

No. LD-21

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

**Department of Internal Medicine №1**

**METHODOLOGICAL MATERIALS**

**TO PERFORM OUT-OF-AUDIT SELF  
WORKS OF STUDENTS 2 COURSE OF MEDICAL  
FACULTY FOR PRACTICAL EXERCISES  
PHYSICAL MONITORING OF PATIENTS**

the main professional educational program of higher education - specialty programs in  
the specialty 05/31/01 General medicine, approved on 12/25/2020

Vladikavkaz, 2020

Methodological materials are intended for teaching 2nd year students (3rd semester) of the medical faculty of the Federal State Budgetary Educational Institution of Higher Education SOGMA of the Ministry of Health of Russia in the discipline "Physical monitoring of the patient"

Compiled by:

Head department, d.m.s. Totrov I.N.  
Professor, MD Enaldieva R.V.,  
Professor, MD Ambalova S.A.,  
Associate Professor, Ph.D. A. A. Medoeva,  
Associate Professor, Ph.D. Dzhikaeva Z.S.  
Assistant, Ph.D. Antoniadi I.V.,  
Assistant, Ph.D. Medoeva A.S.,  
Assistant Kulova L.A.  
Albegova Z.A.

## **TOPIC: Ethics and deontology in medicine. The subject and tasks of physical monitoring of a therapeutic patient**

### **Questions to test the initial (basic) level of knowledge.**

1. Give a definition of the concept of medical ethics.
2. Give a definition of the concept of deontology.
3. What are the basic moral qualities that any healthcare professional should have?
4. What is physical patient monitoring?
5. What are the main stages of the nursing process?
6. Describe each step in the nursing process.

**Target tasks:** To master the importance of the nursing process in the clinic of internal medicine, the goals and objectives of physical monitoring. Master the stages of the nursing process in therapy.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. Fundamentals of medical deontology and medical ethics.</li> <li>2. Leading representatives, founders of Russian and Russian therapeutic schools.</li> <li>3. The main goals and objectives of physical monitoring of patients.</li> <li>4. The main stages of creating a patient information base.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Apply in practice the main provisions of medical deontology and medical ethics.</li> <li>2. Apply in practice the main provisions of medical deontology and medical ethics.</li> <li>3. Construct a conversation (questioning) with the patient with minimal use of medical terminology, but at the same time answering the questions of interest to the patient as fully as possible.</li> <li>4. Conduct a conversation with the patient's relatives and get the most complete picture of the patient.</li> <li>5. To think clinically based on the experience of prominent representatives of Russian and Russian therapeutic schools.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

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### **Motivational block:**

Practical exercises in the 2nd year of physical monitoring of therapeutic patients contribute to mastering the skills of direct communication with the patient, as well as his family and friends, constant observation (monitoring) of the functions of vital organs and systems and the provision of first (pre-medical) aid to the patient, if necessary ...

### **Assignments for independent work on the topic under study**

#### ***Activity 1. List the 5 main steps in the nursing process:***

- one. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

#### ***Task 2. Who owns the lines:***

"The profession of a doctor is a feat. It requires selflessness, purity of soul and purity of thoughts. Not everyone is capable of this. "

3. Make tests by analogy:

THE PRESERVATION OF MEDICAL CONFIDENTIALITY IMPLIES NOT DISCLOSING THE DIAGNOSIS AND OTHER INFORMATION ABOUT THE PATIENT.

- 1) in all cases
- 2) with cancer
- 3) for infectious diseases: syphilis, tuberculosis, cholera, etc.

Correct: 2

**TOPIC: ASKING THE PATIENT (MAIN AND ADDITIONAL COMPLAINTS, HISTORY OF THE DISEASE, LIFE).**

**Questions to test the initial (basic) level of knowledge.**

1. What is meant by the subjective part of the patient's examination?
2. Name the sources of information for obtaining data about the patient.
3. List the principles for collecting complaints.
4. What is the medical history?
5. What are the principles of collecting information about the patient's life, i.e. history of life?

**Target tasks:** to learn the method of questioning the patient (collecting complaints, medical history, life) and creating an information base about the patient. Importance of Priority Complaints in Prioritizing Problems for Nursing Diagnosis. Diagnostic value of passport data.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. Basic principles for collecting complaints.</li> <li>2. The principles of questioning to clarify the stages of development of the disease, its complications, treatment tactics and its effectiveness, i.e. medical history.</li> <li>3. The principles of questioning to clarify the stages of a patient's life that affect the development of the disease and its complications, the ineffectiveness of treatment in order to correct unfavorable factors, i.e. anamnesis of life.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Conduct a questioning of the patient, his relatives and other persons in order to collect the most complete information about the patient and the development of the disease.</li> <li>2. Construct a conversation (questioning) with the patient with minimal use of medical terminology, but at the same time answering the questions of interest to the patient as fully as possible.</li> <li>4. To think clinically based on the experience of prominent representatives of Russian and Russian therapeutic schools.</li> </ol>	<ol style="list-style-type: none"> <li>3. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>4. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivational block:** mastering the skills of direct communication with the patient, as well as his family and friends and the creation of an information base helps to highlight the priority complaints

and problems of patients that need to be solved by methods of first aid (nursing care) with constant monitoring of its effectiveness or failure in order to timely correct the assistance provided.

### **Assignments for independent work on the topic under study.**

#### ***Task 1. Insert the missing words***

To create a full-fledged information base in medicine, the art of communication is of great importance. Communication is a combination of \_\_\_\_\_ in various ways to transmit \_\_\_\_\_ to each other (others), which in medicine are especially important for interaction with the patient, his family, medical staff and other specialists involved in the treatment process, as they significantly increase the effectiveness of the work of medical workers.

**Communication is \_\_\_\_\_ and \_\_\_\_\_.**

1. \_\_\_\_\_ communication - speaking;
2. \_\_\_\_\_ communication - facial expressions, gestures, postures, touching, written communication (words or symbols and pictures if the patient cannot read).

#### ***Task 2. Complete the sentence***

**Subjective examination includes:**

- one.
- 2.
- 3.
- 4.

As well as studying \_\_\_\_\_

**The inquiry consists of the following parts:**

- one. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Task 3.** Translate the word "anamnesis" - \_\_\_\_\_

**Task 4.** Conduct a questioning of the patient and detailing the main complaints. Write them down by analogy.

A patient	Complaints about:	Detailing
Name of the patient	Cough	Dry, harsh, exhausting, evenly throughout the day.
_____	Sputum separation	Thick, viscous, sticky to the tongue, "rusty" color

**TOPIC: General examination of the patient (general condition, consciousness, position).  
Constitutional body types. Diagnostic value.**

***Target:*** learn the technique of conducting a general examination, determining the severity of the patient's condition, impaired consciousness, body types and their diagnostic value.

**Questions to test the initial (basic) level of knowledge.**

1. Indicate the basic principles for conducting a general examination.

2. Indicate the sequence of the general inspection.
3. What are the degrees of violation of the general condition of the patient?
4. List and characterize the types of impairment of consciousness.
5. How can the activity of patients be disturbed, list the violations of the position of patients in bed?
6. List the body types.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. the sequence of the general examination of the patient,</li> <li>2. criteria for assessing the severity of the patient's condition,</li> <li>3. diagnostic value of different position in bed,</li> <li>4. types of impairment of consciousness,</li> <li>5. types of constitutional addition.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Textbook "General examination of the patient" // Totrov I.N., Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. conduct an objective study of the patient - a general examination with an assessment of the severity of the condition, impaired activity, consciousness,</li> <li>2. give a description of the main constitutional types.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivational block:** mastering the skills of general examination of the patient, assessing the severity of his condition, impairment of consciousness, position. To master the diagnostic value of types of normal physique.

#### **Assignments for independent work on the topic under study**

##### ***Task 1. Insert the missing words***



**General principles of patient examination:**

- from simple to \_\_\_\_\_
- from \_\_\_\_\_ to private;
- from the surface \_\_\_\_\_;
- \_\_\_\_\_ down.

**Task 2. Complete the sentence.**

According to the degree of violation of the general condition, the condition is distinguished:

one.

2.

3.

According to the degree of oppression of consciousness, they are distinguished:

one.

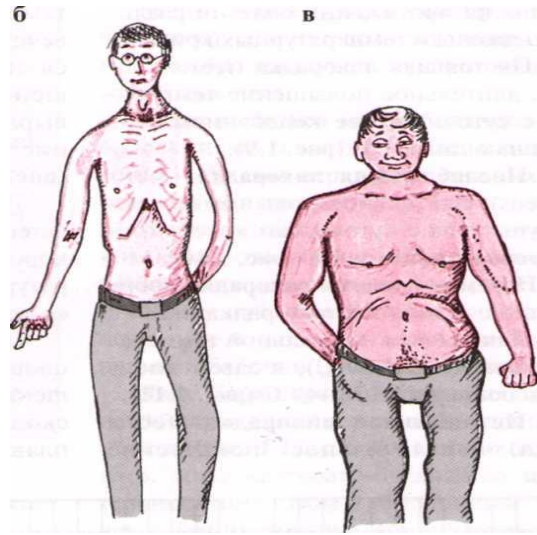
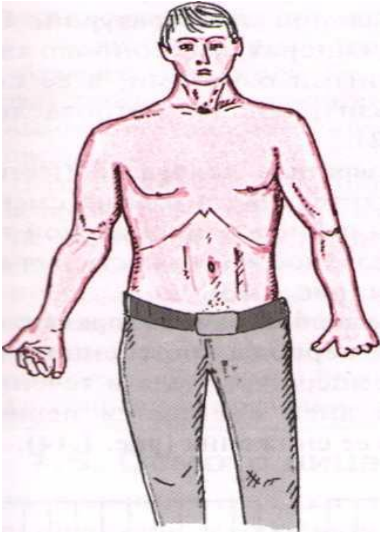
2.

