizer, syringes, needles, tweezers, disinfectant solution, systems, dummies, phantoms.

The student must know:

1. Parenteraladministration of medicinal substances.
2. Syringe device. Technique for disassembling syringes.
3. Preparing the nurse's hands and the patient's skin for injections.
4. Syringe assembly technique. Taking medications from ampoules and vials.
5.Delivery of a syringe to the patient's bedside. Methodology for subcutaneous and intramuscular injections.
6. Features of the use of oil solutions for injections and subsequent treatment of syringes and needles.
7. Method of intravenous injections and infusions. Filling the system for drip infusion of liquids.
8. Possible complicationswith parenteral administration of drugs.
9. Methods of working with disposable syringes. Their advantages.

The student must be able to:

1. Assemble the syringe and draw the medicine from the ampoule.
2. Make subcutaneousintramuscular, intravenous injections and infusions.

Plan and organizational structure of the lesson.

1. Greetings.
15. The role of student attendance.
16. Introductory speech by the teacher. Target setting.
17. Homework assignment.
18. Monitoring and correction of the initial level of knowledge:

1. Parenteral administration of drugs.
2. Types of syringes, needles and their design.
3. Technique for disassembling and assembling syringes.
4. Method of performing subcutaneous injections.
5. Method of intramuscular injections.
6. Methodologyintravenous injections and infusions.

6. Organization of the work of the treatment room.
7. Familiarization with the storage of medications in the department.
8. Demonstration of practical skills.
9. Independent work of students in the department.
10. Discussion of the results of independent work.
11. Monitoring and correction of the final level of learning material.

Train students in 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 skin where the medicine is supposed to be administered is pre-treated with alcohol.

3. The skin is grabbed into a fold and the needle is inserted subcutaneously.
4. The needle is inserted at an angle of 45° to a depth of 1-2 cm between the fingers of the left hand and the medicinal solution is slowly injected.
5. Igloo quicklyextracted.
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 quadrant of the buttock.
2. Quickly insert 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 thoroughly washes his hands with soap and hot water and wipes them 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. All bubbles are removed from the syringe.
6. The site of the proposed injection is carefully treated with alcohol (elbow).
7. A tourniquet is applied above the elbow to the middle of the shoulder and the vein is compressed.
8. The introduction of the solution can be jet or drip.

d) intravenous (drip)

1. The patient lies on his back.
2. Secure your hand with a soft bandage.
3. For injection, it is better to choose a vein of a smaller caliber.
4. The container with the solution is placed at a height of 1 m.
5. The fluid flow rate is usually 50-60 drops per minute.
6. Before starting administration, carefully check the system (droppers, rubber tube, etc.).
7. After insertion, the system is disassembled, washed, sterilized, and must be kept in a sterilizer.
8. The single-use system is discarded after drug administration.

Learn the technique of diluting antibiotics.

1. First, determine the patient's response to antibiotics.
2. For this purpose, the Bezredka method is used (0.1 ml of an antibiotic solution is taken into a syringe, injected subcutaneously and the reaction is checked after 20 minutes).
3. If there are no deviations, another 0.5 ml of solution is injected, and after 20 minutes the rest is administered.
4. If you experience facial hyperemia or discomfort in the heart area, call a doctor immediately.
5. The syringe is delivered to the patient’s bedside on a tray in sterile material.

Place 2-3 needles and sterile cotton swabs soaked in alcohol on the tray.

Tests-tasks to control the initial level of knowledge (Part I)

1. Advantagesparenteral administration of drugs.
*Answer:*1. Speed of action. 2. Dosage accuracy.

2. What are the basic requirements for dosage forms administered parenterally?
*Answer:*1. No irritating effect on tissue. 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. Burning.
5. How long should syringes and needles be boiled?
*Answer:*At least 45 minutes from the moment of boiling.
6. Which area 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 kind of needlesare they used for intradermal injections?
Answer: Diameter 0.4 ml.
9. How are needles inserted for intradermal injection?
*Answer:*1. At an angle of 15°. 2. Cut up. 3. In the thickness of the skin.
10. Namecriterion for correct intradermal administration.
*Answer:*Education"lemon peel"
11. Name common sites for subcutaneous drug administration.
*Answer:*1. Outer surface of the shoulder. 2. Subscapular region.
3. Anterolateral surface of the thigh. 4. Anterolateral surface of the abdomen.
12. Name the advantages and indications for using the lateral humerus.
*Answer:*1. Technical convenience. 2. Ease of treating possible complications.
3. Is a universal 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 drugs that are painful and give a local reaction.
3. A common 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. 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 action of the drug (insulin, heparin, etc.).
16. How is the needle inserted for a hypodermic 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. At least 0.5 cm of the needle should remain above the skin.
17. In what muscles are intramuscular injections given?
*Answer:*1.Into the gluteus maximus. 2.Into the triceps femoris muscle. 3.Into the quadriceps femoris muscle.
18. Name the usual site used for intramuscular administration of drugs. Answer: Outer superior quadrant of the buttock.
19. What needles are used for intramuscular injection? Answer: 6-10 cm long.
20. How is the needle inserted for intramuscular injection?
*Answer:*1. At an angle of 60-90° 2. Deep enough 3. No more than 2/3 of the needle.
21. The procedure for placing syringes and needles in the sterilizer.
*Answer:*1. Check for permeability and tightness.
2. The syringes are stacked disassembled.
3. The cylinder is wrapped in gauze, and the piston is placed immediately.
4. The needles are laid with mandrins.
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 kind of water are used to fill syringes for boiling and how many minutes are they boiled for?
*Answer:*1. Fill with warm distilled water.

2. Or plain water with the addition of a pinch of sodium bicarbonate (2% solution).
3. Boil for 40-45 minutes from the moment of boiling.

24. How long should it be boiled if any instrument has been added to the sterilizer?

*Answer:*Boiling continues for another 40-45 minutes.

25. How to remove instruments from the sterilizer?

*Answer:*The mesh along with the syringes is removed with hooks and placed diagonally on the edge of the sterilizer.

27. How to assemble a syringe?

*Answer:*1. Wash your hands with soap and, without wiping, wipe with alcohol.
2. Remove the cylinder from the sterilizer with tweezers (insert one jaw inside the cylinder-dra).
3. Grasp the cylinder with 2 fingers of your left hand.
4. Take the piston by the handle with tweezers and insert it into the cylinder.
5. Take the needle by the coupling with tweezers, put it on the cone of the syringe and secure 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. Which veins are used for intravenous injections? List them in order of frequency of use.

*Answer:*1. Elbow bend. 2. Rear of the hand. 3. Anatomical snuff box.
4. Shins. 5. Heads.

2. List the rules for applying a tourniquet during intravenous injection.

*Answer:*1. Above the site of the intended puncture.
2. "Venous tourniquet" (compressing only the vein, but not the artery).

3. How is the needle inserted for an intravenous injection?

*Answer:*1. Only into a clearly visible or palpable vein.
2. The skin is punctured at an angle of 30-45°, the vein -5-10°.
3. The bevel of the needle is facing upward.

4. What is the danger of air embolism?

*Answer:*Air enters from the right atrium into the left through the open foramen ovale, which is present in 25% of people, and from there into the vessels of the systemic circulation, cerebral vessels, and coronary arteries.

5. How is the needle positioned correctly during intravenous injections?

*Answer:*By pulling the syringe plunger towards you, blood should appear in the syringe.

6. What should the nurse do if an IV insertion fails?

*Answer:*1. Remove the needle, remove the tourniquet if it is not already removed.
2. By pressing the vein, stop the bleeding.
3. Inject the drug into another vein.
4. Place a warming semi-alcohol compress on the site of the unsuccessful injection.

7. List possiblecomplications with intravenous injections.

*Answer:*1. Pyrogenic reaction. 2. Fat embolism of the pulmonary vessels.
3. Air embolism of pulmonary vessels.
4. Dizziness, collapse, cardiac arrhythmia.
5. Infiltrate. 6. Hematoma. 7. Sepsis. 8. Phlebitis.
9. Allergic reactions.

Complications.

To pyrogenic reactionsmay result from the use of expired drugs or poorly prepared solutions. In patients with severe diseases of the cardiovascular system, this complication may end fatal.

Fat embolism of the pulmonary vesselsoccurs when drugs intended for intramuscular or subcutaneous injection are mistakenly administered into a vein
administration, for example, a solution of camphor in oil. This is manifested by sudden pain in the heart area, choking, coughing, and blue discoloration of the upper half of the chest.
Air embolism of pulmonary vesselsoccurs when bubbles that are not promptly removed from a syringe or blood transfusion system enter
air.
Dizziness, collapse, cardiac arrhythmiamay result from too rapid administration of the drug.
Infiltrateis formed when the drug enters the subcutaneous fatty tissue. This occurs in the case of through perforation of the vein. In order to prevent this complication, you should, by pulling the piston towards yourself, make sure that the needle is in the vein. In addition, during the administration of the drug, it is necessary to ensure that no swelling forms at the injection site, which indicates that the solution is entering the subcutaneous fatty tissue.

Getting drugs such as aminophylline and calcium chloride under the skin is very painful. If this happens, it is recommended to apply a semi-alcohol or dry compress to the elbow area.
HematomasThey form more often near the injection site in patients with impaired blood clotting or increased vascular permeability. Prevention of this complication is sufficiently long (at least 3-5 minutes) and firm pressure on the injection site (sterile swab with alcohol, pressure bandage).
Sepsis -a generalized infection caused by bacterial infection of the blood. Typically occurs when reusable intravenous drip systems are not properly sterilized.
Phlebitis -inflammation of the veins caused by chemical or physical irritation. Often accompanied by thrombosis of the affected vein.
Allergic reactionsmay occur when using most medications. They manifest themselves in the form of itching of the skin, various skin rashes, and Quincke's edema. The most dangerous form of reaction is anaphylactic shock, accompanied by shortness of breath, nausea, itching of the skin, decreased blood pressure, loss of consciousness, and bluish skin. If the patient develops any of these symptoms, you should immediately stop administering the medication and report the incident to your doctor.

As can be seen from the above, although the intravenous method of administering medicinal substances has significant advantages, it 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: monitoring the sterility and suitability of drugs and equipment, applying a tourniquet to the arm, performing venipuncture, loosening the tourniquet, and slowly administering the drug.

Complications of intravenous injections are associated with improper administration of the drug (rapid administration, administration of an oily, irritating drug, etc.), through perforation of the vein, and the development of local or generalized infection.

GENERAL INFORMATION ON NOMACHICAL INFECTIONS (HAI)

"Nosocomial infection(hospital, hospital, in-hospital, nosocomial) - any clinically recognizable infectious disease that affects a patient as a result of his admission to a hospital or seeking medical care, or hospital employees as a result of their work in this institution, outside depending on the onset of symptoms during or after a hospital stay."

European Office of the World Health Organization, 1979.

Even in highly developed countries, more than 5% of hospital patients experience nosocomial infections.

MOST COMMON HAI:

1. Urinary tract infections •
2. Purulent-septic infections
3. Respiratory tract infections
4. Bacteremia
5. Skin infections

For the occurrence of nosocomial infections, there must be three parts of any epidemiological process, namely:

1. Pathogen
2. Pathogen transmission medium
3. Human body susceptible to infection

VBI:

1. **EXOGENOUS**– the source of infection is introduced into the body from the outside
2. **ENDOGENOUS**– the infectious agent is present in the body initially

PATIENTS:

1. Bacteria
2. viruses
3. mushrooms
4. protozoa
5. multicellularparasites

Mechanisms of transmission of nosocomial infections:

- *Aerosol*
- *Contact*
- *Fecal-oral*

Routes of transmission of nosocomial infections:

- *Airborne, airborne dust*
- *Contact, contact-household*
- *Food*
- *Artificial (artificial) route of transmission*

THE MAIN WAY TO PREVENT HAI IS DESTRUCTION OF THE CHAIN OF INFECTION

Ways to break the chain of infection:

-Implementation of effective control over nosocomial infections.
- Elimination of infectious agents.
- Interrupttransmission routes.
- Increasing the resistance of the human body (immunity).

Comprehensive epidemiological measures should be aimed at all 4 links; in addition, it is necessary to carry out a set 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 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 external environment of wards and functional premises of health care facilities, on medical equipment and instruments

TYPES OF DISINFECTION

1. Preventive(in the absence of a focus of infection)
2. Current(performed many times at home or in a healthcare facility)
3. Focal(if infection is present)
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, saturated water steam under excess pressure, ultraviolet irradiation, etc.

CHEMICAL -use of chemicals (antiseptics and disinfectants)

COMBINED -combining the use of several of the listed methods (for example, wet cleaning of premises followed by ultraviolet irradiation)

THE CHOICE OF DISINFECTION 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, AND THE RISK OF INFECTION OF PATIENTS AND STAFF

THREE CATEGORIES OF RISK OF INFECTIOUS LESIONS WHEN CONTACTING ENVIRONMENTAL FACTORS AND RECOMMENDED LEVELS OF DISINFECTION		
LOW RISK	**MEDIUM RISK**	**HIGH RISK**
Objects in contact with healthy and intact skin, or inanimate, environmental objects not in contact with the patient (walls, floors, ceilings, furniture, plumbing and sewerage equipment). Cleaning and drying are usually adequate decontamination methods.	Equipment the use of which does not involve 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 contaminated with pathogenic and spreading microorganisms (for example, endoscopes for the gastrointestinal tract, vaginal instruments). cops, thermometers). An adequate method of disinfection niya - cleaning followed by disinfection	Objects that penetrate sterile tissues, including body cavities and vascular systems (for example, surgical instruments, intrauterine devices). Requires cleaning followed by sterilization. If sterilization is not possible, enhanced disinfection is sometimes sufficient.

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 determined by the peculiarities of 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

from cirrhosis

ROUTES OF TRANSMISSION OF HEPATITIS B

1. After contact with blood or other body fluids (parenteral)
2. Upon contact with household items contaminated with biological fluids of the patient (contact household)
3. From mother to child (perinatal)
4. Having 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 Committee on the Prevention of Viral Hepatitis) includes:

- 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;
- Documentation of cases of infection.

UNIVERSAL PREVENTION MEASURES

- healthcare workers handling blood or other body fluids should consider all patients as a potential source of hepatitis virus infection;
- Precautionary measures such as the use of gloves, masks, gowns and other equipment should be strictly observed (for example, glasses 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 INFECTION

It is necessary to determine antibody titers no later than 48 hours after possible infection.

If a healthcare worker has not previously been vaccinated or his antibody titers are below 10 IU/l, then, in addition to vaccination, administration of immunoglobulin against hepatitis B is recommended.

HAND TREATMENT

HAND WASHING IS THE MOST EFFECTIVE METHOD FOR PREVENTING THE SPREAD OF MICROORGANISMS BETWEEN STAFF AND PATIENTS IN A HEALTHCARE INSTITUTION

HANDS DECONTAMINATION LEVELS

I. SOCIAL LEVEL (HOUSEHOLD)

- Washing moderately dirty hands with plain soap and water removes most temporary microorganisms from the skin. Special hand treatment is carried out:
- before eating, feeding the sick, working with food;
- after visiting the toilet;
- before and after patient care;
- after any contamination of hands

II. HYGIENIC LEVEL (DISINFECTION)

Washing hands using antiseptics. Promotes more effective removal of temporary microorganisms. Hygienic treatment is carried out:

- before executioninvasive 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 hands.

Target:destruction of transient flora and reduction in 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 for hygienic treatment. A certain method of hand disinfection is important

HAND WASHING METHOD

REPEAT EACH STEP 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. Back of fingers to palm of other hand
6. .Rotational friction of palms
7. Rotational friction of thumbs

SUBSTANCES USED IN HAND WASHING AS ANTISEPTICS

WATER	ALCOHOL
1. Povidone-iodine solution with detergent containing 0.75% available iodine. 2. Wet your hands with clean water, moisten with detergent (3-5 ml depending on its composition) or soap thoroughly. Wash hands for 10-15 s using the method described above and dry 3. 4% solution of chlorhexidine biglkionate with detergent.	1. 5% chlorhexidine or povidone iodine solution in 70% isopropanol or ethanol, 60% isopropanol, or 70% ethanol with emollient (eg, 0.5% glycerol). 2. Apply at least 3 ml of 70% alcohol or an antiseptic alcohol preparation with an emollient to your hands and rub until dry. Alcohol is more effective than aqueous antiseptic solutions, but pre-washing may be necessary 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 TREATMENT OF HANDS

Substances: The same as for hygienic hand washing. When using an alcohol preparation, it is applied 2 times, 5 ml each. Each portion is ground dry.
Treatment: The duration increases to 2-3 minutes; covers the wrists and forearms.
Availability 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 the facility

TYPES OF DECONTAMINATION OF INSTRUMENTS
Carried out using chemical and physical disinfection methods

CLEANING	DISINFECTION (MEDIUM LEVEL DISINFECTION)	ENHANCED DISINFECTION (HIGH LEVEL DISINFECTION)	STERILIZATION
Removal of foreign materials (organic and inorganic substances and microorganisms) from the object. Thorough cleaning and drying;remove painMost microorganisms from objects. Cleaning precedes final cleaning	A process that reduces the number of pathogenic microorganisms, but not necessarily bacterial spores, from non-living objects or skin to a level that does not pose a health hazard	The process of destroying tuberculous mycobacteria and enteroviruses, as well as other vegetative forms of bacteria, fungi and more resistant viruses (only resistant spores may remain (botulism, tetanus)	The process of destroying all types of microorganisms, as well as bacterial spores. It is carried out using special methods: - chemical (gas, chemicals) physical (steam, air, glasperlene, radiation -

work (disinfectantion and sterilization). Carried out manually - in watersoluble detergent means using brushes or cotton-gauze swab			naya, plasma)

SUBSEQUENCERECYCLING MEDICAL INSTRUMENTS

1. Preliminary (primary) disinfection. Purpose: Disinfection of instruments to protect medical personnel cleaning from infection
2. Flow flushingwater. Purpose: Disinfectant removal
3. Cleaning (soaking and mechanical cleaning). Goal: Removing all possible contaminants
4. Rinsing with running water. Purpose: Removing residual cleaning solution and dirt
5. Rinsing with distilled water. Goal: Complete removal of cleaning solution residues and contaminants
6. Drying. Purpose: To remove water that could dilute the disinfectant solution for final disinfection or sterilization
7. Final processing (final disinfection and sterilization). Goal: Protect the patient from infection
8. Storing sterile (disinfected)material

CLASSIFICATION OF ENVIRONMENTAL OBJECTS BY CATEGORIES OF HAI TRANSFER RISK

LOW RISK (NON-CRITICAL ITEMS)	MEDIUM RISK (SEMICRITICAL ITEMS)	HIGH RISK (CRITICAL PRE-META)
Objects in contact with healthy skin, not in contact with mucous membranes (blood pressure monitors, axillary thermometers, crutches, bed linen), as well as inanimate environmental objects not in contact with patients (walls, floors, ceilings) , furniture, sanitary equipment). The appropriate method of decontamination is low-level cleaning or disinfection.	Equipment that comes into contact with mucous membranes or damaged skin (respiratory and anesthesiological equipment, endoscopes, rectal thermometers, vaginal instruments), as well as anyobjects, conta- mined by virulent microorganisms. Adequate method of decontamination **— cleaning followed by medium or high level disinfection (depending on the equipment)**	Objects that penetrate sterile tissues, including gel cavities and vascular systems (surgical instruments, imylantates, 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. Latex gloves of sufficient thickness
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 of the immune system, which leads to the death of the patient from secondary lesions (infectious and tumor processes), described as acquired immunodeficiency syndrome (AIDS), or from subacute encephalitis.

ROUTES OF TRANSMISSION

1. Sexual
2. Parenteral
3. When breastfeeding
4. Vertical

CLINICAL CLASSIFICATIONHIV INFECTIONS

1. INCUBATION STAGE. From the moment of infection until the appearance of antibodies. The diagnosis can be confirmed by polymerase chain reaction by detecting the HIV-RNA antigen. Isolation of 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 effect 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, enlarged liver and spleen, skin rashes, meningeal phenomena are possible. Then goes to stage 2B or 2B

2B. ASYMPTOMIC INFECTION Characterized by the absence of clinical manifestations. There may be a moderate enlargement of the lymph nodes. In contrast to the incubation stage, 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. As the disease progresses, clinical symptoms develop, indicating worsening damage to the immune system, which characterizes the onset of stage 3

BEHIND. It is characterized by weight loss of less than 10%, bacterial, fungal, viral lesions of the mucous membranes and skin, and inflammatory diseases of the upper respiratory tract.

ZB. It is characterized by weight loss of more than 10%, skin lesions of a deeper nature, and a tendency to protracted course. Lesions of internal organs, localized Kaposi's sarcoma, develop.

ZV. Characterized bycachexia, generalization of infectious diseases,

disseminated Kaposi's sarcoma, severe lesions of the central nervous system of various etiologies

4. TERMINAL STAGE

Characterized by irreversible damage to organs and systems. Even adequately administered therapy for secondary diseases is ineffective, and the patient dies within a few months

HIV PREVENTION MEASURES IN MEDICAL INSTITUTIONS

The most real danger of infection arises from tears and punctures of gloves, which can lead to contact of contaminated material with the skin, possibly having microtraumas, especially from punctures and cuts. To reduce the likelihood of infection in such cases, it is recommended:

1. When preparing to carry out manipulation on a patient with HIV infection, make sure that the emergency first aid kit is intact.
2. Perform manipulations in the presence of a second specialist, who can continue to perform the procedure in the event of a rupture of gloves or a cut.
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 your mouth and throat with 70% alcohol or 0.05% potassium permanganate solution. Don't rub! For injections and cuts, squeeze the blood out of the wound and treat the wound with a 5% iodine solution. Prophylactic administration of thymooside (AZT) 800 mg/day for 30 days is recommended.

MASKS

Necessary to avoid airborne transmission of microorganisms, as well as if there is a possibility of liquid substances from the body getting into the mouth and nose.

Masks should be replaced when they become damp. Do not put them on your neck or reuse them. All masks must completely cover the mouth and nose.

High-quality disposable masks are much more effective than regular gauze or paper masks at preventing the spread of airborne or droplet vectors.

EYE PROTECTION

Eye and face barriers 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 primary purpose of gowns and polyethylene aprons is to prevent the spread of infectious agents to the clothing and skin of personnel. Gowns and aprons are only necessary when there is a likelihood that wet body fluids will contaminate clothing or skin.

Under no circumstances should staff be allowed to take gowns home to wash.

UNIVERSAL MEASURES FOR THE SAFETY OF 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 7 safety rules to protect the skin and mucous membranes when in contact with blood or body fluids of any patient.

1. Wash your hands before and after any contact with the patient.
2. Consider blood and fluids from all patients as potentially infectious and handle them only with gloves.
3. Immediately after use, place used syringes and catheters in a special container for disposal of sharps, never remove needle holders with needles from syringes and do not perform any manipulations with used needles.
4. Use eye protection and masks to prevent possible splashes of blood or liquid secretions on the face (during surgery, manipulation, 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. Consider all underwear soiled with blood or fluid secretions as potentially contaminated.
7. Consider all laboratory samples as potentially contaminated.

SAFETYMEDICAL STAFF

Mechanisms of transmission of infection from patient to medical personnel

1. **CONTACT**
2. **FECAL-ORAL**
3. **AEROSOL**
4. **TRANSMISSIBLE**

GENERAL INFECTION PREVENTION MEASURES

- Initial and regular examinations with recording of immunity and immunization status.
- All incidents (needle sticks or cuts) must be reported to a supervisor and recorded in the log book. The same applies to cases of infection through contact with a patient.
- All skin breaks should be covered with a waterproof bandage.

IMMUNIZATION IS THE BEST MEANS OF PROTECTING PERSONNEL

REQUIRED VACCINATIONS:from typhus; influenza, polio (during an epidemic). BCG

An important point in the prevention of nosocomial infections among personnel is personal hygiene. To the right

Personal hygiene measures include: daily shower or bath, with special attention paid to hair and nails; thorough washing of gowns and other personal clothing; protect your mouth and nose (if possible with disposable protective equipment) and turn your head away from people nearby when coughing and sneezing; thorough hand washing.

USING GLOVES

If there is the slightest possibility of contact with blood or body fluids, mucous membranes or damaged skin of any patient, as well as if there are cuts or other damage to one's own skin, the use of gloves is necessary.

Gloves should be changed between patient contacts and after contact with secretions and excreta before caring for the same patient. Used gloves should be disposed of appropriately. Sterile gloves are worn only for sterile procedures.

RECOMMENDED VACCINATIONS:from diphtheria, hepatitis B, tetanus

SEQUENCE OF ACTIONS WHEN USING STERILE GLOVES

PUTTING ON	REMOVAL
1. Unwrap the package of gloves. 2. Take the glove by the lapel with your left hand so that your fingers do not touch the inner surface of the glove. 3. Close the fingers of your right hand and insert them into the glove. 4. Open the fingers of your right hand and pull the glove over them without disturbing its cuff. 5. Place the 2nd, 3rd and 4th fingers of the right hand, already wearing the glove, under the lapel of the left glove so that the 1st finger of the right hand is directed towards the 1st finger on the left glove. 6. Hold the left glove vertically with the 2nd, 3rd and 4th fingers of the right hand. 7. Close the fingers of your left hand and insert it into the glove. 8. Straighten the lapel of the left glove, pulling it over the sleeve, then on the right one using the 2nd and 3rd fingers, bringing them under the folded edge of the glove.	1. Using the gloved fingers of your right hand, make a cuff on the left glove, touching it only from the outside. 2. Using the fingers of your left hand, make a cuff on the right glove, also touching it only from the outside. 3. Remove the glove from your left hand, turning it inside out and holding it by the lapel. 4. Hold the glove removed from your left hand in your right hand. 5. With your left hand, take the glove on your right hand by the lapel from 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 away in a waterproof bag.

Questions to control the final level of educational material.

1. Which vein is most often used for internal drug administration and why?
*Answer:*The ulnar vein, the most accessible.
2. What determines the choice of method of drug administration?
*Answer:*First of all, the condition of the patient, as well as the nature of the medicinal effect.
3. How are subcutaneous drug injections performed technically?
*Answer:*The area where the injection is intended is treated with alcohol, the skin is folded and the medicine is injected into its base, after which the needle is quickly removed and the skin is wiped with alcohol.
4. What is the technologicalthe essence of intramuscular injections?
*Answer:*The site of intramuscular injection 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 ensure that the needle is not in the vessel and the medicine is injected, the needle is removed, and the injection site is wiped with alcohol.
5. What are the complications of intravenousadministration of drugs?
*Answer:*Opportunityvascular embolism by accidental injection of air.
6. What are the conditions for drip (intravenous) administration of medicinal solutions?
*Answer:*Use of sterile droppers, sterile solutions, ensuring a slow flow of liquid (40-60 drops per minute). Monitoring the patient's condition.
7. What should you do after removing the needle from the vein?
*Answer:*After removing the needle, the injection site is treated with alcohol.
8. What is the nurse's responsibility if the patient's condition worsens after administering medications?
*Answer:*Immediately call a doctor and provide first aid yourself.
9. In what cases the drug cannot be used for parenteral administration.
*Answer:*An error in the 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 and phlebitis.
11. What is the preparation of the nurse's hands when administering drugs parenterally?
*Answer:*Before starting parenteral administration of medications, 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 into the anterior surface of the shoulder. What complications can you expect?
*Answer:*Possible damage to blood vessels or nerves.
2. After intramuscular injection of penicillin, the patient turned pale, broke out in a cold sweat, and the pulse became thready. What is this condition and how to stop it?
*Answer:*Acute vascular insufficiency. Place the patient on his back.
Give me a sniff of ammonia, call a doctor.
3. When transporting a sterile syringe to the patient's bedside, the nurse covered the needle with a cotton swab. What are the complications?
*Answer:*The needle has become unsterile. 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 wrong and how to fix it?

*Answer:*The drug was administered not into a vein, but subcutaneously. A warming compress should be applied, if a hypertonic solution is injected, the injection site is injected with a 0.25% novocaine solution.

6. After the administration of the antibiotic, the patient developed redness of the skin and discomfort in the heart and epigastric region. What does this mean and what needs to be done?

Answer: The patient has an allergic reaction to this antibiotic. Stop further administration of the antibiotic, administer antihistamines, calcium chloride, in case of severe

When a reaction occurs, prednisolone and hydrocortisone are administered intravenously.

7. At the time of intramuscular injection of the drug, the needle entered a blood vessel. What could be 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 hold it for 2-3 minutes.

Control questions.

1. List the advantages of parenteral administration of drugs.
2. Demonstrate the technique of assembling a sterile syringe with one and two tweezers, and draw the medicine from the ampoule. Make subcutaneous and intramuscular injections.
3. Calculate and dilute antibiotics.
4. Demonstrate the technique of working with 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 a dummy. 10.List the most convenient sites for intradermal subcutaneous, intramuscular and intravenous injections.
12. What is the techniqueintradermal injections?
13. What is the techniquesubcutaneous injections?
14. What is the technique of intramuscularinjections?
15. What is the technique of intravenousinjections?
16. Name the complications of intradermal, subcutaneous, intramuscular and intravenous injections.
17. What are the possible complications when performing subcutaneous and intramuscular injections?

Final control:carried out by random checkpracticalskills:

1. Application of iodine, powders, patches.
2. Applying ointment compresses.
3. Injecting drops into the eyes, ears, nose.
4. Distribution of medications according to an individual scheme.

TEST CONTROL

1. Which method of drug administration is called parenteral? a) the use of drugs by injection;
b) any method of administering drugs bypassing the gastrointestinal tract; c) external use of drugs.

2. In what cases is the rectal route of drug administration used? a) if oral administration is impossible or undesirable;
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 administering drugs?
a) if it is necessary to obtain a quick therapeutic effect;

b) if the drug acts for a very short time; 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 to administer 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) outer surface of the thigh; d)
inner thigh; e) subscapular region;
e) sidewaysvaya surface of the abdominal wall.

5. Which areas of the body are most convenient for intramuscular injections? a) outer
surface of the thigh;
b) inner thigh;
c) lateral surface of the abdominal wall; d)
upper outer quadrant of the buttock;
e) subscapular region.

6. What are the indications?for the use of intravenous infusions? a) decrease in
circulating blood volume;
b) intoxication of the body pfor infectious diseases andpoisoning; c) increased
blood pressure;
d) disturbances in water-electrolyte balance and acid-base status.
7. What is the role of ductworktubes in the system for intravenous drips? a) displaces liquid
from the bottle with the solution;
b) prevents the penetration of air into the system tubes; c)
promotes droplet movement of liquid through the system.