3...

**Task 3. Examine the patient, fill in the table by analogy and make a conclusion...**

SYMPTOMS	Patient 1	Patient 2
Patient position:		
- active		
- passive		
- forced:		
- orthopnea		
- sitting with an emphasis on the hands and difficult exhalation (suffocation)		
- lying on the sore side	+	
- sitting, leaning forward with exudative pericarditis		
- restless with colic		Tossing with pain that radiates down to the perineum
- other		
<b>Conclusion:</b>	The patient has dry pleurisy	Renal colic with urolithiasis

**Task 4. Describe the following constitutional body types:** normosthenic, asthenic and hypersthenic.



**TOPIC: Body temperature. Fever types, diagnostic value. Thermometry.**

**Target:** to learn the principles of thermometry, the technique of correct measurement of body temperature, its graphical recording, the determination of the types and stages of fever, the organization of monitoring the vital functions of the body in case of fever.

### Questions to test the initial (basic) level of knowledge.

1. What processes does the body temperature of a person depend on?
2. List the main methods of temperature measurement, the necessary measures to ensure the correct temperature measurement.
3. Technique for measuring body temperature, especially measuring body temperature in emaciated and seriously ill patients.
4. Registration of temperature measurement results in a temperature sheet.
5. Age features of temperature reactions.
6. Fever, types of fevers according to the height of the temperature, according to the duration, according to the nature of temperature fluctuations.
7. Fever stages. Organization of care for febrile patients, depending on the stage of the fever.
8. Prevention of complications and first aid in case of hyperpyretic temperature, with a critical drop in temperature.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. The main methods of measuring temperature.</li> <li>2. Necessary measures to ensure correct temperature measurement.</li> <li>3. Measurement time. Registration of temperature measurement results.</li> <li>4. Types of temperature curves. Their diagnostic value.</li> <li>5. Age features of temperature reactions.</li> <li>6. Fever stages and care of the febrile patient.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Textbook "General examination of the patient" // Totrov I.N., Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Measure your body temperature.</li> <li>2. Register the measurement results in a temperature sheet.</li> <li>3. Differentiate the types of fever.</li> <li>4. Establish the stage of the fever.</li> <li>5. Organize care for a febrile patient, provide first aid for hyperpyretic reactions and with a critical drop in temperature.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009</li> </ol>

6. Prevent complications of fever.	.-- 304 p. 4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009 .-- 464 p.
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**Motivational block:** Possession of the skills of measuring body temperature, analyzing temperature curves, diagnosing the stage of fever, organizing care for a febrile patient, including feeding him, preventing pressure ulcers.

### Tasks for independent work on the topic under study:

#### *Task 1. Insert the missing words*

The thermoregulation system provides \_\_\_\_\_ between the processes of heat production and heat transfer, due to which, in a healthy person, relatively \_\_\_\_\_ of the body is maintained.

Body temperature is normally \_\_\_\_\_ °C; daily fluctuations are usually recorded in the range of 0.1-0.6 °C and should not be \_\_\_\_\_ °C.

#### *Task 2. Complete the sentence.*

In some cases, a healthy person has a slight increase in temperature:

- With intensive ..... work
- After reception .....
- With strong \_\_\_\_\_ voltage
- In women during the period \_\_\_\_\_ (increase by 0.6-0.8 °C)
- In hot weather (0.1-0.5 °C higher than in winter).

The lethal maximum body temperature is \_\_\_\_\_ °C, the lethal minimum temperature is \_\_\_\_\_ °C.

*Task 3. Draw the graphs of the relaxation and hectic temperature curves...* Point out the main differences.

#### **Solve the following test items...**

1. For what purpose is it recommended to wipe the armpit dry before measuring the temperature?
  - a) for hygienic reasons;
  - b) that the thermometer is in a more stable position;
  - c) in order not to get underestimated measurement results.
2. The body temperature measured in a patient in the rectum is 37.1 °C. How can you characterize this temperature?
  - a) as normal temperature;
  - b) as a moderately high temperature;
  - c) as subfebrile temperature.

3. How thermoregulation processes change in the first stage

temperature rise?

- a) the blood vessels of the skin are narrowed;
- b) the blood vessels of the skin expand;
- c) heat production in skeletal muscles increases;
- d) sweating increases.

4. Where should medical thermometers be kept in the department?

- a) in cases at the post of a nurse;
- b) in the jar at the bottom of which cotton wool is put and disinfection is added. solution;
- c) for each patient;

5. What indicators are reflected in the temperature sheet?

- a) graphical representation of the temperature curve;
- b) a graphical representation of the temperature curve, pulse curves, respiration rate, blood pressure, body weight, urine output, laboratory research data;
- c) graphical representation of the temperature curve, curves heart rate, respiratory rate, results of medical rounds.

6. For 2 weeks in a patient, the morning temperature remains within the range of 36.0-36.5 ° C, the evening temperature - 37.5-38.0 ° C. What type of fever does the patient have?

- a) laxative, remitting;
- b) exhausting, hectic;
- c) perverted, wrong
- d) intermittent.

**TOPIC: Examination of the face, neck, cervical vessels. Diagnostic value.**

**Questions to test the initial (basic) level of knowledge.**

1. List the pathological types of the face.
2. Describe the face of the Corvizar;
3. - face with hyperthyroidism;
4. - with hypothyroidism;
5. - with fever;
6. - with tetanus, leprosy;
7. What is hirsutism characterized by?
8. How does the shape of the neck change with Graves' disease?
9. What is a Stokes collar?
10. How to determine a positive venous pulse, for what diseases?
11. What is "carotid dance", Musset's symptom?

**Target:** learn the technique of examining the face, neck and cervical vessels, assessing the information received, highlighting the priority problem in monitoring the patient, determining the patient's needs based on the results of examining the face, neck and visible mucous membranes.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"><li>6. the sequence of examination of the patient's head,</li><li>7. criteria for assessing the severity of the patient's condition by changing the face, neck and cervical vessels,</li><li>8. diagnostic value of changes in facial expression, edema on the face,</li><li>9. neck deformities,</li><li>10. a method for determining "positive venous pulse", "carotid dance", Musset's symptom.</li></ol>	<ol style="list-style-type: none"><li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li><li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li><li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li><li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li><li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li></ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"><li>1. create an information base:<ul style="list-style-type: none"><li>• conduct an inquiry and collect complaints and anamnestic data,</li><li>• to conduct an objective research:</li><li>• general examination with an assessment of the severity of the condition, impaired activity, consciousness, body type;</li><li>• examination of the head, face, neck and cervical vessels;</li></ul></li></ol>	<ol style="list-style-type: none"><li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. –504 p.</li><li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li><li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li></ol>

2. to assess the severity of the patient's condition and his needs for changes in the face, neck, cervical vessels.	4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. --- 464 p.
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**Motivational block:** mastery of the skills of an objective examination of the patient and the correct conduct of a general examination, examination of the face, neck, cervical vessels.

### Tasks for independent work on the topic under study:

#### Task 1. Continue the sentence:

*Examination of the face and neck is carried out in accordance with the general principles of examination:*

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

#### Task 2. Insert the missing words

1) **Facies Hippocratica** (.....) typical for patients with:

- .....
- .....

The face is deathly pale, sunken, with sunken dull eyes and a pointed nose, beads of sweat are noticeable on the face

2) **Facies febris** (.....) usually agitated, hyperemic skin, febrile eyes are characteristic.

3) **Facies nephritica** (the face of a patient with diseases .....)  
pale, puffy, with edema of the upper and lower eyelids, edema under the eyes.



4) **Facies Basedovica** (patient's face with .....): there is an alarming, irritated or frightened expression on the face, the eye slits are dilated, a peculiar glitter of the eyes, protrusion of the eyeballs or exophthalmos are characteristic.



5) **Facies micsedemica** -the patient's face with .....  
Rounded, puffy, pale face with thickened nose and lips. Characterized by a significant limitation of facial expressions, a dull, sometimes meaningless look, which makes the face extremely expressionless.



6) **Facies leonina** ("Lion face") - the patient's face with

.....  
the skin of the face is diffusely thickened, especially the eyebrows, lips and nose are affected. The eyebrows have fallen out, and a skin fold has already formed in their place: a "lion's face" (facies leonina) is being formed. Multiple tubercles and nodes (lepromas) appeared on the auricles and on the nose.



7) **Risus sardonicus (sardonic smile)** -at \_\_\_\_\_

The muscles of the forehead, the wings of the nose, the corners of the mouth are tense, the face is stiff in a suffering grimace. Sternocleidomastoid muscles and the subcutaneous muscles of the neck are also tense.



With compression of the superior vena cava and impaired blood outflow into the right atrium, \_\_\_\_\_ can be detected.

With severe aortic valve insufficiency, a number of symptoms are noted due to significant blood regurgitation in the left ventricle and fluctuations in blood pressure in the arterial bed:

- Expressed \_\_\_\_\_ - "dance of carotids".
- **De Musset's symptom** - \_\_\_\_\_ (in systole and diastole).

**Task 3. Make 3 tasks by analogy:**

1. Patient research begins:

- a) with the study of the cardiovascular system;
- b) with the study of the respiratory system;
- v) with clarification of the patient's complaints;
- G) from the collection of anamnesis.

Correct: in

**TOPIC: Examination of the skin, elements of skin rash and damage. The diagnostic value of changes in the patient's nails.**



**Target:** learn the technique of examining the skin and visible mucous membranes; identifying elements of skin rash and lesions; determination of changes in nails and hair; detecting disorders in the development of subcutaneous fat, determining the types of obesity, edema.

**Questions to test the initial (basic) level of knowledge.**

1. List the basic principles of examining the skin and visible mucous membranes?
2. What changes in skin color can be identified on examination?
3. What is the reason for the appearance of cyanosis, what types of it are customary to distinguish?
4. What is bronze skin coloration, localization?
5. What is jaundice, list the types?
6. List the elements of skin rash and skin damage.
7. What changes in the nail plates are with iron and zinc deficiency?
8. How can BMI (body mass index) determine eating disorders?

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. The sequence of examination of the skin and visible mucous membranes of the patient,</li> <li>2. Criteria for assessing the degree of color disorders, skin structure, turgor, skin moisture and their diagnostic value,</li> <li>3. The formula for body mass index (BMI), physical methods for determining the degree of development of subcutaneous fat, its excess or insufficiency</li> <li>4. Plan of intervention for changes in skin color and damage (abrasion, erosion, ulcer, phlegmon, etc.).</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Collect the information base: <ul style="list-style-type: none"> <li>- conduct an inquiry, collect complaints and anamnestic data,</li> <li>- to conduct an objective research: <ol style="list-style-type: none"> <li>a) general examination with an assessment of the severity of the condition, impaired activity, consciousness;</li> <li>b) examination of the skin, to identify elements of skin rash and damage;</li> <li>c) to determine the degree of development of subcutaneous fat, obesity, exhaustion (cachexia);</li> </ol> </li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-</li> </ol>

2. To highlight the priority problem, the needs of the patient; 3. Draw up a plan of medical intervention, 4. Implement this plan.	Media, 2009 .-- 464 p.
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**Motivational block:** mastering the skills of an objective examination of the patient and the correct conduct of a general examination, examination of the skin, visible mucous membranes.

### Assignments for independent work on the topic under study

#### *Task 1. Insert the missing words*

The skin is made up of three layers:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

#### *Task 2. Insert the missing words*

\_\_\_\_\_ - **bluish staining of the skin and visible mucous membranes** membranes due to an increase in the peripheral blood (in a limited area of the body or diffusely) in the amount of \_\_\_\_\_.

\_\_\_\_\_ is an icteric staining of the skin and visible mucous membranes.

With hemolysis, jaundice with \_\_\_\_\_ skin tone.

In hepatitis, parenchymal jaundice with a \_\_\_\_\_ shade.

With obstructive jaundice \_\_\_\_\_ skin tone.

**Blister (urtika)** - represents a formation towering above the surface of the skin \_\_\_\_\_, of a varied, sometimes bizarre shape in size from 3-4 mm to 10 cm or more. Urticarial elements that appear in acute inflammation of \_\_\_\_\_, accompanied by a significant expansion of capillaries, are extremely characteristic of \_\_\_\_\_ dermatitis, etc. The appearance of blisters is accompanied by severe itching of the skin.

**Vesicle (vesicula)** - this is a superficial, slightly protruding above the surrounding skin \_\_\_\_\_ formation measuring 1 to 5 mm, emanating from \_\_\_\_\_.

#### *Task 3. Complete the sentence:*

**Decreased elasticity** skin is observed:

A) at \_\_\_\_\_;

B) at \_\_\_\_\_.

**Enhancement** turgor of the skin and an increase in its tension often indicates fluid retention in the body (latent edema). Control over latent edema is:

one. \_\_\_\_\_

2. \_\_\_\_\_

**Damage to the nail bed** caused by pyogenic bacteria, usually penetrating through the barbs, is called paronychia. Patients are predisposed to paronychia:

one. \_\_\_\_\_,

2. \_\_\_\_\_.

#### *Task 4. Make test tasks using the following words:*

nails in the form of watch glasses; drumstick fingers; onycholysis; thimble symptom.

**TOPIC: Evaluation of subcutaneous fat. Obesity types. Hypotrophy, cachexia.**

**Target:** learn how to identify the degree of violation of the development of subcutaneous fat (excess, obesity, malnutrition, cachexia), determine the types of obesity and their diagnostic value; learn how to identify hidden and obvious edema.

**Questions to test the initial (basic) level of knowledge:**

1. How to determine the degree of development of subcutaneous fat?
2. What is body mass index (BMI).
3. How to determine excess or underweight by this indicator?
4. What is edema, their effect on body weight

<b>The student should know:</b> 1. Determination of body mass index. 2. Determination of redundancy, malnutrition along the waist circumference, along the skin fold. 3. Modern classification of obesity. 4. Restriction in diet, dietary habits for obesity, cachexia. 5. Diagnostic value of various types of obesity (apple, pear).	<b>Main:</b> 1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s. 2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p. 3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p. 4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p. 5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.
<b>The student should be able to:</b> 1. Determine the degree of development of subcutaneous fat. 2. Determine the body mass index. 3. Determine redundancy, malnutrition around the waist circumference, along the skin fold. 4. Reveal latent and obvious edema.	1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p. 2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p. 3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p. 4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.

**Motivational block:** mastering the skills of objective examination of the patient and the correct identification of the degree of violation of the development of subcutaneous fat (excess, obesity, malnutrition, cachexia), determining the types of obesity and their diagnostic value; learn how to identify hidden and obvious edema.

**Assignments for independent work on the topic under study*****Task 1. List the functions of subcutaneous fat:***

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Task 2. Insert the missing word:**

- \_\_\_\_\_ - extreme weight loss.

**Task 3. Continue the sentence:**

*Edema control methods:*

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Task 5. Insert the missing words.**

To assess the degree of development of subcutaneous fat, use

**inspection** - with obesity, the abdomen is \_\_\_\_\_ in volume, \_\_\_\_\_ is increased, the ratio of waist / hip volume is close to \_\_\_\_\_ and>.

Obesity should be distinguished from ascites - \_\_\_\_\_. In obesity, the abdomen is enlarged \_\_\_\_\_, the navel is \_\_\_\_\_, and in the patient's position, the abdomen rises "\_\_\_\_\_".

When ascites in a standing position, the fluid pulls the abdominal wall down to the bosom - the abdomen takes on the appearance of "\_\_\_\_\_"; in the prone position - the abdomen "\_\_\_\_\_", the navel \_\_\_\_\_.

In obesity, there may be a predominant deposition of fat in the \_\_\_\_\_ and abdomen (like "\_\_\_\_\_") with the appearance of purple stretch marks (\_\_\_\_\_).

**Task 6. Complete the sentence:**

The nature of the distribution of fat is of diagnostic value:

- one. \_\_\_\_\_
2. \_\_\_\_\_

**TOPIC: Examination of the musculoskeletal system and joints. Diagnostic value.**

**Purpose of the lesson:** to learn carrying out a physical examination of the musculoskeletal system and joints of the patient.

**Questions to test the initial (basic) level of knowledge.**

1. List the main complaints of patients with damage to the bone, articular and muscular systems.

2. List the main changes in the muscular system,
3. - // - bone and
4. - // - articular systems detected during external examination.
5. What are passive and active joint movements?
6. What types of joint movements do you know?
7. How to correctly assess the muscular system (degree of development, strength, etc.)?
8. What deformities of the spine and bones are distinguished?

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. Methodology for examining the musculoskeletal system and joints in patients.</li> <li>2. Palpation technique for muscles and joints.</li> <li>3. Research methods of the functional state of the joints.</li> <li>4. The diagnostic value of the identified changes to determine the nature of joint damage.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Examine the musculoskeletal system and joints in patients.</li> <li>2. Palpate the joints: identify the presence of joint swelling, crepitus, joint deformities, limitation and soreness during active and passive movements.</li> <li>3. Interpret data obtained during examination and palpation.</li> <li>4. Fill out a fragment of the case history diary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivational block:** opossession of the methods of physical examination of the musculoskeletal system and joints, the skills of correct interpretation of the data obtained.

#### **Assignments for independent work on the topic under study**

##### ***Task 1. Insert the missing words:***

The main complaints of patients with diseases of the musculoskeletal and articular systems include:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Task 2. V in what cases the following types of pathological gaits are observed:**

- spastic - \_\_\_\_\_
- "Drunk gait" - \_\_\_\_\_
- small steps, jerky - \_\_\_\_\_
- "Duck gait" - \_\_\_\_\_
- ataxic gait - \_\_\_\_\_

**Task 3. Write the definitions:**

**Lordosis** - \_\_\_\_\_

**Kyphosis** - \_\_\_\_\_

**Scoliosis** - \_\_\_\_\_

**Kyphoscoliosis** - \_\_\_\_\_

**Task number 4: Insert the missing words:**

Muscle tone is assessed by \_\_\_\_\_ of the limbs and \_\_\_\_\_, determined by palpation.