TOPIC 10: MONITORING AND CARE OF PATIENTS
WITH DISEASESRESPIRATORY ORGANS.

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-standing spittoons and for individual use with a ground-in lid, a set of instruments for pleural puncture (needles, syringes, pleuroaspirator, Bobrov apparatus), a set of medications to assist in the event of acute cardiovascular failure during pleural puncture (ammonia, cordiamine), oxygen pillows, oxygen cylinders with reducers for centralized oxygen supply, nasal catheters, temperature sheets for recording respiration, pulse and blood pressure, a set of medications for providing emergency care for pulmonary hemorrhages (camphor, epsilon-aminocaproic acid, calcium chloride solution, ascorbic acid solution, rubber tourniquets.

The student must know:

1. The method of counting the number of respiratory movements and recording it in the temperature sheet.
2. To familiarize students with the main symptoms of respiratory diseases: shortness of breath,

cough, pleural pain, pathological discharge 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 respiratory phase disorders, as well as determination of rhythm and frequency disturbances of respiratory movements.
5. Provide emergency assistance for respiratory diseases (choking, shortness of breath, cough, hemoptysis)
6. Rules for caring for bed-ridden patients with respiratory diseases.
7. Filling an oxygen bag and delivering it to patients.
Use of various oxygen installations. Oxygen humidification.
8. Cough, assistance with it.
9. Collecting sputum in measuring cups throughout the day, in pocket spittoons. Disinfection of spittoons. Sending sputum to the laboratory.
10. Symptoms of hemoptysis, pulmonary hemorrhage. Urgent first aid.
11. Using 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 for elderly and senile patients with respiratory diseases.

The student must be able to:
1. Use the spittoon and perform its sanitary and hygienic treatment.
2. Calculatebreathing movements, make a graphical recording of them.
3. Provide first aid for an attack of nonproductive cough.
4. Use a functional bed and other devices to create a comfortable position for the patient (consolidation of skills).
5. Use an inhaler.
6. Put the cansmustard 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 (reinforcement of skills).
11. Provide first aid in case of suffocation.

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech by the teacher. Target setting.
4. Homework assignment.
5. Monitoring and correction of the initial level of knowledge:
    1. Anatomy and physiology of the respiratory organs.
    2. Determination of external respiration.
    3. Types of breathing (thoracic, abdominal, mixed).
       Pathological types of breathing
       (Kussmaul, Biot, Grokk, Cheyne-Stokes breathing).
    4. Method of counting respiratory movements. Recording the breathing curve on the temperature sheet.
    5. List the main symptoms of respiratory dysfunction.
    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, assistance 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 of collecting sputum for laboratory testing:

- sputum collection for general clinical examination
- - / - for detection of Mycobacterium tuberculosis
- - / - for sensitivity to antibiotics

11. Observation and care of patients with respiratory diseases.

12. Features of caring for elderly and senile patients.

13. Oxygen therapy. Safety precautions when working with oxygen.

14. Hyperbaric oxygen therapy, complications.

15. Methods of using oxygen.

16. Pleural puncture (thoracentesis, thoracentesis), complications. Methods of diagnostic and therapeutic pleurocentesis.

17. Organization of the work of a nurse in the pulmonology department

6. Demonstration of patients with respiratory diseases.

7. Monitoring students' performance of manipulations: counting the number of respiratory movements, graphically recording them in a temperature sheet, filling the oxygen bag. Providing oxygen cushions to patients, etc.

8. Independent work of students in the department.

9. Discussion of the results of independent work.

eleven. Monitoring and correction of the final level of learning material (solving situational problems).

Tests-tasks for monitoring the initial level of knowledge of students (part 1).

1. Define shortness of breath.

*Answer:*Dyspnea is difficulty breathing, characterized by a disturbance in the frequency, rhythm, depth of respiratory movements and the ratio of the inhalation and exhalation phases.

2. What is suffocation?

*Answer:*Asphyxiationcalled paroxysmal severe shortness of breath.

3. What types of shortness of breath are there?

*Answer:*Inspiratory, expiratory.

4. First aid for shortness of breath.

*Answer:*1. Give an elevated position.

2. Free yourself from restrictive clothing.
3. Open a window or window.
4. Give oxygen.

5. Indicate the normal number of respiratory movements per minute.

*Answer:*16-20 breathing excursions per minute.

6. Define cough.

*Answer:*Cough is a protective reflex act aimed at removing foreign bodies, mucus, and 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 non-productive cough.

*Answer:*1. Give a warm drink (hot only with soda or half and half with warmed Borjomi).

2. Place jars or mustard plasters.
3. Take warm foot baths.

8. What complications can a cough lead to?

*Answer:*1. Syncopal attacks (episodic loss of consciousness at the height of coughing).

2. Rupture of an emphysematous pulmonary bulla 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 emergency pre-medical measures for pulmonary hemorrhage?

*Answer:*1. Providecomplete rest (calm down, prohibit talking, put to bed).

2. Give an elevated position.
3. Place an ice pack on the chest and allow small pieces of ice (0.5-1 cm in diameter) to be swallowed.
4. Monitor the condition of the cardiovascular system.
5. Give antitussives (codeine, codeterpine, etc.).

11. What manipulationscontraindicated for pulmonary hemorrhage?

*Answer:*1. Install mustard plasters. 2. Place jars. 3. Use heating pads. 4. Use physical therapy.

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 prohibited to smoke, use open fire or electrical appliances in the room where the oxygen cylinder is located.

2. Heating of the cylinder is unacceptable.
3. Do not use a faulty cylinder.

Tests-tasks to determine the initial level of knowledge of students (part 2).

1. What is the disinfection method?individual spittoons?

*Answer:*1. Before giving to a patient, spittoons are disinfected by boiling.

2. Add 74 2% chloramine solution.

3. At least once a day, the sputum in the 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 furatsilin (1:5000), or 0.01% potassium permanganate solution by coughing.

3. How is sputum collected for sensitivity to antibiotics?

*Answer:*Sterile Petri dishes are used to culture sputum for sensitivity to antibiotics.

4. List the complications of oxygen therapy. 1, 2, 3, 4, 5.

*Answer:*1. Retrolental fibroplasia. 2. Arterial hypotension.

3. Stopping breathing. 4. Oxygen poisoning.
5. Damage to the epithelium of the airways and alveoli.

5. How to avoid complications of oxygen therapy? 12.

*Answer:*1. Do not use 100% oxygen concentration.

2. Limit the time of oxygen supply.

Questions to control the initial level of mastery of educational material

Option 1

1. What are the respiratory organs used for? What is the number of respiratory movements per minute for a healthy person?

The respiratory organs serve to carry out the life process, which consists in supporting the constant exchange of gases - oxygen and carbon dioxide - between the external environment and the body. The normal number of respiratory movements is 16-20 per minute.

2. Define external respiration.

External respiration is the exchange of gases between pulmonary and atmospheric air.

3. What pathological types of breathing do you know?
Pathological types of breathing include: Kussmaul breathing, Biota breathing. Cheyne-Stokes.
4. What is shortness of breath?
Dyspnea 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 and develops in the presence of a mechanical obstruction in the upper respiratory tract.
Expiratory dyspnea is breathing with difficulty exhaling, which occurs in bronchial asthma and emphysema.
7. How to collect sputum for general analysis?
After rinsing the mouth, the sputum is collected in a transparent glass container and sent to the laboratory for examination for general analysis.
8. Characterize sputum by consistency and color.
Sputum is distinguished by consistency: mucous, serous, purulent, mucopurulent, bloody; by color: colorless, pinkish, rusty, scarlet, greenish, grayish.
9. How to take sputum for Mycobacterium tuberculosis using flotation?
Sputum is collected for 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 tissue to prevent sputum particles from falling on others. Do not spit sputum onto the floor or into a handkerchief, as it can be a source of infection for healthy people. The 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% solution of soda for 15 minutes.
11. What is pulmonary bleeding characterized by and how to distinguish it from gastrointestinal bleeding
Pulmonary bleeding is accompanied by coughing, and gastrointestinal bleeding is accompanied by vomiting and movements.
12. Providing emergency first aid for pulmonary hemorrhage.
Create complete physical and mental rest for the patient. Place in bed with the head of the bed raised. Before the doctor arrives, give the patient a salt solution (20 g per glass of water) or a 10% calcium chloride solution (30-40 ml) to drink. In case of excessive bleeding, apply tourniquets to 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 semi-liquid form.
14. Providing emergency care to patients with pleural pain.
In case of severe pleural pain, it is necessary to administer painkillers (analgin, novocaine blockade).
15. How to prepare a patient for pleural puncture?
The patient should be seated astride a chair, facing the back of the chair, on which a pillow should be placed. Place your arms bent at the elbows on a pillow. The patient's torso should be slightly turned in the opposite direction. where the puncture will be performed. Before puncture, treat with a 5% alcohol solution of iodine, thoroughly treat with alcohol and apply local anesthesia to the intended puncture site.
16. What should a doctor prepare for performing a pleural puncture?
To perform a pleural puncture, it is necessary to prepare iodine, alcohol, sterile syringes, needles, a pleural aspirator, 0.5% novocaine for local anesthesia, and a sterile tube for sending pleural fluid to the laboratory.

Option 2
1. How to correctly count respiratory movements?

Respiratory movements should be counted within a minute, unnoticed by 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)? Dyspnea can be pulmonary, cardiac, hematogenous, nervous or centrogenic.
4. Give characteristics of Biot's respiration.
Proper alternation of deep breathing movements and pauses.
5. Describe Cheyne-Stokes respiration.
Correct alternation of breathing periods with increasing and decreasing frequency and depth of breathing with pauses.
6. Kussmaul's breathing - describe it.
Slow and deep breathing (occurs in diabetic coma, hepatic coma, cerebral hemorrhage).
7. What is phlegm?
Sputum is pathological discharge from the respiratory tract and lungs when coughing.
8. How to collect sputum for bacteriological examination?
The patient should rinse his mouth thoroughly and collect sputum in a sterile container.
9. What is the purpose of the treatmentgymnastics for lung diseases?
Physiotherapy. Prescribed to restore body functions impaired by disease using physical exercises. By improving breathing, therapeutic exercises prevent the development of an inflammatory process in the lungs in patients on bed rest.
10. For what purpose is a pleural puncture performed on a patient? a) lifelong testimony;
b) for diagnostic purposes, in addition to a general analysis of the pleural fluid, the specific gravity, the total amount of protein, and the Rivalta test are examined. count the formed elements, atypical cells, mycobacterium tuberculosis, etc.
11. What diseases cause oxygen starvation?
Oxygen starvation is observed in pneumonia, bronchial asthma, pulmonary edema, emphysema, etc.
12. For what purposes is oxygen therapy prescribed?
Oxygen therapy is prescribed for the development of oxygen starvation (hypoxia).
13. What physical procedures are contraindicated for hemoptysis and pulmonary hemorrhage?
For hemoptysis and pulmonary hemorrhage, cupping, mustard plasters and other physiotherapeutic methods of treatment are contraindicated.
14. What is characteristic of pleural pain?
Pleural pain increases with deep inspiration. The position of the patient on the affected side limits the movement of the pleural layers and thereby reduces pain.
15. How to take sputum for testing for atypical cells?
To collect sputum for atypical cells, it is necessary for the patient to rinse his mouth well, and then collect the sputum in a clean container, after which the sputum is urgently sent to the laboratory for examination.
16. What precautions must be taken when using bottled oxygen?
Oxygen cylinders should be stored in a dry room at a temperature not exceeding 35° C, in a vertical position, in special nests. Protect the cylinder from shocks, impacts, and falls. When opening the cylinder, it is not recommended to stand facing the stream of oxygen, as you can damage your vision.

Option 3

1. Describe the chest type of breathing.

Chest breathing is most common in women. With it, the chest cavity expands mainly in the anteroposterior and lateral directions.

2. Describe the abdominal type of 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 features 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 if there is difficulty in sputum production?

The patient should be recommended to take a position in bed 2-3 times a day for 20-30 minutes, in which accumulated sputum is more easily removed.

6. What is the first aid for a patient with bronchial asthma in status asthmaticus? Free the patient's chest from constricting clothing, give the patient a semi-sitting position in bed, increase air access to the room, and administer oxygen therapy.

7. What diseases cause a dry cough?

The cough can be dry with inflammation of the upper respiratory tract, inflammation of the pleura, compression of the bronchial tube by a tumor, or a foreign body.

8. Organization of work of medical personnel in the pulmonology department. Medical staff should:

a) frequently ventilate wards and treatment rooms; b) monitor the disinfection of spittoons;

c) monitor the three-time wet cleaning of premises with disinfectant solutions;

d) strictly follow the doctor’s instructions;

e) be able to prepare the patient for endoscopic examination.

9. What diseases cause a wet cough?

The 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 a centralized oxygen supply. Daily morning toilet, prevention of bedsores. Measurement of daily sputum production, counting of breaths, determination of the Stange and Gentsch tests.

11. Routes of oxygen administration during 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, wound irrigation, 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 an upright 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 medicinal 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 cessation of breathing due to lack of oxygen.

Situational tasks and questions for final knowledge control.

1. Patient K., 43 years old, came to you for help, complaining of bloody vomiting. You suspected he had stomach bleeding.

Based on what data can you distinguish gastric bleeding from pulmonary bleeding?

*Answer:*Table of differential diagnosis of pulmonary and gastric bleeding.

Clinical signs	**Bleeding**	
	pulmonary	**gastric**
The nature of blood discharge.	When coughing.	When vomiting.
The color of blood.	Bright red, scarletfoamy.	Dark red,the color of coffee grounds.
An admixture of food residues.	Absent.	Available.
Anamnesticdata.	Respiratory diseases, pulmonary edema.	Gastric diseases,liver diseases.

2. Patient R., 52 years old, is in the therapeutic department for right-sided lower lobe pneumonia. The doctor prescribed cupping 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 placed the cups on his back for 10 minutes.

Name the mistakes made by the nurse.

*Answer:*a) Did not wipe the washed jars dry;

b) did not lubricate your back with Vaseline or glycerin (to avoid burning your back).

3. While working in a hot shop, worker S.M., 22 years old, suddenly developed a nosebleed. A nurse was called from the health center. The patient is excited, complains of weakness, dizziness, cough, nausea. Pallor of the skin appeared.

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 and given a position in which there is less opportunity for blood to enter the nasopharynx.

3. Place an ice pack, a ball of snow wrapped in a scarf, a handkerchief moistened with cold water, a bandage, a ball of cotton wool, etc., on the area of the nose and bridge of the nose.

4. A sufficient 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 as high as possible, and the nose is squeezed with force. The patient must breathe through his mouth. You need to squeeze your nose for 3-5 minutes. The patient should spit out blood that gets into the mouth.

6. Instead of pressing, you can tamponade the nasal passages with a dry ball of cotton wool or a ball of cotton wool moistened with a solution of hydrogen peroxide. Cotton balls are inserted into the nasal passages, and the patient's head is tilted forward. On cotton wool, blood quickly coagulates and 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 techniques for providing first aid to patients with shortness of breath or suffocation.

5. List first aid techniques for pulmonary hemorrhage.
6. List first aid techniques for an attack of nonproductive cough.
7. Features of caring 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 and repeated attacks of suffocation. He sits in bed and cannot assume a horizontal position. Cough with a small amount of glassy sputum. Breathing with sharply difficult and prolonged exhalation. 22 per min. Wheezing wheezes when breathing are heard throughout.
Task: What type of shortness of breath does the patient have, how and in what sequence should she be given emergency care?

*Answer:*The patient has expiratory shortness of breath. It is necessary to free the patient's chest from constricting clothing and heavy blankets. Give the patient a semi-sitting position in bed, increase the access of oxygen in the room, and administer oxygen therapy.

2. The patient, 70 years old, has been suffering from headaches for a long time, and recently his memory has weakened significantly. Objectively, there are tortuous vessels at the temples. Pulse is high, hard, 70 beats. per minute Blood pressure 180-70 mm. rt. Art. Breathing is characterized by periodicity of respiratory movements, between which there are pauses with a gradual increase in respiratory movements and subsequent decay until a complete stop.
Assignment: Graphically depict the type of breathing described and name it. Under what conditions of the respiratory center does this type of breathing appear?

*Answer:*This is Cheyne-Stokes breathing. It occurs with brain diseases, comas, poisoning, and severe circulatory disorders.

3. Patient, 20 years old. She has been coughing for a long time (several years) but has not sought help from doctors. Suddenly in the morning, after a strong coughing attack, a large amount (300 ml) of foamy scarlet blood came out.
Assignment: Where did the bleeding come from? Provide emergency first aid (indicate the sequence).

*Answer:*The patient has pulmonary hemorrhage. It is necessary to put her in bed with the head of the bed raised, create physical and mental peace, and forbid talking. Give a strong solution of table salt to drink (1 tablespoon per glass of water) or a 10% solution of calcium chloride.

4. Patient, 19 years old. Parents suffer from pulmonary tuberculosis. Over the past 3 years, the patient has developed weakness, low-grade fever, and cough with a small amount of sputum. Task: What examination should be performed on the patient? What method is used to collect sputum for the study of Mycobacterium tuberculosis?

*Answer:*The patient needs to examine the sputum for Mycobacterium tuberculosis. Sputum is collected by flotation.

5. A 60-year-old patient was brought to the department in serious condition with severe shortness of breath and cyanosis. There is no centralized oxygen in the department, only bottled oxygen.
Task: How to use oxygen directly from a cylinder? List the sequence of your manipulations. On contact with what substances does compressed oxygen gas ignite?

*Answer:*When prescribing oxygen inhalation for a long period, 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 for the purpose of humidification, through water poured into a vessel from Bobrov's apparatus, and then enters the patient's mouth or nose. Compressed gaseous oxygen ignites when it comes into contact with oils, fats, or petroleum.

6. During the pleural puncture, the patient suddenly turned pale and began to sweat.
Assignment: What are the nurse's emergency actions?
*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, spits sputum on the floor, into a handkerchief.
Assignment: Nurse tactics?
*Answer:*Explain to the patient that if you are surrounded by healthy people, you should refrain from coughing, or cover your mouth with a handkerchief so that sputum particles do not fall on another person. You should not spit sputum on the floor or on a handkerchief, as this may cause illness to the people around you. Teach the patient to use an individual spittoon.

8. For a patient with exudative pleurisy, the doctor must perform a pleural puncture (diagnostic).
Task: What instruments and medications 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: Nurse tactics for the prevention of congestive pneumonia.
*Answer:*Ventilate the room, if there are no contraindications, turn the patient on his side, light back massage, therapeutic exercises.

10. A patient with pulmonary heart failure receives diuretics as prescribed by a doctor.
Task: How to determine the effectiveness of diuretic drugs?
*Answer:*Collect daily urine in a container and note the amount of fluid drunk and excreted in the medical history on the temperature sheet.

11. A patient with pneumonia had a sharp drop in temperature (from 39° to 35°), he became covered in sticky sweat, and suddenly turned pale.
Task: What condition developed in the patient and what measures did the nurse take before the doctor arrived?
*Answer:*The patient developed collapse. To stop it, it is necessary to introduce cardiotonic drugs, 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:*If "rusty sputum" appears, cups and mustard plasters should not be given to the patient.

ABSTRACT TOPICS.

1. Main symptoms for various respiratory diseases.

2. Emergency care for asthmatic conditions.
3. Emergency care for pulmonary hemorrhage.
4. Principles of care for patients with respiratory dysfunction.
5. Therapeutic exercise for respiratory diseases and prevention of congestive pneumonia.
6. Oxygen therapy: indications, inhalation methods of oxygen administration.
7. Hyperboricoxygenation, indications and contraindications.
8. Organization of work of nursing staff in the pulmonology department.

Control questions.

1. Method of counting respiratory movements.
2. List the main symptoms of respiratory dysfunction.
3. What pathological types of breathing do you know?
4. Describe the types of shortness of breath depending on respiratory phase disorders. What is 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 inhalation methods of 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 caring for patients with respiratory diseases.
11. Methodology and possiblecomplications during pleural puncture.

Knowledge level control:carried out by testing practical skills, solving situational problems on the topic and test control.

TEST CONTROL.

1. Which of the listed methods of studying the respiratory system are considered x-ray?
a) bronchography;
b) bronchoscopy;
c) fluorography; d)
tomography;
d) spirography.

2.What signs are characteristic of chest pain associated with pleural damage? a) increased pain with deep breathing and coughing;
b) stabbing nature of pain;
c) compressive nature of pain;
d) increased pain when lying on the affected side;
e) reduction of pain when lying on the affected side; f)
increased pain when pressing on the chest.

3. What procedures are advisable to prescribe to a patient to reduce a persistent dry cough?
a) drainage of the bronchi with a change in body
position; b) warm alkaline drink;
c) jars, mustard plasters;
d) expectorantsand antitussives; e) oxygen
inhalation.

4.For which study is it necessary to collect sputum for 1-3 days? a) examination for the presence of atypical cells;
b) testing 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) blood is scarlet, foamy;
b) dark blood, clots like "coffee grounds"; c) the released blood has an alkaline reaction; d) the released blood has an acidic reaction;
e) discharge of blood with coughing impulses.

7. What measures should be taken if a patient experiences pulmonary hemorrhage? a) prescribe complete rest;
b) place an ice pack on the chest area; c) administer vikasol and calcium chloride;
d) put up jars 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 with a foreign body; d) pulmonary embolism;
e) poisoning with narcotic substances.

9. What signs are characteristic of expiratory dyspnea? a) difficulty in exhaling;
b) difficulty breathing;
c) difficulty in inhaling and exhaling.

10. What is the most 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) preventing the toxic effect of oxygen on the body.

12. What's it likepurpose of 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) introductiondrugs into the pleural cavity;

d) disconnectionpleural adhesions;
e) sucking sputum from the bronchi and washing them

SUBJECTeleven. MONITORING AND CARE OF PATIENTS WITH CIRCULAR DISEASES. MEASUREMENT OF BLOOD PRESSURE, DETERMINATION OF PROPERTIES OF ARTERIAL PULSE

Target:medical deontology and ethics in caring for patients with cardiovascular diseases. 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 caring for 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. Fasting days."
4. Systems (sterile) for single intravenous administration of fluids. A set of medications necessary to provide emergency care for various acute conditions (shock, collapse, fainting, cardiac asthma).
5. Items for the care of patients with cardiovascular diseases (rubber circles, tourniquets, drinking cups, enema supplies, camphor alcohol, oxygen units, temperature sheets, portion cups).

The student must know:

1. Pulse, its properties,identification technique, digital and graphic recording.
2. Arterial pressure,the technique of its measurement, digital and graphic recording.
3. Main symptomsdiseases of the cardiovascular system.
4. Understanding the causes of heart pain and first aid for them.
5. Acute vascular insufficiency (fainting, collapse) and first aid for them.
6. General care for patients with cardiovascular diseases.
7. Features of caring for patients with this pathology in the elderly and senile.

The student must be able to:

1. Determine the patient’s pulse, give its characteristics, and write it down graphically.
2. Measure blood pressure and interpret the data obtained.
3. Determine swelling in the patient’s legs and lower back.
4. Provide first aid for acute vascular insufficiency.
5. Provide first aid for acute heart failure.
6. Count the frequency of respiratory movements and evaluate its nature (consolidation of skills).
7. Observe the patient’s appearance and assess his condition, monitor physiological functions.
8. Provide first aid for pain in the heart area.
9. Feed the seriously ill (reinforcing the skill).
10. enjoyfunctional bed (skill consolidation).
11. Change your underwear and bed linen (reinforce the skill).

12. Prevent bedsores (reinforce the skill). 13. Provide a bedpan and urine bag, disinfect them (reinforce skills).
13. Give oxygen (reinforce the skill).
14. Carry out subcutaneous and intramuscular injections to cardiovascular patients (consolidation of skills).

Plan and organizational structure of the lesson.

1. Greetings.
2. The role of student attendance.
3. Introductory speech by the teacher. Target setting.
4. Homework assignment.
5. Monitoring and correction of the initial level of knowledge:
6.
   1. Deontology in caring for patients with circulatory diseases.
   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 heart or behind the sternum.
   5. Observation and care of patients with poor circulation: Acute vascular insufficiency, provision of first aid. Chronic heart failure.
   6. Features of caring for patients with this pathology in old age.
   7. What is the method for determining arterial pulse. Give its characteristics and write it down graphically.
   8. Define blood pressure.
   What is the technique for measuring it using the Korotkoff method.
   Characteristics of blood pressure in healthy and sick people.
   9. Organization of the work of a nurse in the cardiology department.
   10. Features of therapeutic nutrition for patients with illness. circulatory organs.

6. Demonstration of patients with circulatory diseases.
7. Showing practicalskills: method of determining arterial pulse, its registration in the observation sheet, measuring blood pressure.
8. Independent work of students in the department.
9. Discussion of the results of independent work.
10. Monitoring and correction of the final level of learning material. (solving situational problems).

Monitoring the initial level of student knowledge

1. List the main symptoms of pathology of the circulatory system.
1. Pain in the heart area or behind the sternum. 2. Palpitations, interruptions in heart function.
3. Shortness of breath. 4. Swelling.
2. Emergency first aid in case of pain in the heart or behind the sternum.
1. Lay the patient down and calm him down.
2. Give a nitroglycerin tablet under the tongue, having previously found out how this drug is tolerated.
3. Place mustard plaster on the heart area.
4. If the pain does not stop within 5 minutes, call a doctor immediately.
3. Features of shortness of breath in cardiac pathology.
Increased shortness of breath in a horizontal position and decreased in a vertical position

4. What is the emergency first aid if suffocation occurs in a patient with a disease of the cardiovascular system?
   1. Give a semi-sitting position with legs down, calm down.
   2. Apply tourniquets to the limbs.
   3. Give oxygen.
   4. Call a doctor immediately.
5. How to properly apply tourniquets to limbs
   1. On top of 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. Severe weakness, dizziness, ringing in the ears, sometimes nausea, “darkening” in the eyes, loss of consciousness.
   2. Pale skin, cold sticky sweat.
   3. The pulse is soft and rare.
   4. The pupils narrow.
7. List the main symptoms of collapse.
   1. Severe pallor, collapse of visible veins, cold sticky sweat, limbs cold to the touch.
   2. Breathing is rapid, shallow, but not difficult.
   3. The pulse is frequent, soft, thread-like.
   4. Blood pressure is sharply reduced.
   5. The patient is motionless, although conscious, and answers questions with difficulty.
8. First aid for fainting.
   1. Lay the patient down so that the head is lower than the feet.
   2. Unbutton your clothes.
   3. Spray your face with cold water, sniff the ammonia and rub your temples with ammonia.
   4. Rub the skin of the face and soles.
9. First aid for collapse.
   Lay the patient down, warm him with heating pads, give him strong tea, inject 1-2 ml of 10% caffeine, 1-2 ml of cordiamine under the skin, call a doctor immediately.
10. What is pulse?
    Rhythmic contractions (pulsation) of the vascular wall synchronous with the work of the heart.
11. What is the heart rate of a healthy person? 60-90 beats per minute.
12. List the places where the pulse can be examined.
    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 dorsum of the foot.
13. Stages of pulse examination.
    1. Determination of pulse on both hands.
    2. Study of the properties of the arterial wall.
    3. Study of the properties of the pulse.
14. Properties of the pulse. 1.Frequency.2.Rhythm.3.Filling.4.Tension.5.Height.6. Form.

Questions to control the initial level of educational material

Option 1

1. Why are heart and vascular diseases considered a severe pathology of internal organs?
These diseases are widespread and cause high morbidity and mortality among the population.

2. Method of determining pulse.
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 pulse. Frequency, rhythm, content, size, form.
4. Method for determining blood pressure.
It is measured with a sphygmomanometer, Riva-Rocci apparatus; Korotkoff sounds are heard in the elbow bend at the site of the projection of the brachial artery with a stethophonendoscope (the appearance of pulsation is systolic blood pressure, the disappearance is diastolic blood pressure).
5. Characteristics of blood pressure in healthy and sick people.
Healthy blood pressure is 100-150 mm Hg. column - systolic, and 60-90 - diastolic (depending on age). Blood pressure with hypotension is 100/60 mm Hg. Art. and below. Blood pressure with hypertension is 160/95 mm Hg. Art. and higher.
6. Name the common symptoms of diseases of the circulatory system.
Pain in the heart area, shortness of breath, suffocation, cough, palpitations, cyanosis, wheezing in the lungs, enlarged heart boundaries, heart murmurs with rhythm disturbances, liver enlargement, anasarca, ascites, swelling in the legs and torso.
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 thread-like pulse indicate? About a sharp drop in blood pressure.
9. What is heart rate deficit?
Difference between heart rate and pulse rate
10. What does the appearance of swelling in the legs of a patient with heart disease indicate? About cardiac failure.
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 for 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. Give characteristics of systolic blood pressure.
Systolic pressure is the pressure at the moment of maximum rise of the pulse wave, occurring after left ventricular systole.
3. Technique for measuring blood pressure.
The patient should sit or lie quietly while measuring blood pressure. A cuff is placed on the patient’s bare shoulder 2-3 cm above the elbow. A phonendoscope is applied in the elbow bend above the area of pulsation of the radial artery. The numbers on the scale show systolic pressure (appearance of sounds) and diastolic pressure (disappearance of sounds).
4. Therapeutic nutrition for patients with circulatory insufficiency
Table 10. Limiting 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 down, sedatives (valerian, motherwort, validol), access to fresh air, mustard plasters on the collar area.
6. First aid for an angina attack.
Validol, nitroglycerin under the tongue, rest, fresh air, unbutton 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. Patient regimen for hypertensive crisis

Bed first, then the regime expands depending on the nature of the complications.

You should follow your doctor's prescription.

9. Why is inhalation of oxygen moistened with alcohol vapor prescribed for pulmonary edema?ta?For reducing foamy sputum in the bronchi.

10. Mode of a patient with myocardial infarction.

Bed and acute and subacute periods of myocardial infarction. It is allowed to sit from the 3rd week, to walk from the 4th week (depending on the course of the disease and complications).

11. Acute vascular insufficiency (causes).

Mental shock, blood loss, injury, pain, poisoning.

12. What enemas can be recommended for a patient with myocardial infarction? Hypertonic, oil, medicinal.

Option 3

1. Deontology in caring for patients with circulatory diseases

Sensitivity, attention, tact when caring for bedridden and seriously ill patients, instilling confidence in recovery, conversations with caregivers about nutrition and rules of patient care.