Joint deflection is an uneven change in the shape of the joint due to \_\_\_\_\_ changes.

Deformation of the joints is a more persistent change in the shape of the joints due to \_\_\_\_\_ changes with the destruction of cartilage and articular ends of the bones, the development of ankylosis, bone growths, injuries of the musculo-ligamentous apparatus and subluxation of the joints.

**Task 5. Complete the sentence**

Muscle strength is measured in two ways:

1. static force - \_\_\_\_\_
2. dynamic force - \_\_\_\_\_.

Joint examination usually begins:

- one. \_\_\_\_\_
2. \_\_\_\_\_

The reason for the limitation or lack of movement in the joint should be identified, which may be due to:

- one. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Task 6. Make a situational task,** from which it follows that the patient has an articular syndrome characteristic of rheumatoid arthritis, by analogy:

**An example of a situational task.**

Patient N., 64 years old, was admitted to the department with complaints of pain in the knee and hip and ankle joints, aggravated by physical exertion, crunching in them. Considers himself sick for 5 years. Objectively: "duck gait". Knee and ankle joints with proliferative changes. Limitation of the volume of active and passive movements due to pain syndrome. In the area of the distal interphalangeal joints, Heberden's nodules are determined.

What symptoms of the syndrome have been identified?

**Answer:** signs of articular syndrome characteristic of degenerative-dystrophic diseases of the joints - osteoarthritis.

**TOPIC: Human lymphatic system. Examination and palpation of peripheral lymph nodes.  
Diagnostic value.**

**Purpose of the lesson:** to learn conducting a physical examination of peripheral lymph nodes, assessing their condition (soreness, enlargement, adhesion with underlying tissues, etc.)

**Questions to test the initial (basic) level of knowledge.**

1. Specify the anatomical features of the lymphatic system.
2. What are the physiological characteristics of the lymphatic system?
3. List the constituent components of the lymphatic system



4. List the functions of the lymph nodes
5. What pathological changes in the lymph nodes can be detected by palpation?

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. Methodology for examining peripheral lymph nodes in patients.</li> <li>2. Palpation technique of peripheral lymph nodes.</li> <li>3. The diagnostic value of the identified changes to determine the nature of the lesion of the lymph nodes.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Conduct an examination of the peripheral lymph nodes, underlying tissues.</li> <li>2. Palpate the peripheral lymph nodes: reveal the presence of swelling, redness of the underlying skin, pain on palpation.</li> <li>3. Interpret data obtained during examination and palpation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivational block:** opossession of the methods of physical examination of peripheral lymph nodes, which are an integral part of the lymphatic system, the skills of correct interpretation of the data obtained.

#### **Assignments for independent work on the topic under study**

##### ***Task 1. Insert the missing words:***

Lymphatic system is an integral part of \_\_\_\_\_ and represents, as it were, an additional channel of the \_\_\_\_\_ system, in close connection with which it develops and with which it has similar structural features (presence of \_\_\_\_\_, direction of lymph flow from tissues to \_\_\_\_\_).

The main functions of the lymphatic system:

one. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

Visceral lymph nodes - located at \_\_\_\_\_. Accordingly, the gastric, mesenteric, bronchial and other groups of lymph nodes are isolated.

Subcutaneous lymph nodes- can be directly \_\_\_\_\_ under the skin.

### **Task 2. Complete the sentence...**

There are several largest groups of subcutaneous lymph nodes:

one.

2

3

4

5

6

7

eight

9

When palpating the lymph nodes, you should pay attention to:

one.

2.

3.

4.

5.

### **Task 3. Give a definition**

Lymphadenopathy is \_\_\_\_\_

Lymphadenitis is \_\_\_\_\_

Lymphangitis is \_\_\_\_\_

What diseases are characterized by systemic enlargement of lymph nodes?

1 . \_\_\_\_\_ 2 . \_\_\_\_\_ 3 . \_\_\_\_\_

### **Task 4. Solve test tasks**

1. An enlarged lymph node above the left clavicle indicates

1) metastasis of a tumor localized in the stomach

2) lymphogranulomatosis

3) inflammatory diseases of the oral cavity

4) tuberculous process

2. The lymphatic system performs the following functions

- 1) transport
- 2) resorptive
- 3) drainage
- 4) barrier
- 5) all of the above is true

3. Normally, the size of the lymph node is

- 1) 0.5 - 30 mm
- 2) 50-60 mm
- 3) 60-80 mm
- 4) 80-100 mm

4. Soreness on palpation of the lymph nodes indicates

- 1) the presence of an inflammatory process in them
- 2) presence of metastases

5. Dense, inactive, lymph nodes prone to fistula formation appear when

- 1) tuberculosis
- 2) lymphogranulomatosis
- 3) lymphadenitis
- 4) chronic myeloid leukemia
- 5) cancer metastases

**TOPIC: Physical monitoring of patients with respiratory diseases: questioning, general examination. Chest examination. Palpation of the chest.**

**Questions to test the initial (basic) level of knowledge.**

1. Normal Anatomy: Anatomical data and clinical topography of the respiratory system.
2. Fundamentals of respiratory physiology: pulmonary ventilation, gas diffusion, pulmonary blood flow.
3. Interrogation of a patient with respiratory diseases.
4. General examination of the patient.
5. Chest examination.
6. Palpation of the chest. Definition of voice tremor.

**Target tasks:** Master the methods of direct examination of a patient with respiratory diseases, conduct an inquiry, general examination of the patient, examination of the chest, palpate the chest, interpret the results of the study.

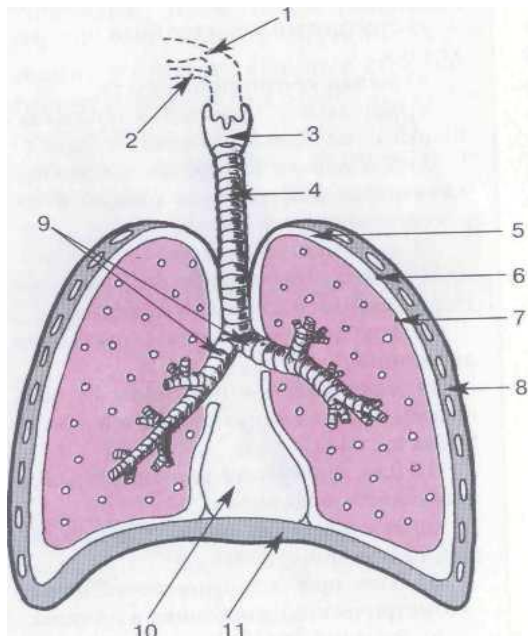
<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. The main and additional complaints of patients with respiratory diseases, the mechanism of their occurrence.</li> <li>2. Features of the anamnesis of the disease and the patient's life.</li> <li>3. Pathological symptoms identified in patients with bronchopulmonary diseases during general examination (forced position), the mechanism of their occurrence.</li> <li>4. The order and rules of chest palpation, determination of chest resistance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Interview a patient with respiratory diseases, highlight the main and additional complaints.</li> <li>2. Collect data from the anamnesis of the disease: to obtain information about the first manifestations of the disease, the causes of the appearance and possible etiological factors of the disease, to find out in detail the initial symptoms of the disease in chronological order, to obtain information about the diagnostic and therapeutic measures being taken, their effectiveness.</li> <li>3. Collect data from the patient's life history: find out the patient's biography to assess the etiological risk factors for the disease, as well as work history, past illnesses during life, family history, allergic history, the presence of bad habits.</li> <li>4. Conduct a sequential examination of the patient with the identification of clinical symptoms of the pathology of the bronchopulmonary system.</li> <li>5. Conduct an examination of the chest: determine the shape of the chest, determine the type of breathing, evaluate the excursion of the chest.</li> <li>6. Palpate the chest: to determine the resistance of the chest.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivational block:**interrogation, general examination of the patient, examination of the chest, palpation of the chest are important elements of creating an information base that have important

diagnostic value, which allows to correctly assess the functional state of the respiratory system, to identify pathological processes occurring with the pathology of the bronchopulmonary system.

### Assignment for independent work on the topic under study:

1. What is the structure of the respiratory system.



one -

2 -

3 -

4 -

5 -

6 -

7 -

eight -

9 -

10 -

eleven -

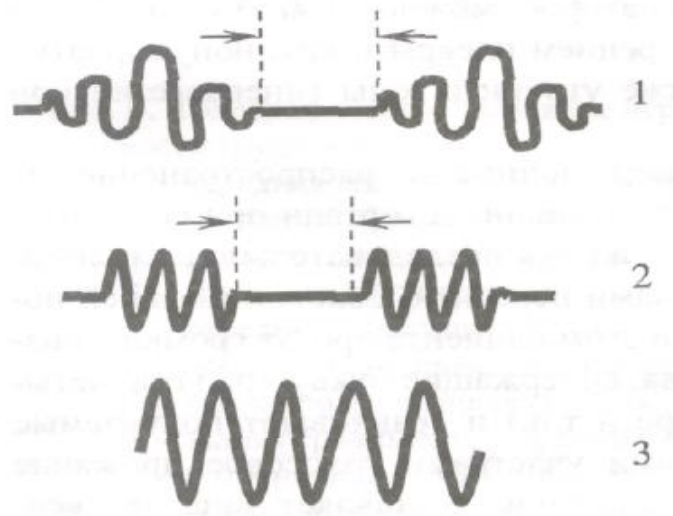
2. Complete the table.