2. First aid for fainting.

Fresh air, inhalation of ammonia, unfasten the collar of clothing, lie on your back, head end below the body.

3. Methods of oxygen administration.

The inhalation method of introducing oxygen through a mask, nasal catheters, oxygen supply is carried out from a cylinder and by a centralized method. Subcutaneous and rectal methods of administration.

4. Emergency care for collapse.

Subcutaneous administration of cordiamine, caffeine, camphor, mezatone, ephedrine and glucocorticoids as prescribed by a doctor.

5. Emergency care for shock.

Painkillers as prescribed by a doctor: analgin, baralgin, drugs in combination with diphenhydramine or pipolfen. When blood pressure drops, cordiamine, mesaton, norepinephrine, reopolyglucin, intravenous glucocorticoid hormones.

6. Emergency first aid for an attack of cardiac asthma.

Establish an inhalation supply of oxygen moistened with alcohol, create an orthopneic position for the patient, apply tourniquets to three limbs, administer a diuretic (Lasix), and invite a doctor.

7. The role of the nurse in caring for patients with circulatory diseases.

Monitoring and careful adherence to the diet, monitoring physiological functions, general condition and physiological functions, transfer of products, and implementation of medical procedures.

8. Nurse tactics when caring for patients with myocardial infarction.

Monitoring diet, hygiene, physiological functions, general condition.

Monitoring blood pressure and blood pressure, performing medical procedures.

9. Therapeutic nutrition for patients with heart failure.

Diet according to table 10, in cases of severe edema - table 10a, excluding fatty and spicy foods. The intake of salt and spicy foods is limited.

10. Equipment for the cardiology department.

Control over drinking regime and diuresis, nutrition. Regularly count pulse, number of respirations per minute, measure blood pressure and record these indicators on a temperature sheet.

11. Caring for patients with heart failure.

A specialized cardiology department should be equipped with devices for measuring blood pressure, syringes, sterile systems, cardiac monitors, defibrillators, oxygen, electrocardiographs, cabinets with sets of medications for emergency medical care.

12. Therapeutic nutrition for a patient with myocardial infarction.

Small in quantity, fractional (6 meals a day), low-calorie diet No. 17, introduction of foods rich in magnesium and potassium, limitation of salt, spicy foods, spices.

Tests-tasks to control the initial level of knowledge

1. What is blood pressure called?
Blood pressure is the force with which blood acts on the walls of blood vessels.

2. Blood pressure indicators in a healthy person.
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 method for measuring blood pressure according to Korotkoff?
1. The sphygmamanometer cuff 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, install a phonendoscope in the elbow bend.
3. Shut off the air valve and begin to increase the air pressure in the cuff using a bulb. The pressure should be increased until pulsation is heard, and by another 20-30 mmHg. Art. higher.
4. By slightly loosening the air valve screw, air is slowly released, the moment when vascular sounds appear corresponds to the systolic (maximum) pressure.
5.The moment of disappearance of vascular sounds corresponds to diastolic (minimum) pressure.

5. List the most common mistakes when determining blood pressure.
1. The arm muscles are not relaxed.
2. Place the cuff over the clothing.
3. Blood pressure measurement is carried out once, and not 2-3 times.
4. When working with a mercury sphygmamanometer, you should strive to ensure that the zero mark of the manometer is at the level of the heart.

Situational tasks

1. To determine pulse deficiency in a patient with cardiosclerosis and cardiac arrhythmia.
Task: a) Methodology.
b) What rhythm disturbance is indicated by a pulse deficiency?
*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 when determining a threadlike pulse. Task: a) What does this indicate? b) What should the nurse do?
*Answer:*a) About acute cardiovascular failure.
b) Urgently put the patient to bed, inhale ammonia vapor, call a doctor.

3. The patient has burning, squeezing pain behind the sternum, radiating to the left arm.
Assignment: First aid tactics.
*Answer:*Nitroglycerin (1 tablet 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, and chest pain persists.
Task: a) Which department should the patient be admitted to?
b) Transporting 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) To the cardiology department, to the intensive care ward.

5. The patient with myocardial infarction (2nd day) got out of bed, went to the toilet, washed, and sat down to have dinner in the dining room.
Task: a) Indicate violations in the regime.
b) Why is violation of the regime dangerous for patients with myocardial infarction?
*Answer:*a) Strict bed rest is indicated for patients with acute myocardial infarction. b) Death may occur from cardiac arrest and pulmonary edema.

6. On the 7th day of illness, a patient with acute myocardial infarction suddenly developed an attack of suffocation, cough with foamy bloody sputum, cold sweat, weakness, and cyanosis.
Assignment: Tactics of the nurse before the doctor arrives.
*Answer:*a) Place the patient in an orthopneic position or with the head of the bed elevated. b) Give oxygen (inhalation), moistened with alcohol vapor.
c) Apply tourniquets to 3 limbs. d) Call a doctor immediately.

7. After mental stress, a patient suddenly developed acute vascular insufficiency (fainting).
Task: a) How will blood pressure and pulse change?
b) Tactics of the nurse before the doctor arrives.
*Answer:*a) The pulse is not detectable, may be thread-like, blood pressure drops to zero.
b) Place the patient on his back, with the head down, give ammonia, fresh air, rest, administration of cordiamine, caffeine, intramuscular mesatone (as prescribed by the doctor) are necessary.

8. The patient has an injury, an open fracture of the lower limb, loss of consciousness has occurred, breathing has stopped, pulse and blood pressure are not determined.
Assignment: Nurse tactics.
*Answer:*a) Artificial respiration and closed cardiac massage, cordiamine, caffeine, lobelia, cititon, parenterally (as prescribed by a doctor), after breathing has been restored - oxygen inhalation.

9. The patient has a hypertensive crisis. Blood pressure 260/130 mm Hg. Art. Task: a) What is the danger of this condition?
b) What should be the regimen for such patients?
c) Emergency care tactics.
*Answer:*A). A stroke or myocardial infarction may develop. b) Bed.
c) Rest, cold to the head, warmth to the feet, quick-acting antihypertensive drugs (as prescribed by a doctor), as well as bloodletting, leeches, diuretics.

10. The patient has heart failure, severe swelling of the lower extremities, ascites. Assignment: What is the diet of such patients?
*Answer:*Diet No. 10a and 10, with limited salt and liquid. Fasting days - fruit, vegetable, cottage cheese, apple.

11. A patient with myocardial infarction developed an acute attack of pain in the heart area and shortness of breath after a heavy meal.
Task: a) Why did the attack of pain 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 inhalation, irrigation with chloroethyl or nitromintment on the heart area.

12. A patient with heart disease. After being on bed rest for a month, I began to experience pain in the area of the sacrum, heels, shoulder blades, local redness, and weeping.
Assignment: a) What are these manifestations? b) Nurse tactics.
*Answer:*a) Bedsores are trophic disorders in the skin and subcutaneous fat.
b) Improve the patient's hygiene: turn the patient several times (a day, wipe the skin of the back with camphor alcohol, place rubber circles under the places of greatest contact with the bed, make sure that there are no folds on the bed linen.

Situational tasks and questions for the final control of students' knowledge.

1. The young man's blood was taken from a vein for analysis. Suddenly he turned pale, covered in cold, sticky 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 attacks of squeezing and pressing pain behind the sternum and in the left half of the chest, and at the same time severe pain in his left arm. Pain occurs with any slight physical activity, sometimes at night, during sleep, often after eating.
Think about the diagnosis. Your actions during an attack.
3. Describe diet No. 10, used in the treatment of patients with cardiovascular diseases.
4. How to determine if a patient has edema?
5. The significance and methodology for determining diuresis in patients with damage to the cardiovascular system.
6. Features of general care for patients with diseases of the cardiovascular system.
7. Examine the pulse, characterize it and depict it graphically.
8. Determine blood pressure using the Korotkoff method, write it down and display it graphically.

Control questions.

1. Methods for determining blood pressure (BP) and pulse (P), properties of the pulse.
2. List the main symptoms of diseases of the circulatory system.
3. Describe the main symptoms of acute vascular insufficiency (fainting, collapse, shock).
4. Principles of pre-hospital emergency care for acute vascular insufficiency.
5. Describe the main symptoms of acute heart failure (cardiac asthma, pulmonary edema).
6. Principles of emergency first aid for acute heart failure.
7. Caring for patients with circulatory diseases.
8. Features of care for elderly and senile patients with circulatory insufficiency.
9. Basicsymptoms of chronic heart failure.

TEST CONTROL

1. What propertiesDoes the pulse characterize the level of blood pressure? a) frequency;
b) rhythm;
c) with rare heart contractions.

2. Pulse deficiency 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) the difference between systolic and diastolic pressure;
b) simultaneous recording 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 activity;
b) under emotional stress; c) during sleep;
d) during a rapid transition from a horizontal to a vertical position.

5. What are the distinctive features of pain in the heart area that are characteristic of an attack of angina?
a) compressive nature; b) piercing character;
c) retrosternal localization;
d) connection with physical stress;
e) duration for several hours; f) duration of several minutes; g) spread of pain to the left shoulder, scapula;
h) disappearance after taking nitroglycerin.

6. What features of an angina attack give reason to suspect the development of myocardial infarction?
a) the occurrence of an attack of angina at rest;
b) the duration of the attack is several hours; c) lack of effect after taking nitroglycerin;
d) the occurrence of a repeated attack of angina during the day.

7. If an attack of angina occursthe patient is recommended to: a) stop physical activity;
b) taking nitroglycerin;
c) placing mustard plasters on the heart area; d) administration of adrenaline, cordiamine;
e) oxygen inhalation.

8. What assistance should be provided to a patient with pulmonary edema? a) give a semi-sitting position;
b) apply tourniquets to the lower limbs;
c) administer blood replacement fluids (reopolyglucin);

d) place mustard plasters on the heart area;
e) give inhalation of a mixture of oxygen and ethyl alcohol vapor;
f) administer diuretics and cardiac glycosides.

9. What drugs should be used for cardiogenic shock? a) cardiac glycosides;
b) diuretics;
c) blood replacement fluids; d) corticosteroids.

10. Chronic heart failure is characterized by:
a) shortness of breath;
b) swelling;
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) creating an elevated headboard; d) oxygen therapy;
e) limiting the consumption of liquid and table salt; f) frequent change of underwear and bed linen.

12. What assistance should be provided to a patient who faints? 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 the cotton wool with ammonia to smell.

SUBJECT12: "OBSERVATION AND CARE OF PATIENTS WITH DISEASES ORGANSDIGESTION"

Educational goal: deontological principles of caring 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. Teach students to examine a patient, paying especially close 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. Be able to prepare patients for the study of gastric juice and duodenal intubation.
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 logical structure of the topic.
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. Five- and two-gram syringes, twenty-gram syringes, etc., Janet syringe.
6. Esmarch mug, rubber bulb for enemas.
7. Gas outlet pipe, bedpans.
8. Sterile tubesfor bacteriological examination of the contents of the pharynx, nose, tonsils.
9. Glass funnel with a capacity of about a liter.
10. Table with characteristics of diets of the Institute of Nutrition of the Russian Academy of Medical Sciences. Fasting days.

The student must know:

1. Oral care.
2. Providing first aid for vomiting.
3. Collection of vomit and sending it to the laboratory.
4. Signs of gastric bleeding and first aid for them.
5. Probingstomach. Types of probes. Technique of execution, preparation of the patient.
6. Gastric lavage. Execution technique. Preparation of the patient and necessary supplies. Caring for patients after the procedure.
7. Duodenal sounding. Techniqueexecution. Preparing the patient.
8. Preparing the patient for x-ray examination of the stomach and gallbladder.
9. Features of care and preparation for research of elderly and senile patients.
10. Taking stool and sending it to the laboratory. Preparing the patient for stool sampling for occult blood.
11. Intestinal bleeding and first aid.
12. Storage, disinfection and delivery of the vessel to the patient.
13. Flatulence and insertion of a gas tube.
14. Enemas. Types of enemas. Indications and contraindications for enemas.
15. Method of administering enemas. Position of the patient. Disinfection of the system and tips. Storing enemas.
16. Sigmoidoscopy, colonoscopy (concepts).
17. Preparationpatient for an X-ray examination of the intestine.
18. Features of care and preparation for research of elderly and senile patients.

The student must be able to:

1. Treat the oral cavity of a seriously ill patient (reinforce the skill),
2. Provide first aid for vomiting.
3. Collect vomit and send it to the laboratory.
4. Provide first aid for gastric bleeding.
5. Prepare the patient for gastricand duodenal intubation.
6. Flush the stomach with a tube. Provide first aid in case of poisoning.
7. Prepare the patient for an X-ray examination of the stomach.
8. Collect stool for general analysis and occult blood and send it to the laboratory.
9. Provide assistance with intestinal bleeding.
10. Insert the gas outlet tube.
11. Disinfect and serve the vessel to the patient (reinforcement of the skill).

12. Be able to do cleansing, nutritional, hypertonic, drip, oil enemas.
13. Prepare the patient for x-rayintestinal examination.

Plan and organizational structure of the lesson.

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

1. List the main symptoms for 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. Preparing the patient and necessary supplies. Indications and contraindications. Technique.
5. Gastric intubation. 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. Preparing the patient. Methodology and technique for performing the procedure, possible complications.
9. Taking stool for examination and sending it to the laboratory. Preparing patients for stool sampling for occult blood (Gregersen reaction)
10. Method of administering enemas. Disinfection of systems and tips.
11. Technique for inserting a gas outlet tube.
12. Preparing patients for x-ray examination of the gastrointestinal tract.
13. Preparing patients for endoscopic examination.
14. Laparocentesis. Methodology and technology. Complications.

6. Demonstration of patients with diseases of the digestive system.
7. Controlperforming manipulations by students in the therapeutic department.
9.Discussion of the results of independent work.
eleven. Monitoring and correction of the final level of learning material (solving situational problems).

Questions to control the initial level of mastery of educational material

Option 1

1. How are bedpans disinfected? In a 1% chloramine solution.
2. What types of endoscopic examination are performed in the gastroenterology office? Esophagogastroscopy, colonoscopy, rectoscopy.
3. Is it possible for a patient with sudden abdominal pain to be given an anesthetic before being examined by a doctor? No.
4. What stimulators of bile secretion are used during probeless 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 the appearance of coffee-ground vomiting indicate?

For light bleeding from the vessels of the stomach.

6. What does it indicate?the appearance of tarry stool?
For bleeding from the gastrointestinal tract (most often from the duodenum).

7.What should you think about if you see red blood in your stool? About
bleeding from hemorrhoidal veins or from the large intestine.

8. What is the patient's diet if there is a suspicion of gastrointestinal bleeding? Food should be cold, carefully processed mechanically and thermally. Exclude-
include sour, spicy foods and spices, concentrated meat and vegetable broths.

9. How is an esophagogastroduodenoscope disinfected?
Soap solution, water and peroxide solution.

10. What is the difference between cystic bile obtained through duodenal intubation?
Bubble bile is thick and dark green in color.

11. How to collect feces for coprogram In
a dry, clean container.

12. What conditions must be observed when examining stool for protozoa?
They look for protozoa in completely fresh, still warm feces.

Option 2

1. List the main symptoms of gastrointestinal diseases. Pain, nausea, vomiting, heartburn, loss of appetite, weight loss, bowel dysfunction.

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 test breakfast consist of? 40 g of stale bread and 200 g of tea.

6. List the causative agents of gastric secretion used in fractional intubation.
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 a patient for stool examination for occult blood?
Gregersen's reaction: Prescribes a diet excluding meat for three days. fish. Do not brush your teeth (to avoid getting blood from the gums).

9. What types of enemas do you know?
Cleaning, siphon,medicinal, nutritional, emulsion.

10. How do you prepare a patient for a colonoscopy?
A slag-free diet is prescribed 2-4 days before the test, 30-40 ml of castor oil is given after breakfast the day before the test, dinner is cancelled, cleansing enemas are given in the evening and in the morning 2 hours before the test until the intestines are completely emptied.

11. What portions do you receive during duodenal intubation?
Choledochal (portion A), cystic (portion B), hepatic (portion C).

12. What is first aid for gastrointestinal bleeding? Place the patient in bed, raising the head of the bed, place a pillow on the epigastric region.
pack with ice, 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 changes in stool color occur with obstructive jaundice?
Discoloration of stool.

3. In what form should bile obtained through duodenal intubation be delivered to the laboratory? Warm.

4. What should be done for a patient who has severe flatulence? Place a gas outlet tube, give carbolene and dill water.

5. What should be done if the patient is vomiting?
Provide assistance to prevent aspiration of vomit. Collect vomit for examination.

6. Where do smears for bacteriological examination come from?
From the throat, tonsils, nose, rectum.

7. What should be indicated on the label of glassware containing material intended to be sent to the laboratory?

Last name, first name, patronymic of the patient, date. department, ward, purpose of the study, doctor's name.

8. Is it possible to place a heating pad on a 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 introducing medicinal and nutrients into the body.

10. In what cases is a siphon enema prescribed?

If you suspect intestinal obstruction, if there is no effect from a cleansing enema and taking 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 inserting a probe into a patient?

Bleeding, the presence of a disintegrating tumor of the stomach or esophagus, stenosis of the esophagus, varicose veins of the esophagus.

Tests-tasks of the first level of mastery 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 slightly off the bed.

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 down, 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 your mouth or wipe the oral cavity (if the patient is unconscious) with a 2% solution of sodium bicarbonate or a 0.01% solution of potassium permanganate.

5. To stop vomiting, you can give mint drops, cold water acidified with citric acid, a 0.5% solution of novocaine, and swallow pieces of ice.

2. What is emergency medical treatment for stomach bleeding?

1. Create complete physical and mental peace, put you to bed with your head bowed low.
2. Place 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. Methods of gastric lavage.

1. Ingest 1-2 liters of warm soda water.

2. Using a gastric tube.

5. What is the principle of gastric lavage using a tube? 1.

Siphon principle. One vessel is a funnel, the other is a stomach. When the funnel is raised, liquid will flow into the stomach, and when lowered, liquid will flow from the stomach into the funnel.

6. Accessories necessary for gastric lavage.

1. Thick gastric tube 1-1.5 m long.

2. Glass funnel with a capacity of 1 l, clearance 8 mm.

7. Solutions used for gastric lavage.

1. 2% solution of sodium bicarbonate 2. Weak solution of potassium permanganate.

3. Boiled water.

8. During gastric lavage, streaks of blood appeared. What should the nurse do in this case?

The appearance of blood streaks indicates that the procedure should be stopped unless the washing is associated with acid poisoning.

9. How to perform gastric lavage in weakened patients?

Washing is carried out in bed. The patient is placed on his side, his head must 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 mastery 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. For what purpose are cleansing enemas used?

To cleanse the lower intestine of feces and gases during stool retention, before X-ray examinations of the gastrointestinal tract and kidneys, before operations, childbirth, induced abortion, and medicinal enemas.

3. The principle of operation of a cleansing enema.

The effect of cleansing enemas is based on stimulating intestinal peristalsis with water, softening and crushing feces.

4. What accessories are used for performing cleansing enemas?

1. Esmarch mug 2. Sterile tips. 3. Tripod for hanging Esmarch's mug 4. Vaseline 5. Thermometer. 6. Oilcloth.

5. What volume of water is needed for a cleansing enema and at what temperature? 1-1.5 liters at room temperature.

6. How far 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 a siphon enema.

The siphon method (multiple intestinal lavage) is the principle of communicating vessels. One of them is the intestine, 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 attached to 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. A weak solution of potassium permanganate 2. 2% solution of sodium bicarbonate.

3. Boiled water.

11. At what distance is the probe inserted into the rectum during 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 introducing medicinal and nutritional substances 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 - Xia.
15. Preparing the patient before a medicinal enema.
A cleansing enema is given 30-40 minutes before the medicinal enema.
16. Whichmain substances used in medicinal enemas?
1. Painkillers 2. Sleeping pills 3. Sedatives.
17. What is the purpose of drip enemas?
To compensate for large losses of fluid and 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 drop method? With what frequency?
1. 3 liters of liquid 2. 60-80 drops per minute.
20. Volume and temperaturefluid used in nutritional 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 administer nutrients by mouth and as an additional method of introducing nutrients into the body.
23. For which stool examination is necessary preliminary preparation of the patient and what does it consist of?
When examining stool for occult blood, the patient is prepared for 3 days, excluding meat and fish products, egg dishes, green vegetables, tomatoes and medications containing iodine, bromine and iron from the diet; on the 4th day the stool is sent for examination.
24. What stool examination requires the use of special glassware?
Feces for dysentery are sent in special test tubes containing an English mixture of glycerin and alcohol, which well preserves dysentery bacilli.
25. How is stool collected for bacteriological examination?
For bacteriological examination of feces, there are sterile test tubes with cotton swabs wrapped on a wire. The patient is placed on his right side, the buttocks are spread 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 wall.
26. Which stool test is mandatory for every patient?
A stool test to determine helminth eggs is mandatory for every patient.
27. Which x-ray examination requires special preparation of the patient? X-ray examination of the gastrointestinal tract requires special preparation.
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 of thoroughly cleansing the intestines using a cleanser.
new enemas in the morning and evening. Follow a diet for 1-2 days before the study, excluding foods that cause flatulence. For flatulence - take activated carbon, enzymes (festal).

Questions for the final control of students' knowledge.

1. List the main symptoms of stomach diseases.
2. What are the symptoms of stomach bleeding? What is first aid for bleeding?

3. Emergency medical care for vomiting.
4. Methodology for collecting vomit for laboratory research.
5. What is the preparation of patients for gastric and duodenal intubation?
6. Indications and technique of gastric lavage.
7. Explain the technique for taking gastric contents with a thin probe.
8. Explain the method of duodenal intubation.
9. Describe the method of preparing a patient for an X-ray examination of the stomach.
10. Features of care and preparation for research of elderly and senile patients.
11. What is the procedure for examining a patient with dysfunction of the digestive organs?
12. What are the features of caring for patients with dysfunction of the digestive organs, taking into account the characteristics of the elderly and senile age?
13. How to properly take smears for bacteriological examination?
14. How to perform gastric lavage?
15. How should a fractional study of gastric secretion and duodenal contents be carried out?
16. How to prepare patients: for x-ray examination of the gastrointestinal tract, for endoscopic examination of the stomach and intestines?
17. Preparing the patient for stool examination for occult blood.
18. What is the procedure for delivering research material to the laboratory?
19. How to performcleansing, siphon, medicinal, drip, nutritional and other enemas?
20. What is the technique for installing a gas outlet tube?

Situational tasks

1. A patient with a gastric ulcer began to vomit the color of "coffee grounds", he turned pale, his blood pressure dropped, and his pulse became thread-like.
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 gastric ulcer is prescribed a stool test for occult blood. Assignment: Why is this research being carried out? How to prepare a patient.
A fecal occult blood test is performed to exclude bleeding from the gastrointestinal tract. The patient is prescribed a diet excluding meat and fish three days before the study. Do not brush your teeth (possible bleeding from the gums may give a positive reaction to occult blood).

3. The patient developed nausea, drooling, and vomiting food.
Task: What should the nurse do?
Place the patient in bed on his side with his head bowed over the pelvis. Use a spatula to clean your mouth from food masses. Give water to rinse your mouth. Call a doctor.

4. During a cleansing enema, the patient is bothered by flatulence.
Task: What should the nurse do?
Stop introducing water into the rectum. Insert the gas outlet tube. Call a doctor.

5. The patient was prescribed a medicinal enema. Task: What kind of preliminary enema is needed? It is necessary to pre-administer a cleansing enema.

6. A patient with a stomach ulcer has severe heartburn?

Assignment: What should I give him? Baking soda or Bourget's mixture.

7. A patient with gastric ulcer has frequent, loose, black stools. Assignment: Nurse behavior?
Put the patient to bed, put cold on the stomach, call a doctor, call a laboratory assistant to determine a general blood test, then repeat the hemoglobin test in an hour.

8. When taking gastric juice with a thin probe, blood streaks appeared in one of the tubes. Task: What needs to be done? You should definitely consult your doctor.

9. A duodenal intubation probe was inserted into the patient, but bile does not flow out of it. Task: What should the nurse do?
The nurse should go with the patient to the X-ray room, where behind the screen they should check the location of the probe (olive).

10. A patient with gastric ulcer developed severe pain in the epigastric region. Assignment: What is the nurse's tactics?
The nurse should call the doctor. The administration of any painkillers is strictly prohibited.

11. The patient was prescribed cholecystography.
Task: How to properly prepare a patient for a study?
Three days before the study, the patient is prescribed a diet with limited carbohydrates, carbolene, and dill water. The night before, it is advisable to eat a teaspoon of honey. On the day of the examination, do not eat or drink water until intravenous
cholecystography.

12. The patient was prescribed irrigography. Assignment: How to properly prepare him for this study?
Three days before the study, the patient is prescribed a diet with limited carbohydrates, carbolene, and 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 examination, they begin to give a cleansing enema “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, nutritious, oil). Indications and contraindications for their use. Execution technique.
4. X-ray examination of the gallbladder and bile ducts with oral and parenteral administration of contrast agents. Indications and contraindications. Techniques for preparing for research.
5. Alcohol and the gastrointestinal tract.
6. Diet therapy for patients with stomach diseases (gastritis, peptic ulcer). Characteristics of diets.
7. General characteristics of the diet for diseases of the liver and gall bladder. Diet.
8. Diet No. 1a - indications for its use, general characteristics. Diet.
9. Diet No. 2 - indications for its use, purpose of use, general characteristics, diet.

Final control of knowledge of students' skillsis carried out independently by performing the above skills, under the supervision of a teacher.

TEST CONTROL.

1. Distinctive signs of peritoneal pain are: a) cramping or aching
nature;
b) sharp, cutting nature; c) clear
localization;
d) uncertain localization, diffuse pain; e) increased
pain when moving;
f) pain is accompanied by tension in the muscles of the abdominal wall.

2. Why is persistent, uncontrollable vomiting dangerous?
a) disturbance of the electrolyte balance of the body;
b) dehydration of the body;
c) involvement of the peritoneum in the pathological process;
d) tears in the mucous membrane of the esophagus and stomach with subsequent bleeding.

3. What measures should be taken in case of flatulence? a)
insertion of a gas outlet tube;
b) limiting foods rich in fiber and starch in the diet; c) the use of activated carbon,
carminative herbs;
d) gastric lavage;
e) 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) decrease in blood pressure; e)
tachycardia;
f) cyanosis;
g) pallor of the skin.

5.In what diseases is gastrointestinal bleeding most common? a) inflammation of the gastric mucosa;
b) impaired motor function of the stomach; c)
malignant tumors of the stomach;
d) erosive-ulcerativestomach lesions;
e) rupture of varicose veins of the esophagus and stomach.

6. What measures should be taken in case of gastrointestinal bleeding? a) ensuring complete peace;
b) cold on the stomach;
c) administration of vikasol, calcium chloride;
d) urgent X-ray and endoscopic examination of the gastrointestinal
tract
e) performing a siphon enema;
f) performing a cleansing enema; g)
gastric lavage.

7. Contraindicationsfor gastric lavage:
a) gastric bleeding;
b) late period after chemical burns of the pharynx and esophagus; c)
cerebrovascular accident;
d) myocardial infarction;
e) narrowing of the gastric outlet;
f) chronic renal failure with the development of uremic gastritis.

8. Why is it not advisable to use cabbage broth as a secretion stimulator during fractional gastric intubation?
a) the decoction is contraindicated for certain diseases;
b) the decoction is too weak a stimulator of gastric secretion; c) the decoction
is too strong a stimulant of gastric secretion.

9. How to check the correct position of the duodenal tube? a)
introducing air through a probe;
b) X-ray control;
c) introducing a gallbladder contraction stimulator through a probe.

10. The following is used as a stimulator of motor activity of the gallbladder during duodenal intubation:
a) 33% solution of magnesium
sulfate; b) histamine;
c) 25% solution of magnesium
sulfate; d) 40% glucose solution;
e) heated vegetable oil; e) meat
broth.

11. For what purpose is chromatic duodenal sounding used?
a) for more accurate differentiation of duodenal contents from gastric contents; 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. For what purpose are hypertensive enemas used? a) to
introduce fluid into the body;
b) for bowel movement with atonic constipation; c) for bowel
movements during spastic constipation; d) to combat edema.

14. In what cases are siphon enemas used? a) for
diagnosing intestinal obstruction;
b) for the treatment of intestinal obstruction;
c) for the purpose of administering fluid when the body is dehydrated;

d) before administering medicinal mysms; d)
in case of poisoning.

15. What tip is inserted into the rectum when performing siphon enemas? a) plastic or
glass, 10-12 cm long;
b) rubber, 10-12 cm long; c)
rubber, 20-30 cm long;
d) thick gastric tube or intestinal tube.

16. What amount of washing liquid must be prepared to perform a siphon enema?
a) 1-1.5 l;
b) 50-100 ml
c) 5-6 l;
d) 10-12 l.

17. Medicinalenemas:
a) are most often microenemas;
b) used for administering drugs. well absorbed in the colon;
c) are used for local effects on the mucous membrane of the rectum and sigmoid colon;
d) used to treat intestinal obstruction.

18. Features of preparing a patient for an X-ray examination of the stomach: a) always on
the day of the examination on an empty stomach;
b) be sure to have a cleansing enema the day
before; c) necessarily a slag-free diet.

19. Features of preparing a patient for cholecystography:
a) on the day of the study on an empty stomach;
b) a cleansing enema is required the evening before and in the morning on the day of the study;
c) be sure to take an iodine-containing X-ray contrast drug 15-17 hours before the study;
d) be sure to have a “fat” breakfast with butter before taking a radiocontrast drug.

20. Features of preparing a patient for irrigoscopy:
a) on the day of the study on an empty stomach;
b) cleansing enemas are required the night 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;
G)conducting a preliminary test to determine the tolerability of the radiocontrast agent; e)
administration of atropine 30 minutes before the study.

21. Features of preparing a patient for ultrasound examination (echography) of the abdominal
organs:
a) following 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

SUBJECT13. MONITORING AND CARE OF PATIENTS WITH DISORDERS OF RENAL AND URINARY TRACT FUNCTIONS

Target:deontological principles of caring for patients with kidney and urinary tract diseases and carrying out urological manipulations.

Lesson equipment:patient observation sheets for recording daily diuresis, urine collection jars, labels, urinals (male and female), disinfectants, soft and hard catheters, equipment for urological or therapeutic departments, phantoms.