**SIGNS OF DIFFERENT TYPES OF CHEST.**

Signs	Normosthenic	Asthenic	Hypersthenic
1. The ratio of the anterior-posterior and lateral dimensions.			
2. Epigastric angle			
3. The severity of the supra- and subclavian fossa.			
4. Position of the shoulder blades.			
5. The course of the			

ribs.			
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3. Describe the disturbance in the rhythm and depth of breathing that you see in the picture. Under what pathological conditions such breathing is observed.



one -

2 -

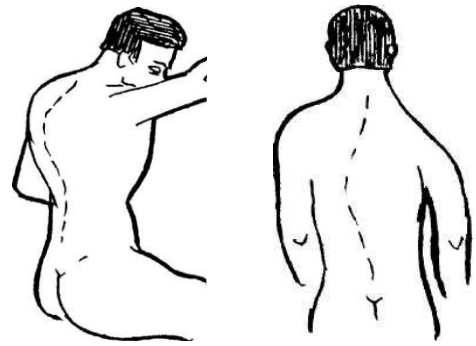
3 -

4. Make 3 tests by analogy:

Examination of the patient revealed a lateral and posterior curvature of the spine.

INDICATE THE NAME OF SUCH A CURVATURE

1. Kyphosis;
2. Scoliosis;
3. Lordosis;
4. Kvphoscoliosis.



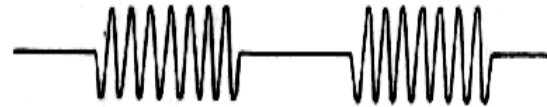
**Answer: 4**

5. Solve the clinical problem.

Patient N., 75 years old, with severe cerebrovascular accident, breathing is characterized by deep respiratory movements, following at regular intervals and periodically interrupted by respiratory pauses from several seconds to 1/2 minute.

What pathological type of breathing is this typical for?

1. Breath of Kussmaul.
2. Breath of Biot.
3. Cheyne-Stokes breath.
4. Breath of Grokk.



**Answer:**

**9. Solve the clinical problem:**

Patient C, 49 years old, was admitted to the department. accountant. Complains of an attack of suffocation, which arose 2 hours ago at home, of a cough with a small separation of viscous vitreous sputum.

INSPECTION: The condition is serious. Forced position: the patient sits in bed, leaning on it with his hands. The chest is emphysematous. The number of respiratory movements is 30 per minute, exhalation is sharply difficult. Marked diffuse cyanosis, swelling of the cervical veins.

WHAT IS THE MOST PROBABLE CAUSE OF DYSPNOE?

1. Reduction of the respiratory surface of the lungs (lobar inflammatory induration);
2. Decreased lung elasticity due to emphysema;
3. Spasm of small bronchi;
4. Mechanical obstruction in the upper airway (larynx);
5. Mechanical obstruction in the trachea or large bronchus.

**Answer:**

**TOPIC: Physical monitoring of patients with circulatory diseases: questioning and examination of patients. Examination of the heart area.**

**Questions to test the initial (basic) level of knowledge.**

1. Normal anatomy of the anatomy of the heart. Features of its blood supply.
2. Physiology of the circulatory system. The main functions of the heart, the mechanical work of the heart, regulation of the functions of the heart, regulation of blood circulation.
3. List the main complaints of patients with heart disease. Describe coronary pain.
4. Describe pain in pericarditis, aortitis, myocarditis, cardioneurosis.
5. Describe cardiac edema, explain the mechanism of their development.
6. Explain the mechanism of development of shortness of breath in patients with diseases of the cardiovascular system, the therapeutic significance of the symptom.
7. What help does a nurse provide for heart pain?

**Target tasks:** To master the methods of direct examination of a patient with diseases of the cardiovascular system by means of questioning, examination. Thoroughly and comprehensively study the subjective manifestations of diseases of the cardiovascular system. To study the technique of examining patients with diseases of the cardiovascular system.

<b>The student should know:</b> <ol style="list-style-type: none"><li>1. Complaints of patients with diseases of the circulatory system, the mechanism of their occurrence, their details.</li><li>2. Features of the anamnesis of the disease and the patient's life.</li><li>3. Pathological symptoms detected in patients with diseases of the circulatory system during a general examination (forced position, cyanosis, edema).</li><li>4. Examination of the heart area (heart hump, apical impulse, etc.)</li><li>5. Pulse, rules for measuring blood pressure, normal blood pressure values</li></ol>	<ol style="list-style-type: none"><li>1. Nursing: Textbook. - T. 2. -2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li><li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li><li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li><li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li><li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li></ol>
<b>The student should be able to:</b> <ol style="list-style-type: none"><li>1. Interview the patient, identify and evaluate the complaints characteristic of diseases of the circulatory system.</li><li>2. Obtain information about the first manifestations and possible etiological factors of the disease, trace the dynamics of the disease (severity and frequency of manifestations, duration of remission, effectiveness of previous therapy).</li><li>3. Find out the medical history of the patient in order to assess the etiological risk factors, as well as concomitant health disorders that affect the examination tactics.</li><li>4. Conduct a consistent general examination of the patient, identify pathological symptoms characteristic of diseases of the circulatory system.</li><li>5. Conduct an examination of the heart area, determine the diagnostic value of the identified</li></ol>	<ol style="list-style-type: none"><li>1. Nursing: Textbook. - T. 2. -2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li><li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li><li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li><li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li></ol>



changes.	
6. Calculate the pulse, measure the blood pressure.	

**Motivational block:** pAsks, examination of the patient, examination of the heart area are of great diagnostic value, allowing to correctly assess the functional state of the cardiovascular system, to identify the pathology of the heart.

### Self-study assignments

#### **Task 1. Make 3 tests by analogy:**

**What are the causes of a positive venous pulse?**

- A. Mitral insufficiency.
- B. Mitral stenosis.
- B. Aortic insufficiency.
- D. Aortic stenosis.
- D. Insufficiency of the tricuspid valve.

**Correct: D**

#### **Task 2. Answer the question:**

1. Will acrocyanosis be detected in a patient with left ventricular failure if the hemoglobin level in his blood does not exceed 60 g / l?
2. List the complaints of a patient with left ventricular failure.
3. List the complaints of patients with right ventricular failure.

**Task 3. Make a situational task,** from which it follows that the patient has a syndrome of right ventricular failure, by analogy:

Patient I., 50 years old, complains of dyspnea at rest, cough, general weakness. Objectively: position of orthopnea, acrocyanosis, pulsation of the jugular veins, apical impulse spilled, displaced to the left by 1.5 cm from the mid-clavicular line in the 5th intercostal space.

Answer: S-m left ventricular insufficiency.

CM dilatation of the left ventricle.

#### **Task 4. Make a table with the distinguishing signs of edema of cardiac and renal origin**

Symptoms	Cardiac edema	Renal edema
1. Localization of edema		
2. Spread of edema		
3. The consistency of edema		
4. Skin color		

#### **Exercise 5. Give the characteristics of coronary pain:**

1. Localization .....
2. Irradiation .....
3. Duration .....
4. What are provoked by .....
5. What are filmed .....
6. The mechanism of occurrence .....

#### **Task 6. Solve test tasks**

1. Attacks of suffocation in heart disease are most often caused by:

- a. Acute right ventricular failure
- b. Acute left ventricular failure
- c. Acute left atrial failure
- d. Acute right atrial insufficiency
- e. Acute vascular insufficiency

2. Pulse deficiency is often detected when:

- a. Atrial fibrillation
- b. Extrasystoles
- c. Bundle branch block
- d. Atrioventricular block
- e. Intra atrial block

4. Name the examination data for mitral stenosis

- a. Skin pink
- b. Acrocyanosis, bluish cheeks and pale skin
- c. The apical impulse is displaced to the left, spilled
- d. Apical impulse not changed
- e. Heart beat

**Task 7. Make a task by analogy.**

Patient M., 38 years old, was admitted to the therapeutic department with complaints of dyspnea at rest, palpitations, general weakness. History - suffering from rheumatism since 12 years. Objectively: the general condition is severe, the consciousness is clear, the position is orthopnea. Skin - acrocyanosis. The shins are pasty. NPV - 25 per min. Pulse 98 beats. in min., weak filling and tension on the left radial artery, arrhythmic. BP 100/60 mm Hg

What pathological syndrome can you think of?

**Answer:** syndrome of left ventricular failure in a patient with rheumatism and mitral stenosis.

**Task 8. Supplement the list of pathological conditions in which are determined:**

Full pulse (ps.plenus)	Empty pulse (ps. Vacuus)
Increase in stroke volume:	Decrease in stroke volume:
1. Hypertension, thyrotoxicosis	1. Severe tachycardia
2.	2.
3.	3.
4.	4.

**Task 9.** What blood pressure is called normal, optimal, high normal?

**TOPIC: Questioning and examination of patients with diseases of the digestive system**

**Questions to check the initial level of knowledge.**

1. Features of the structure of the oral cavity, esophagus, stomach, intestines, liver, gallbladder.
2. The main functions of the digestive system as a whole; esophagus, stomach, intestines, liver, gallbladder.
3. List the main complaints of patients with gastritis, peptic ulcer, hepatitis, cirrhosis, gallstone disease.
4. List the main syndromes with lesions of the gastrointestinal tract and hepato-biliary system (GBS).

**Target tasks:** learn to identify the main complaints typical of patients with diseases of the esophagus, stomach, intestines, GBS, their detailed characteristics and clinical significance. To learn how to conduct a general examination of the patient, examination of the oral cavity, examination of the abdomen, trunk, and give a clinical assessment of the results obtained.

<p><b>The student should know:</b></p> <ol style="list-style-type: none"> <li>1. Main complaints typical of diseases of the gastrointestinal tract.</li> <li>2. Conduct a general examination and assess the data obtained accordingly.</li> <li>3. Conduct an examination of the oral cavity and assess accordingly.</li> <li>4. Perform abdominal examination and clinical characterization.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. To reveal the nature of complaints of patients with diseases of the esophagus, stomach, intestines.</li> <li>2. Conduct a general examination of a patient with diseases of the digestive system.</li> <li>3. Examine the oral cavity.</li> <li>4. Inspect the tongue.</li> <li>5. Inspect the abdomen, trunk.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

**Motivation:** identification and analysis of patient complaints is the first stage in the diagnosis of diseases of the gastrointestinal tract and their differentiation. Detection of typical complaints will allow you to highlight priority problems and solve them successfully.

### Self-study assignments

**Task 1. Make tests by analogy**, from which it follows that the patient has a disease of the stomach, esophagus.

Which of the following complaints indicates bowel disease:

1. Melena.
2. Eructations rotten.
3. Vomiting 40 minutes after eating, relieving.
4. Anorexia.
5. Heartburn.
6. Cramping abdominal pains preceding the act of defecation.

Answer: Correct 1, 6.

**Task 2.** Select symptoms that indicate esophageal disease:

1. Enlargement of the abdomen, the navel is retracted, with percussion, high tympanitis.
2. Retrosternal pain radiating to the lower jaw, neck, shoulders, interscapular region.
3. Feeling of heaviness in the epigastrium after eating.
4. Belching with air.
5. Vomiting of "coffee grounds".
6. Hypersalivation.
7. Dysphagia (difficulty passing food through the esophagus).
8. Nocturnal regurgitation (wet pillow symptom).

**Task 3.** Select symptoms that indicate stomach trouble:

1. Limited pain and local tension of the abdominal muscles in the epigastrium to the left of the midline.
2. Eructation of food after heavy meals.
3. Pain during bowel movements.
4. Morning syndrome: bad taste in the mouth, regurgitation of "bitter water", nausea.
5. Pain in the epigastric region.
6. Eructations rotten.
7. Melena.
8. Vomiting at the height of the pain, giving relief.
9. Pain in the epigastric region 30-60 minutes after eating.
10. Decreased appetite with the appearance of aversion to certain foods (especially meat).

**Task 4.** Select symptoms that indicate bowel disease:

1. Paroxysmal, intense short-term pain, quickly changing its localization, disappearing after the passage of gas.
2. Inconsistent diffuse pain on palpation in the epigastrium.
3. Melena.
4. Seasonal epigastric pain in the autumn-spring season.
5. Perversion of taste, the need to eat inedible substances.
6. Diarrhea, bowel movements 3-6 times a day.
7. Vomit.
8. Losing weight with no appetite.
9. Bowel emptying once every 4-5 days.

**Task 5.** Compose situational tasks by analogy with those presented, using the symptoms of pathology 1) stomach, 2) intestines, 3) liver or gallbladder.

**An example of situational tasks:** The patient complains of vomiting, which occurs soon after the start of a meal. Vomiting occurs suddenly without prior nausea. Vomit consists of undigested, unchanged food of neutral reaction.

**The patient had:**

A) Regurgitation.

- B) Regurgitation.
- C) Rumination.
- D) Esophageal vomiting.
- E) Stomach vomiting.

**Correct: G**

**Objective 2:** The patient complains of bloating, mushy yellowish stools with a sour odor and a lot of gas bubbles. The feces are acidic. Microscopic examination of feces revealed a large number of starch grains, plant fiber, iodophilic microbes.

**Answer:** the patient has fermentative dyspepsia syndrome.

**Task 6. Solve the problem.**

Task 1. The patient complains of difficulty in swallowing food, as well as a feeling of a lump in the throat and a slight bursting pain along the esophagus. Salivation and periodic regurgitation are also troubling. Sometimes vomiting occurs without a previous feeling of nausea. Vomit consists of undigested food. These sensations appeared 2 months ago. At first, they appeared only after eating a dense meal. Later they began to be observed after watery food.

**Questions:**

1. What could be the most likely cause of these pains? \_\_\_\_\_
  2. Is it possible, according to the information available in this problem, to imagine from which part of the digestive tube the vomit came? \_\_\_\_\_
  3. For what diseases are such complaints possible? \_\_\_\_\_
  4. What disease is characterized by the rapid progression of these symptoms and weight loss?
- 

**Task 7. Fill in the missing information in the following text:**

In diseases of the liver and biliary tract, the following dyspeptic symptoms are observed: decreased appetite, ... ..

In diseases of the pancreas, the following dyspeptic symptoms are observed: aversion to fatty foods, ... ..

**Task 8. Which of the following complaints indicate liver disease:**

1. Dysphagia.
2. Icteric staining of the skin.
3. Constipation.
4. Enlargement of the abdomen.
5. Diarrhea.
6. Feeling of fullness in the right hypochondrium.
7. Vomiting of "coffee grounds".
8. Paroxysmal, intense pains, quickly change their localization, disappear after the gas passes.
9. Loss of appetite.
10. Weakness.

**Task 9. Which of the following complaints indicate diseases of the gallbladder and biliary tract:**

1. Severe paroxysmal pain in the right hypochondrium radiating to the right shoulder, scapula.
2. Vomit.
3. Dull, aching pain in the right hypochondrium.
4. Bitter taste in the mouth.

5. Belching.
6. Seasonal epigastric pain in the autumn-spring season.
7. Eructations rotten.
8. Temperature rise to febrile digits.
9. Bloating and rumbling in the abdomen.
10. Itchy skin.

#### **Task 10. Solve the problem**

The patient complains of aching pain in the right hypochondrium and in the epigastric region, weakness, poor appetite, an unpleasant taste in the mouth, an increase in the abdomen, and loss of body weight. Also notes rumbling in the abdomen, belching, unstable stools. Patient with low nutrition. The abdomen is enlarged, saggy, the navel is protruding. The skin is dirty with an icteric tinge, in places petechial rash and bruises. On the skin of the face, neck and shoulders there are “spider veins”. The sclera are icteric. An enlarged network of saphenous veins is visible around the navel. Tongue red, smooth (varnished). The symptoms observed in the patient can be combined into the following syndromes:

- A) Jaundice.
- B) Liver failure.
- C) Portal hypertension.
- D) Cholestasis.
- E) Biliary colic.

### **TOPIC: Physical monitoring for kidney disease: questioning and examination of patients with kidney disease.**

#### **Questions to test the baseline (basic) knowledge:**

1. Brief anatomical data
2. What are the main syndromes and symptoms that can be identified in patients with kidney disease?
3. What is polyuria, oligo-, anuria?
4. For what disease is urine of the color of "meat slops"?
5. For what disease is the urine dark, frothy?
6. What are the symptoms of kidney failure?

**Target tasks:** to learn the methodology and technique of questioning and examining patients with kidney diseases.

<b>The student should know:</b>	1. Nursing: Textbook. - T. 2. –2nd ed., Revised.
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<ol style="list-style-type: none"> <li>1. The main complaints typical of kidney disease.</li> <li>2. Conduct a general examination and examination of the lumbar region, give an appropriate assessment of the data obtained.</li> <li>3. Palpate the kidney area and interpret the identified changes.</li> <li>4. Diagnostic value of diuresis disorders.</li> <li>5. 5. Monitoring and caring for patients with renal colic.</li> </ol>	<p>and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.</p> <ol style="list-style-type: none"> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> <li>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</li> </ol>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Interview the patient (detailed complaints, medical history and life history).</li> <li>2. Examine the patient.</li> <li>3. Palpate the kidney area.</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. —2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</li> </ol>

### Self-study assignments

**Exercise 1.** Make an algorithm for diagnosing edema of renal and cardiac origin.

**Task 2.** Make 3 tests according to the sample, using the symptoms "oliguria, ischuria, pollakiuria, nocturia, hypostenuria":

✓ What is stranguria:

- a. increased urination
- b. decrease in the amount of urine excreted
- v. soreness and pain when urinating
- d. predominance of nocturnal diuresis over daytime

**Answer:** Correct in.

**Task 3.**What information can be obtained from the study of general urine analysis, urine analysis according to Zimnitsky; according to Nechiporenko.