The student must know:

1. Observation of urination: frequency, character. Measurement of urine output.
2. Taking urine for examination and sending it to the laboratory. Preliminary toileting of the patient.
3. Methods for collecting urine for examination for general analysis, according to Nechiporenko, according to Addis-Kakovsky, according to Zimnitsky, for diastase, for the determination of sugar and acetone, glucosuric profile, bacteriological examination.
4. Urinals.Disinfection, storage and serving to the patient.
5. Measures for urinary retention, calling reflexes to urinate.
6. Bladder catheterization. Types of catheters. Technique.
7. Preparing the patient for x-ray examination.
8. Cystoscopy,chromocystoscopy. Bladder lavage.
9. General care for seriously ill patients with kidney disease.
10. Features of caring for elderly and senile patients.

The student must be able to:

1. Measure daily diuresis and evaluate the data obtained.
2. Collect urine for testing and send it to the laboratory.
3. Wash the patient (consolidation of the skill).
4. Producecatheterization of the bladder with a soft catheter.
5. Give the patient a urinal bag, performits disinfection (consolidation of the skill).
6. Realizeprevention of bedsores (skill consolidation).
7. Help with acute urinary retention, induce a reflex to urinate.
8. Prepare the patient for 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 by the teacher. Target setting.
4. Homework assignment.
5. Monitoring and correction of the initial level of knowledge:

1. List the symptoms characteristic of patients with kidney and urinary diseases.
2. Observation of urination: frequency, character, diuresis measurement.
3. Changes in the quantity and quality of urine excreted:

- Daily diuresis is the total amount of urine excreted by a person during the day (SD = 1000-1800 ml)
- Oliguria – urine output 500 ml per day.
- Anuria is a complete cessation of urine flow into the bladder.
- Ischuria is urinary retention caused by the inability to empty the bladder.

- Polyuria – increased daily diuresis (DM more than 2 liters)
- Nocturia is the predominance of nighttime diuresis over daytime.
- Enuresis is urinary incontinence.

4. Diuresis and its disorders. Urinary disorders:
- Dysuria - urinary disorders.
- Pollakiuria – increased frequency of urination. (more than 6 times a day)
- Strangury is difficulty (painful) urination.
- Ishuria is his delay.
- Tenesmus is a frequent and often fruitless urge.

5. Emergency care for acute urinary retention.

6. Taking urine for examination and sending it to the laboratory. Preliminary toileting of the patient.

7. Method of collecting urine for research:
- Clinical urine analysis.
- Urinalysis according to Nechiporenko
- Urinalysis according to Addis–Kakovsky
- Urine analysis according to Zimnitsky
- Volhard test
- Urine analysis for determination of sugar and acetone
- Urine analysis for diastase
- Glucosuric profile
- Bacteriological examination of urine

8. Bladder catheterization. Types of catheters. Technique. Possible complications.

9. Preparing patientsfor instrumental urinary examinations. syst.

10. Observation and care of patients with urinary retention.

11. Observation and care of patients with urinary incontinence.

12. Features of caring 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. Monitoring and correction of the final level of learning material. (solving 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 sacral area and pain in the urethra.
2. Urinary disorders.
3. Changes in the quantity and quality of urine excreted.
4. Swelling, mainly on the face.

2. What dysuric disorders do you know?
1. Pollakiuria.
2. Strangury.
3. Ishuria.

3. What changes do you know in the amount of urine excreted?
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. From women, urine is taken from the “middle portion”.
4. Urine containers 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. Namepossible complications during bladder catheterization.
1. Introduction of infection.
2. Damage to the mucous membrane of the urethra and bladder.
3. Urethral fever.

7. What is the preparation of patients for x-ray examination of the urinary organs?
1. Within 2-3 days, the patient should be put on a diet excluding gas-forming products.
2. For flatulence, carbolene is prescribed.
3. The night before and in the morning before the study, a cleansing enema is given.

8. What reasons can cause acute urinary retention? 1, 2, 3.
1. Adenoma, prostate cancer or acute prostatitis.
2. Stricture of the urethra.
3. Urethral stones.

Final control of students' knowledge.

1. Explain the method of collecting urine for laboratory tests.
2. How to determine daily diuresis and evaluate its data?
3. Explain the technique of bladder catheterization and demonstrate it on a phantom.
4. What complications can occur during 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 emergency care for acute urinary retention?
8. What is 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 seriously ill patients with kidney diseases.

TEST CONTROL.

1. What diuresis disorder is called nocturia? a) decrease in the amount of daily urine to less than 500 ml; b) an increase in the amount of daily urine more than 2 liters; c) predominance of night diuresis over daytime; d) increased frequency of urination.

2. For what purpose is a three-glass sample used when examining urine?
a) clarification of the part of the urinary system (urethra, kidneys, bladder), which is the source of hematuria or leukocyturia;
b) assessment of renal concentration function;
c) counting the number of formed elements (erythrocytes, leukocytes, cylinders) in urine using the Kakovsky-Addis method.

3. How urine is collected for research using the method. Nechiporenko? a) during the day every 3 hours;
b) for 10 hours (from evening to morning);

c) once every 3 hours;
d) an average portion of morning urine.

4. What is the advantage of the Nechiporenko test compared to a general urine test?
a) allowsbetter assess the concentration function of the kidneys;
b) allows you to more accurately identify latent forms of inflammatory kidney diseases (for example, pyelonephritis);
c) makes it possible to better assess the effectiveness of treatment;
d) makes it possible to identify pathogens and determine their sensitivity to antibiotics.

5. What are the results of the Zimnitsky test?indicate a decrease in renal concentration function?
a) predominance of night 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 preparing patients for 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) following 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 area or a hot bath
c) the use of antispasmodics (for example, baralgin); d) use of anticholinergics (for example, atropine); e) 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;
d) swelling.

9. Atthe treatment of patients with chronic renal failure is recommended: a) limiting the consumption of table salt;
b) reducing the protein content in the diet; c) restriction of fluid intake;
d) control over blood 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, use:
a) catheterization of the bladder; b)
cystostomy;
c) subcutaneous administration of
proserin; d) subcutaneous
administration of atropine;
e) use of antispasmodics (no-spa, baralgin);
f) irrigation of the external genitalia with warm water.

12. For urinary incontinence, it is recommended:
a) use of a urinal;
b) inhalation of adiurecrine into the nasal
cavity; c) thorough toilet of the skin;
d) control over the cleanliness of underwear and bed linen;
e) applying a heating pad to the lumbar region;
f) subcutaneous administration of proserin.

SUBJECT14. FEATURES OF CARE FOR THE SERIOUSLY ILL AND AGONIUS.

Educational goal:deontological aspects when caring for seriously ill and suffering patients, carrying out resuscitation measures. Issues of medical deontology and ethics when declaring death, handling a corpse, and talking with relatives.

Lesson equipment:

1. Patient observation sheets.
2. Equipment of the intensive care and resuscitation department: functional bed, bedspreads, urinals, rubber ring, disinfectants, bed and underwear, equipment for oxygen therapy and resuscitation.
3. Phantom "Vasya" for training in resuscitation measures.
4. Kits for emergency procedures: venesection, venipuncture. intra-arterial injection of blood and its substitutes.
5. An untouchable fund of pharmacological agents for emergency care.

The student must know:

1. General rules for caring for seriously ill and dying patients. Their position in bed, prevention of bedsores, oral care, monitoring of all physiological functions.
2. The concept of resuscitation. Signs of clinical death.
Technique for providing first aid in case of clinical death.
3. Features of the work of medical staff in intensive care units. Individual post.
4. Caring for patients during fever, delirium and hallucination, in an unconscious state.
5. Care for the dying.
6. Features of caring for seriously ill elderly and senile patients.
7. Signs of biological death. Handling a corpse.

The student must be able to:

1. Monitor various functions of a seriously ill patient.
2. Provide first aid in case of clinical death.
3. Determine death and handle the corpse.

4. Feed a seriously ill patient (reinforcement of skill).
5. Change the underwear and bed linen of a seriously ill patient (reinforcement of the skill).
6. Examine the oral cavity of a seriously ill patient and carry out treatment (consolidation of the skill).
7. Realizeprevention of bedsores (skill consolidation).
8. Provide a bedpan and urinal (reinforce the skill).

Plan and organizational structure of the lesson.

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

1. Features of caring for seriously ill and dying patients. Their position in bed, prevention of bedsores, oral care, monitoring of all physiological functions.
2. Borderline states between life and death: (Terminal states)
- Preagonal state
- Terminal pause
- Agony
- Clinical death

3. Signs of clinical death. Techniques for providing first aid.
4. The concept of resuscitation. Describe resuscitation measures:
- Heart massage (indirect and direct)
- Artificial ventilation (artificial respiration "mouth to mouth" and "mouth to nose")

5. The concept of "biological death", its statement.
6. List the main actions of medical staff in handling a corpse.
7. Intensive care units and principles of their work.
8. Features of the work of medical staff in intensive care units.
9. Resuscitation measures and first aid for poisoning.
10. - // -when drowning.
11. - // -with heat and sunstroke, electrical injury.

6. Familiarization with the equipment and operation of the intensive care unit.
7. Independent work of students in the department.
8. Monitoring and correction of the final level of learning material.

Questions to control the initial level of mastery of educational material

Option 1

1. What is agony?
*Answer:*Agony is a terminal state of the body, a reversible stage of dying with a deep disruption of the functions of the cerebral cortex with simultaneous excitation of the centers of the medulla oblongata (breathing failure, slowdown of cardiac activity, loss of consciousness, convulsions).
2. What is the pregonal state?
*Answer:*Hemodynamic and respiratory disorders, drop in blood pressure, depression of consciousness, increase in oxygen starvation.
3. What is a terminal pause?
*Answer:*The sudden cessation of breathing and extinction of corneal reflexes lasts 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 observation units?
*Answer:*Currently, there are three main types of organization of intensive care services: multidisciplinary intensive care units, highly specialized intensive care units (burn trauma, heart attack, nephrology and intensive care and resuscitation wards at individual hospitals.
6. What is intensive care?
*Answer:*This is the urgent implementation of emergency manipulations and therapeutic measures prescribed by a doctor at a high professional level and constant monitoring of the patient.
7. What resuscitation procedures should an intensive care unit nurse know?
*Answer:*Know the technique of performing artificial respiration and chest compressions.
8. Personal hygiene of severe and dying patients.
*Answer:*In the morning: wipe your teeth and tongue, rinse your mouth, wash your face, wipe the whole body, wash the patient, regularly take measures to prevent bedsores.
9. Items for caring for seriously ill patients.
*Answer:*Sippy cups, feeding tubes, heating pads, enemas, rubber bedpan, oilcloth, rubber ring, headrests, ice packs, gas tubes, oxygen pillows.
10. "Individual" nursing station. When is it appointed?
*Answer:*Patients who are in an excited state (with delusions, hallucinations) and those in agony are assigned a post from the most experienced and highly qualified nurses.
11. Ascertainment of biological death.
*Answer:*Complete cessation of breathing, absence of pulse and blood pressure, pallor. relaxation of the muscles, disappearance of the shine of the eyes, cooling of the body, dilation of the pupils and their lack of reaction to light, numbness of the body muscles after 6-8 hours.
12. Physiological effects of severe and agonizing patients.
*Answer:*Place a rubber sheet under the buttocks, an oilcloth under the sheet, change dirty linen immediately (these patients often experience paralysis of the sphincter of the rectum and bladder).

Option 2

1. How is the skin of a seriously ill bed patient treated?
*Answer:*Wiping the skin is carried out with some kind of disinfectant solution (camphor alcohol, vodka, cologne, special solution).
2. How do you feed a patient if he cannot lift his head?
*Answer:*A small diameter rubber tube is put on the end of the sippy cup. It is introduced into the patient's mouth, the sippy cup is raised and slightly lowered, then the food in the volume of one sip evenly enters the mouth.
3. Preventionbedsores.
*Answer:*Changing body position, timely change of underwear, placing a rubber circle under the sacrum, wiping 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 caring for seriously ill patients.
*Answer:*Constant monitoring of their appearance, pulse rate, and blood pressure levels. The bed should be clean and comfortable. It is advisable to isolate patients in a single or double ward and regularly carry out bedsore prevention.

6. Feeding the seriously ill.
*Answer:*Feeding should be done frequently, in small portions, trying to satisfy the patient's desire within the prescribed diet; use sippy cups for liquid food.
7. Nutrition of patients 6 in an unconscious state.
*Answer:*Nutrients are administered by drip: intravenously or through the rectum.
8. What is the "emergency fund" of pharmacological agents in the intensive care unit?
*Answer:*These are medications necessary for intensive care: hydrocortisone, norepinephrine, insulin manitol, gemodez, strophanthin, repolyglucin, canned blood.
9. Caring for dying patients.
*Answer:*An "individual" nursing station, the nurse constantly monitors the patient's condition, cares for him, fulfilling all the doctor's orders.
10. Hygienicregime in the intensive care unit.
*Answer:*The staff completely changes clothes, puts on a mask, special slippers and shoe covers. Sinks, soap, and towels are available in each room; a 0.5% solution of chloramine or diocite 1:5000 is used to disinfect hands. There must be bactericidal lamps and boxes with appropriate conditions for working with infectious patients.
11. Caring for seriously ill patients in a state of mental agitation.
Answer:"Individual" nursing station, near the bed - a net, strengthening of the limbs, constant supervision of a nurse.
12. Change of linen, wiping the skin with camphor alcohol, measuring body temperature, drinking regime, monitoring pulse, blood pressure and respiratory rate, using an ice pack. Answer: Caring for severely febrile patients.

Option 3

1. What should an intensive care unit nurse be able to do?
*Answer:*The nurse must have the necessary minimum technical and laboratory skills, be able to use anesthesia machines and oxygen installations, prepare instruments, care for seriously ill patients, if necessary
be able to perform artificial respiration and chest compressions.
2. Maintaining an IV table in the intensive care unit.
*Answer:*A sterile vessel (50 ml) with isotonic sodium chloride solution or distilled water for diluting drugs, jars with sterile beads in alcohol, sterile wipes, injection needles, syringes with a capacity of 20, 10, 5, 2, 1 ml, sterile and ready for use. drip infusion system for use.
3. Principles of work of a nurse in the intensive care unit.
*Answer:*The nurse must continuously monitor the patient, his condition, skin, pulse, blood pressure, and respiratory rate. Accurately document hourly records of urine output and stool output.
4. Where are the belongings and valuables of the deceased given?
*Answer:*Things must be put into storage or given to relatives against receipt,
5. Rules for handling a corpse.
*Answer:*The exact time of death of the patient is stated by the doctor in the medical history. The corpse is undressed, laid on its back with straightened limbs, 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 the last name, first name, patronymic, and medical history number on the thigh of the deceased, duplicating all this on the referral to the morgue, where the diagnosis and date of death are indicated. The corpse is transferred to the morgue for autopsy.
6. Rules for handling corpses of people who died from especially dangerous infections.
*Answer:*The corpses of persons who died from cholera or plague are wrapped in sheets moistened with a solution of sublimate or carbolic acid, then placed in tightly closed coffins; on

the bottom of which is placed in 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 an intensive care unit.
*Answer:*The 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" (nurse tactics).
*Answer:*Maximum tilt of the patient's head back. The nurse is at the side of the patient. With one hand she squeezes the wings of his nose, with the other she 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 to the air duct, then exhales vigorously and sharply. This is done until the patient breathes spontaneously.
9. Artificial respiration "mouth to nose" (nurse tactics).
*Answer:*This air is blown into the patient's nasal passages. To do this, the nurse covers the patient's mouth with her palm or presses the lower lip to the upper lip. Combine with indirect cardiac massage (12-15 times per minute, one vigorous insufflation per 4-5 compressions on the chest). While maintaining heart rate, the frequency of blowing should be 20-25 per minute.
10. Indirect cardiac massage.
*Answer:*The goal 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, exposing the heart area. Nurse at the patient's side
- one palm is placed on the lower third of the sternum, the other on the first. Massage is carried out 50-60 times per minute with energetic sharp pressure on the patient's sternum (with the entire weight of his body) so that the sternum moves towards the spine
by 3-4 cm. Massage is effective if pulsation of large vessels appears in the rhythm of the massage, breathing is restored, cyanosis disappears, dilated pupils narrow.
11. Direct cardiac massage.
*Answer:*Direct cardiac massage is performed by a doctor (opening the chest, exposing the heart).
12. Artificial ventilation.
*Answer:*It is indicated not only when spontaneous breathing stops, but also when it is severely impaired, especially in the preliminary and agonal state. The most effective and reliable method of restoring breathing is long-term artificial ventilation using a device.