**Task 4.** Make a situational task, from which it follows that the patient has a pain syndrome characteristic of

- A) renal colic,
- B) renal hypertension syndrome by analogy:

**An example of a situational task:** Patient K., 51 years old, was admitted to the department with complaints of edema on the face, upper and lower extremities, trunk, shortness of breath with little physical exertion, headaches, and general weakness.

History: for 20 years suffering from chronic glomerulonephritis.

Objectively: the general condition of the patient is of moderate severity, clear consciousness, active position, pale skin. Edema on the face, trunk, upper, lower extremities. NPV - 28 per minute. Heart rate - 98 per minute. BP - 140/100 mm Hg

The abdomen is enlarged due to ascites.

What symptoms of the syndrome have been identified?

**Correct answer:** Symptomatic hypertension. Edematous syndrome.

### **Task 5. Solve test tasks**

1. Specify the disease, which is characterized by urine of the color of "meat slops"
  1. hemolytic jaundice;
  2. acute glomerulonephritis;
  3. acute pyelonephritis;
  4. diabetes.
2. Specify functional tests for kidney disease
  1. test of Addis-Kakovsky;
  2. test of Nechiporenko;
  3. Zimnitsky test;
  4. test of Quick-Pytel.
3. A urine test according to Nechiporenko is carried out to identify
  1. to detect protein in urine;
  2. to identify the ratio of leukocytes and erythrocytes in 1 ml of urine;
  3. to detect glucose and ketone bodies in urine.
4. Specify the features of renal arterial hypertension
  1. high pulse pressure;
  2. increased more diastolic pressure;
  3. only systolic blood pressure is increased.
5. Pollakiuria is characteristic
  1. acute glomerulonephritis;
  2. chronic glomerulonephritis;
  3. cystitis;
  4. amyloidosis of the kidneys.
6. A high specific gravity of urine is typical for:
  1. acute pyelonephritis;
  2. chronic glomerulonephritis;
  3. diabetes mellitus.

7. Concentration function of the kidneys is assessed:
  1. on a three-glass Thompson test;
  2. according to the analysis according to Nechiporenko;
  3. according to the sample of Zimnitsky;
  4. based on the Kvik-Pytel test.
  
8. Glucosuria is typical for:
  1. acute pyelonephritis;
  2. acute glomerulonephritis;
  3. diabetes mellitus;
  4. urolithiasis.
  
9. The appearance of tonic and clonic seizures is typical for:
  1. renal colic;
  2. uremia.

**TOPIC: Interrogation and examination of patients with diseases of the hematopoietic organs.**

**Questions to test the initial (basic) level of knowledge:**

1. Anatomical and morphological features of the circulatory system.
2. Hematopoiesis scheme.
3. The function of red blood cells.
4. The function of blood leukocytes (participation in the immune process, inflammation, phagocytosis)

**Target tasks:** Learn to collect complaints and anamnesis of the disease, life in patients with hematopoiesis pathology, learn to palpate peripheral lymph nodes.

<b>The student should know:</b> <ol style="list-style-type: none"> <li>1. Complaints of patients with diseases of the hematopoietic system.</li> <li>2. Factors contributing to the development of</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. -</li> </ol>
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<p>diseases of the blood system (according to anamnesis).</p> <p>3. Objective data when examining patients.</p> <p>4. Method of palpation of lymph nodes. Diagnostic value.</p>	<p>504 s.</p> <p>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</p> <p>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</p> <p>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</p> <p>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</p>
<p><b>The student should be able to:</b></p> <p>1. Conduct a targeted questioning of a patient with a disease of the hematopoietic system (complaints, medical history, life history).</p> <p>2. Conduct a general examination of the patient, give a correct assessment of the data obtained.</p> <p>3. Palpate the lymph nodes. Give the correct interpretation of the data obtained.</p>	<p>1. Nursing: Textbook. - T. 2. —2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</p> <p>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</p> <p>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</p> <p>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</p>

**Motivational block:** the ability to purposefully conduct questioning and examination of patients with diseases of the hematopoietic system, correctly assess the data obtained is important in diagnosing the disease, in establishing the cause of anemia or leukemia.

### Self-study assignments

#### Task 1. Make three tests according to the following pattern:

What is angular stomatitis?

- A. Inflammation of the tongue
- B. Difficulty swallowing
- B. Cracks in the corners of the mouth
- D. Dental caries

**Correct: V.**

#### Task 2. Select objective data characteristic of anemia.

1. bruising on the skin
2. lymphadenopathy
3. splenomegaly
4. fever of hectic type
5. hemarthrosis
6. cherry skin tone
7. koilonychia
8. sensory disturbances in the lower extremities

### **Task 3. Solve the situational task:**

**No. 1.** Patient M., 34 years old., Complains of sore throat, high fever, pain in the bones, in the left hypochondrium, nasal bleeding, from the gums, severe general weakness. Objectively: a state of moderate severity. Pale skin, a few bruises. On examination of the oral cavity: symptoms of necrotizing ulcerative sore throat. Enlarged submandibular and axillary lymph nodes are palpated. What signs of a pathological condition are revealed in the patient?

**Answer:** \_\_\_\_\_

**No. 2.** Patient V., 40 years old, was admitted to the department with complaints of weakness, dizziness, increased dry skin, hair loss, brittle nails. History: nursing mother. The skin and visible mucous membranes are pale (waxy pallor). When examining the nails, koilonychia is determined. What are the symptoms of the patient's clinical condition?

**Answer:** \_\_\_\_\_

### **Task 4. Solve the test tasks:**

1. Symptoms of anemia include:
  - a) shortness of breath;
  - b) pallor of the skin;
  - c) heartbeat;
  - d) petechiae;
  - e) hypersensitivity to cold.
2. Signs of iron deficiency are:
  - a) hair loss;
  - b) brittle nails;
  - v) icterus;
  - G) koilonychia;
  - e) splenomegaly;
  - f) perversion of taste.
3. The most common causes of iron deficiency anemia are:
  - a) blood loss (chronic);
  - b) helminthic invasion;
  - c) congenital iron deficiency;
  - d) insufficient intake of iron from food
4. The clinical manifestations of B12-deficiency anemia are:
  - a) dizziness;
  - b) paresthesia;
  - v) icterus;
  - d) motor and sensory disorders in the lower extremities;

e) all of the above.

5. The most common causes of B12-deficiency anemias are:

- a) blood loss;
- b) helminthic invasion;
- c) atrophy of the stomach glands (gastritis, stomach cancer);
- d) pregnancy;
- e) alimentary factor.

**TOPIC: Questioning and examination of patients with diseases of the endocrine system.**

**Questions to check the initial level of knowledge.**

1. Normal Anatomy: Location of the endocrine glands.
2. List the functions of the endocrine glands.
3. The main complaints of patients with diseases of the endocrine system (hyper-, hypothyroidism, diabetes mellitus).
4. Features of collecting anamnesis of the disease and anamnesis of the patient's life.
5. Symptoms detected during a general examination of patients (with hyper-, hypothyroidism, diabetes mellitus, etc.).

**Target tasks:** To master the methods of direct examination of a patient with diseases of the endocrine system and, according to the survey, examination, to identify priority problems in a patient with the most common endocrine diseases.

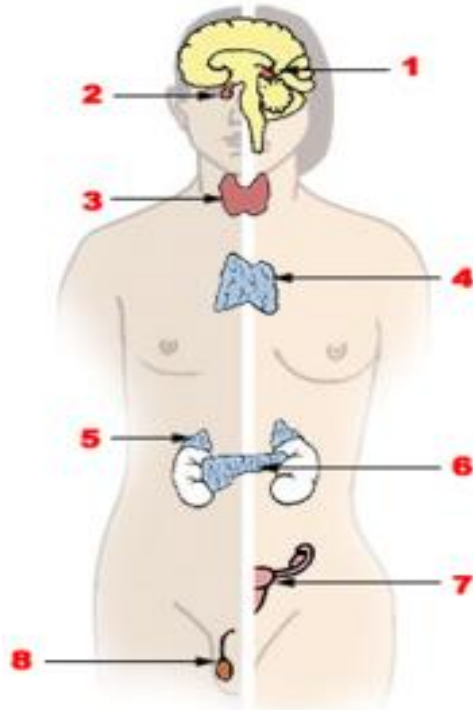
<b>The student should know:</b> 1. Complaints of patients with endocrine pathology. 2. Features of the anamnesis of the disease and	1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. -
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<p>the patient's life.</p> <p>3. Pathological symptoms identified in patients with endocrine system damage by examination.</p> <p>4. Interpretation of the obtained research results.</p>	<p>504 s.</p> <p>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</p> <p>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</p> <p>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</p> <p>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</p>
<p><b>The student should be able to:</b></p> <p>1. Conduct a questioning of a patient with diseases of the endocrine system, highlight priority, main and additional complaints.</p> <p>2. Collect data from the anamnesis of the disease: to obtain information about the first manifestations of the disease, the causes of the appearance and possible etiological factors of the disease, to find out in detail the initial symptoms of the disease in chronological order, to obtain information about the diagnostic and therapeutic measures being taken, their effectiveness.</p> <p>3. Collect data from the patient's life history: find out the patient's biography to assess the etiological risk factors for the disease, as well as work history, past illnesses during life, family history, allergic history, the presence of bad habits.</p> <p>4. Conduct a sequential general examination of the patient with the identification of clinical symptoms of the pathology of the endocrine system.</p> <p>5. Palpate the thyroid gland.</p> <p>6. Determine the degree of enlargement of the thyroid gland.</p>	<p>1. Nursing: Textbook. - T. 2. —2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</p> <p>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.</p> <p>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009. -- 304 p.</p> <p>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009. -- 464 p.</p>

**Motivational block:** Questioning, general examination of patients with diseases of the endocrine system are of great diagnostic value, they allow to correctly assess the functional state of the body, to identify pathological processes occurring with the pathology of the endocrine system.