Tests-tasks to control the initial level of knowledge of students.

1. Indications for resuscitation measures (cardiac massage and artificial ventilation).
*Answer:*Statement of the state of clinical death no later than 5-6 minutes from the moment of its occurrence.
2. Name the signs of clinical death.
1. Disappearance of consciousness and reflexes (including corneal).
2. Stopping breathing.
3. Absence of pulsation of the carotid arteries, cardiac arrest.
4. Blood pressure is not determined.
5. Maximum dilation of the pupils and their lack of reaction to light.
6. Deathly pale complexion.
7. Dropping of the lower jaw.
8. Involuntary urination and defecation.
9. Cramps.
10. Decreased body temperature.

3. List the stages of resuscitation.

*Answer:*1. The first stage of nonspecific (pre-hospital) resuscitation.
2. The second stage of specific (medical) resuscitation.

4. The purpose of the first (pre-hospital) stage of resuscitation.

*Answer:*Support blood circulation to ensure the minimum need for vital organs (brain, heart) in oxygen and make it possible to restore their functions.

5. Measures of the first stage of resuscitation.

*Answer:*1. Provide air access by tilting the patient's head back.
2. Indirect (closed) cardiac massage.
3. Artificial ventilation of the lungs using the "mouth to mouth", "mouth to nose" method.

6. Rules for external cardiac massage.

*Answer:*1. Place 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. Apply rhythmic sharp pressure on the area of the sternum (its body) at the rate of 60 per minute, pushing the sternum 3-4 cm.

7. Hand position during external cardiac massage.

*Answer:*The arms are extended, the right palm crosses over the left.

8. Rules for artificial ventilation.

*Answer:*1. Tilt the patient's head back as far as possible, placing your hand under his neck.
2. Make maximum air blows into the patient's mouth (holding his nose) or into his nose (holding his mouth) at the rate of 16 per minute.

9. The ratio of the number of massage pressure on the heart area and ventilation blows "mouth to mouth" and "mouth to nose".

*Answer:*5:1.

10. Signs of the effectiveness of cardiac massage.

*Answer:*1. Constriction of the pupils.
2. Disappearance of the deathly pallor of the face.
3. The appearance of a pulse in the carotid artery when pressing on the sternum.
4. The emergence of new types of electrocardiographic artifacts.

11. Within what time period the effectiveness of resuscitation measures is the highest.

*Answer:*Within the first 1.5-2 minutes. from the moment of clinical death.

12. Signs of effective ventilation.

*Answer:*1. Raising and lowering the chest during artificial ventilation.
2. Feeling of resistance in the lungs as they expand.
3. You can hear the sound of air escaping when you exhale.

13. List the signs of biological death.

*Answer:*1. Absence of heartbeat, pulse, breathing, pupil reaction to light.
2. Clouding and drying of the cornea of the eye.
3. Cat's eye symptom.
4. Coldness 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 measures.

*Answer:*Acute cardiovascular failure. Precomatose state. Shock. All unconscious states. States of severe mental arousal. Feverish states (with high body temperature).

2. The patient's breathing is disturbed: noisy, large, with mouth opening, 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 is 35.6° C. Describe this condition.
*Answer:*Agony.

3. The patient lost consciousness, stopped breathing and cardiac activity within four minutes. After resuscitation measures, restoration of cardiac activity and breathing is noted. Name the state in which the patient was for four minutes.
*Answer:*Clinical death.

4. How should the intensive care unit be equipped and why?
*Answer:*Electrocardiograph, cardiac monitor, defibrillator, anesthesia machine, respirators for artificial respiration, mobile X-ray unit, nursing table with sterile instruments for massive blood transfusion and providing emergency resuscitation to the patient. An untouchable fund of pharmacological agents for providing emergency care for a number of urgent conditions.

5. How to feed seriously ill patients (in an unconscious state)?
*Answer:*Through a probe inserted through the nose or mouth, liquid and high-calorie food (milk, cream, broth, raw eggs) is given, or nutritious enemas are given through the rectum.

6. What examinations should the nurse conduct when caring for seriously ill and suffering patients?
*Answer:*Examination of the skin, mucous membranes, measuring body temperature, counting pulse, respiration, measuring blood pressure. Take into account daily drinking regimen, diuresis, stool.

7. Nurse tactics when caring for patients with psychomotor agitation.
Answer:"Individual" nursing station, constant observation, monitoring of pulse, blood pressure, bed guarding, fixation of limbs, feeding and monitoring of physiological functions.

8. Nurse's tactics when caring for febrile patients.
*Answer:*Constant observation, change of linen, rubbing the skin with alcohol, personal hygiene of the patient, drinking regime, measuring body temperature, strict administration of medications by the hour, monitoring pulse, blood pressure.

9.Signs of biological death. Who pronounces the death of a patient?
*Answer:*Complete cessation of breathing, absence of pulse, blood pressure, heartbeat, pallor, relaxation of muscles, drooping of the lower jaw, disappearance of the shine of the eyes, loss of sensitivity, cooling of the body, dilation of the pupils, lack of their reaction to light. Biological death is determined by the doctor.
10. Which patients are indicated for resuscitation and which ones?
*Answer:*Cardiac arrest—indirect cardiac massage, then artificial respiration. Stopping breathing - artificial respiration. Cardiac and respiratory arrest - cardiac massage and artificial respiration.

11. Rules for handling a corpse. Nurse's tactics when handling corpses of people who died from particularly dangerous infections.
*Answer:*Death is confirmed by a doctor and indicated in the medical history.
The corpse is undressed, laid on its back with straightened limbs, and the lower part is tied up.

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, medical history no., duplicating these data on the accompanying note to the morgue. The corpse is transferred to the morgue, where an autopsy is performed. The corpses of those who died from cholera or plague are wrapped in sheets moistened with a solution of sublimate or carbolic acid, the coffin is tightly closed and burned along with the things of the deceased.

12. Deontology when a nurse cares for seriously ill patients.
*Answer:*The nurse is the main person caring for these patients. Usually this is a nurse whose professional skills must be impeccable, executive discipline at its best and personal qualities that correspond to complete dedication to the patient.

Abstract topics (UIRS)

1. "Borderline"with the death of the state.
2. Emergency care for conditions bordering on death.
3. Caring for seriously ill and agonizing patients, feverish and in a state of mental agitation.
4. Intensive observation unit: equipment, purpose, staff, work of medical personnel.
5. Functional responsibilitiesintensive care unit nurses.
6. “Biological” death and rules for handling a corpse.
7. Deontological aspects in working with seriously ill and dying people.
8. Feeding seriously ill patients in the intensive care unit.
9. Physiological functions of seriously ill and agonizing patients.
10. Hygienic regime when working with seriously ill and dying patients.

Control questions.

1. Describe the states bordering on death: agony, preagonal state, terminal pause, clinical death.
2. Features of caring for seriously ill and dying patients. feverish and in a state of mental agitation.
3. Describe the equipment of the intensive observation unit.
4. Describe resuscitation measures: cardiac massage (indirect and direct), artificial ventilation (mouth-to-mouth and mouth-to-nose artificial respiration).
5. The concept of “biological death”, its statement.
6. List the main actions of medical staff in handling a corpse (sequentially).

Final control Students’ knowledge and skills are carried out by independently performing newly acquired skills, under the supervision of a teacher.

TEST CONTROL

1. What is meant by terminal state? a) state of
clinical death;
b) agonal period; c) the
period of dying;
d) the borderline state 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 forresuscitation measures:
a) late periods (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) cerebrovascular accident with loss of consciousness; e) the last stage of cancer.

4. What conditions do you consider most important for the operation of intensive care units? a) allocation of single wards;
b) 24-hour communication with the laboratory; c) organization of a separate entrance;
d) allocation of "shock" wards and "resuscitation rooms" for carrying out resuscitation measures;
e) equipping with monitoring equipment, artificial ventilation devices, defibrillators, pacemakers.

5. Why is it necessary to tilt the patient's head back when performing artificial respiration?
a) to make it more convenient to place the resuscitator's mouth on the patient's nose or mouth; b) to ensure airway patency;
c) to create a good seal between the resuscitator's mouth and the victim's nose (or mouth) when performing artificial inhalation.

6. How to check the correctness of artificial respiration?
a) during artificial inhalation, the patient's chest should expand;
b) during passive exhalation of the patient, the chest should collapse;
c) during artificial inhalation, "inflating" of the patient's cheeks should be noted.

7. What are the reasonsinsufficient effectiveness of artificial respiration? a) frequency of artificial respiration no 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 patient's respiratory tract.

8. In what cases is direct cardiac massage used? a) if indirect cardiac massage is ineffective;
b) in the presence of instruments that allow opening the patient's chest cavity;
c) if cardiac arrest or fibrillation occurred during surgery on the chest organs.

9. In what position should the resuscitator's hands be when performing chest compressions?
a) maximally extended at the wrist and elbow joints;
b) slightly bent at the elbow joints and maximally extended at the wrist joints; c) slightly bent at the elbow joints and slightly extended at the wrist joints.

10. What indicates the effectiveness of chest compressions? a) a pulse appears in the carotid arteries;
b) pupils narrow;

c) pupils dilate;
d) blood pressure increases;
d) spontaneous breathing is restored.

11. What damage to the respiratory system occurs in the first hours of poisoning? a)
inhibition of the excitability of the respiratory center;
b) violationrespiratory muscle functions; c) toxic
pulmonary edema;
d) toxic tracheobronchitis; e)
toxic pneumonia;
f) violation of tracheobronchial patency.

12. What damage to the cardiovascular system can occur during poisoning?
a) acute cardiovascular failure associated with inhibition of excitability of the vasomotor center and hypovolemia;
b) acute cardiovascular failure associated with weakening of the left ventricular myocardium;
c) toxic (painful) shock; d) heart
rhythm disturbances.

13. What therapeutic measures are advisable to carry out in case of ethyl alcohol poisoning?
a) gastric lavage;
b) subcutaneous administration of cordiamine and
caffeine; c) forced diuresis;
d) hemodialysis; e) carrying
out hemosorption.

14. What help should be provided if bitten by venomous snakes? a)
squeezing out the first drops of blood from the wound;
b) cauterization of the bite site;
c) clampingaffected limb with a tourniquet; d)
cold to the bite site;
e) use of specific anti-snake serum.

15. First aid for drowning:
a) removing water from the victim's respiratory tract; b)
removing water from the stomach by inserting a tube; c)
swinging the victim on a blanket or sheet;
e) artificial respiration; e)
indirect cardiac massage.

16. Early signsheat 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) apply a cold
compress or ice pack to the head;

c) artificial respiration and chest compressions; d)
subcutaneous administration of cordiamine and caffeine.

18. First aid for electrical injury:
a) release the victim from the effects of electric current; b) cover
the victim with earth;
c) artificial respiration; d)
indirect cardiac massage.

19. Symptoms of the initial period of radiation injuries:
a) general weakness, headache; b)
nausea, vomiting;
c) increase in temperature;
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 radioactive contamination zone;
b) complete sanitization;
c) gastric lavage and cleansing enemas; d) blood
transfusion;
e) prescription of antibacterial agents.

Required practical skills

1. Preparation of workerschlorinated disinfectant solutions.
2. Determination of the patient's height and weight.
3. Determination of chest circumference.
4. Counting the number of breathing movements.
5. Transporting the patient on a wheelchair, on a stretcher and manually (on a stretcher).
6. Change of underwear and bed linen for a seriously ill patient.
7. Vessel delivery.
8. Washing the patient.
9. Carrying out oral toilet.
10. Putting drops into the eyes and rinsing the eyes.
11. Ability to place eye ointment behind the lower eyelid from a tube and an eye spatula.
12. Putting drops into the ears.
13. Carrying out the toilet of the ears.
14. Carrying out toileting of the nose.
15. Putting drops into the nose.
16. Measuring body temperature and recording the measurement data on a temperature sheet.
17. Stagingmustard plasters.
18. Setting up cans.
19. Setting up leeches.
20. Applying a local warming compress.
21. Applying a cold compress.
22. Preparing and serving a heating pad to the patient.
23. Prepare and serve an ice pack to the patient.
24. Carrying out rubbing, rubbing, lubricating the skin with a medicine.
25. A set of medicinal solution from an ampoule and a bottle into a syringe.
26. Breedingantibiotics.

27. Intradermal injection.
28. Subcutaneousinjection.
29. Intramuscular injection.
30. Intravenous injection.
31. Filling the system forintravenous drip administration of drugs.
32. Carrying out intravenousdrip infusion.
33. Applying a tourniquet to the shoulder.
34. Providing first aid for sudden shortness of breath (choking).
35. Collection of sputum for laboratory testing.
36. Providing first aid for hemoptysis and pulmonary hemorrhage.
37. Carrying out oxygen therapydifferent ways.
38. Skilluse a pocket inhaler.
39. Determination of the main characteristics of the arterial pulse on the radial artery.
40. Blood pressure measurement.
41. Registration of the results of the study of arterial pulse and blood pressure.
42. Providing first aid for vomiting.
43. Carrying out an oral examination.
44. Taking a swab from the throat and nose for bacteriological examination.
45. Carrying out gastric lavage with a thick probe.
46. Probing the stomach with a thin probe. Conducting a fractional study of gastric juice.
47. Carrying out duodenal intubation.
48. Insertion of a gas outlet tube.
49. Setting up a cleansing enema.
50. Setting up a siphon enema.
51. Performing an oil and hypertonic enema.
52. Administration of a medicinal enema.
53. Definitionwater balance.
54. Collection of urine for laboratory testing.
55. Carrying out the Zimnitsky test.
56. Conducting catheterization of the bladder with a soft catheter.
57. Performing indirect cardiac massage.
58. Carrying out artificialventilation of the lungs.

Educational and methodological support for the

discipline Recommended reading:

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 “Emergency medical care.” 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 patient care and basic

epidemiology". Medicine, 1985
5. E. Ya. Severova with co-authors “Towards the formation of a justified deontological tactics by a doctor.” Clinical med. 4, 1984
6. I. Ya. Shevchenko “Laboratory methods for studying the respiratory system.” Leningrad. Medicine, 1982
7. Mukhina S. A., Tarnovskaya I. I. Atlas on manipulation techniques (for medical schools). - M.: Medicine, 1995.
8. Mukhina S.A., Tarnovskaya I.I. General nursing (for medical schools). - M.: Medicine, 1989.

CONTENT