**Assignment for independent work on the topic under study:**

**Task 1. From the course of anatomy, remember and list the endocrine glands.**



one -  
2 -  
3 -  
4 -  
5 -  
6 -  
7 -  
eight -

**Task 2. Add the definition:**

**Endocrine system** - (from the Greek endon - inside and crino - I highlight) - a system for regulating the activity of internal organs through ....., allocated by ..... cells directly into ....., or diffusing through the intercellular space into neighboring cells.

**Task 3. Identify eye symptoms and characterize.**



**Exophthalmus** - .....  
.....  
.....  
.....  
.....  
.....

■ Stelvag's ..... symptom -

.....

■ Greffe's symptom - .....



■ Mobius symptom - .....



- Dalrymple symptom -.....
- Symptom Marie in Romberg position - .....

**Task 3. Insert the missing words:**

**1. Diabetes mellitus** is a disease caused by... .. or.... lack of insulin in the body and is manifested by disorders ..., ... and .... exchanges

**2. There are two main pathogenetic forms of diabetes mellitus:**

one.....

2 .....

**3. The most typical manifestations** diabetes mellitus are:

one.....

2 .....

3.... ..

4.....

5.....

6. ....

**Task 4. Make 3 test tasks by analogy:**

Exophthalmos is:

- a) change in nail plates;
- b) divergence of teeth;
- v) an increase in the size of the eye slits and protrusion of the eyeballs;
- G) discrepancy, atrophy of the skin in the form of stripes;
- e) enlargement of the nose

**Answer: in**

**Task 5. Make a clinical problem by analogy.**

1. Patient M., 25 years old, complains of palpitationsnausea, sweating, irritability, tremors of the extremities, insomnia, unstable stools.

On examination, the neck is deformed due to enlargement of the thyroidnoah gland, exophthalmos. Pulse 102 beats / min. Unstable in Romberg position.

What kind of thyroid disease do these symptoms indicate?

**Answer:** The patient has thyrotoxicosis.

2. Patient K., 60 years old, was admitted to the department with complaints of thirst, dry mouth, frequent, profuse urination, progressinglosing weight despite a good appetite. On examination: the skin is dry, the face is pinkish, traces of scratching on the skin of the chest and abdomen.



What disease can these symptoms indicate? What additional laboratory tests are required for this patient?

Answer: A patient has type 2 diabetes mellitus. Blood sugar control is essential.

**Topic: Monitoring and caring for severe and moribund patients. The concept of resuscitation...**

**Questions to test the initial (basic) level of knowledge:**

1. What does intensive care medicine study?
2. The concept of resuscitation in cardiac arrest, in respiratory arrest.
3. What is Terminal State?
4. What types of terminal conditions are distinguished?
5. How to correctly determine the pulse on the carotid artery?
6. How to correctly perform artificial respiration, blood circulation?

**Target:** learn how to diagnose terminal conditions, identify priority problems of the patient and provide the necessary amount of first aid.

<b>The student should know:</b>	
1. Symptoms of a severe and extremely serious condition.	1. Nursing: Textbook. - T. 2. –2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 s.
2. Symptoms of the patient's dying, stages.	2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001. -- 592 p.
3. Interpretation of the results of the study of vital organs.	3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. -
4. Features of the anamnesis of the disease and the patient's life, contributing to the provision of the most qualified care.	
5. Ethical underpinnings of key issues for the dying patient, such as resuscitation; refusal from	

<p>unnecessary therapy leading to a decrease in life expectancy; ineffectiveness of therapeutic measures.</p> <p>6. Medical and legal norms governing the amount of assistance provided to an agonizing patient.</p> <p>7. Cultural and religious traditions related to the terminal stage.</p>	<p>M.: MEDpressinform, 2009.-- 304 p.</p> <p>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009.-- 464 p.</p> <p>5. Tutorial "General examination of the patient" // Totrov IN, Enaldieva R.V., Ambalova S.A. and etc.</p>
<p><b>The student should be able to:</b></p> <ol style="list-style-type: none"> <li>1. Deliberately discuss issues related to death and the dying process</li> <li>2. Conduct a questioning of the patient and / or his relatives, caregivers, highlight priority, main and additional complaints.</li> <li>3. Collect data from the anamnesis of the disease, obtain information about the ongoing diagnostic and therapeutic measures, their effectiveness.</li> <li>4. Collect data from the patient's life history, the presence of relatives or a confidant with whom you can discuss issues related to dying and providing assistance.</li> <li>5. Conduct a sequential general examination of the patient with the identification of clinical symptoms of severe or extremely severe, agonal states.</li> <li>6. Provide adequate first aid to a dying patient</li> <li>7. Understand cultural and religious traditions related to the terminal stage and protect the dying person from physical and mental suffering as much as possible</li> </ol>	<ol style="list-style-type: none"> <li>1. Nursing: Textbook. - T. 2. --2nd ed., Revised. and add. / Ed. G.P. Kotelnikov. - Samara: Publishing house of the State Unitary Enterprise "Perspektiva", 2004. - 504 p.</li> <li>2. Grebenev A.L. Propedeutics of Internal Diseases: Textbook. - 5th ed., Rev. and add. - M.: Medicine, 2001.-- 592 p.</li> <li>3. Strutynsky A.V., Baranov A.P., Roitberg G.E., Gaponenkov Yu.P. Fundamentals of the semiotics of diseases of internal organs: textbook. allowance. — 2nd ed., Rev. and add. - M.: MEDpressinform, 2009.-- 304 p.</li> <li>4. Oslopov V.N., Bogoyavlenskaya O.V. General patient care in a therapeutic clinic: textbook. allowance. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2009.-- 464 p.</li> </ol>

**Motivational block:** mastering the skills of interrogating and examining severe and moribund patients is of great diagnostic value, allows you to correctly assess the functional state of the body and its reserve capabilities, to identify the symptoms of irreversibility of pathological processes.

### TASKS FOR INDEPENDENT WORK

#### Task 1. Insert the missing words:

1. Cancer patients usually experience a gradual decline in functional status, and the following signs are often associated with the onset of the dying phase:

- The patient stopped \_\_\_\_\_ out of bed.
- The patient is in a coma.
- The patient is able to eat only \_\_\_\_\_ food or refuses to eat.

- The patient is not able to take \_\_\_\_\_ medications, as swallowing is impaired, and he needs to be transferred to \_\_\_\_\_ methods of drug administration.

2. Experienced clinicians identify a subgroup of patients with progressive heart failure admitted to hospital, whose prognosis looks particularly poor and may end in death. These patients are characterized by the following features:

- Repeated previous hospitalizations for the progression of heart failure, \_\_\_\_\_ received the effect of previous treatment.
- No reversible cause \_\_\_\_\_.
- Receiving \_\_\_\_\_ therapy.
- \_\_\_\_\_ kidney function.
- \_\_\_\_\_ after 2 to 3 days of effect on optimal cardiac therapy.

3. Realizing that his condition is \_\_\_\_\_, but at the same time without receiving any information from the doctor, the patient loses \_\_\_\_\_ to him.

**Task 2.** Without receiving information from medical professionals, the patient dies in a state of severe emotional stress and loss of self-esteem.

Answer the question:

Do national, cultural and religious traditions play a role in ensuring “worthy” dying of the patient?

Is it possible to ignore the need of a dying person to collect unction and say goodbye to those close to him?

**Task 3.** Resuscitation measures in the provision of first aid include the following:  
one. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Task 4.** Describe the technique of artificial respiration



Рис. 17-1. Запрокидывание головы реанимируемого больного.

**Task 5.** Describe the technique of chest compressions



Рис. 17-4. Проведение непрямого массажа сердца.

**Assignment 6...** Insert the missing words.

The signs of clinical death are as follows:

1. \_\_\_\_\_ consciousness: usually 10-15 seconds after circulatory arrest.
2. \_\_\_\_\_ reactions to external stimuli.
3. \_\_\_\_\_ pupils to light (when the patient's eyelid is opened, the pupil remains \_\_\_\_\_, "fills" almost the entire iris). The maximum \_\_\_\_\_ is observed in 90-100 s. after circulatory arrest.
4. Cessation of breathing or infrequent shallow breathing (name by author \_\_\_\_\_): \_\_\_\_\_ NPV up to 5-8 per minute.
5. \_\_\_\_\_ pulse on the radial, carotid, femoral arteries.
6. The appearance of cyanosis of the lips, fingertips, earlobes.
7. Blanching of the skin with the development of \_\_\_\_\_.

Resuscitation measures must be started immediately in the room where clinical death occurred; in this case, the patient's body should be quickly and carefully laid on \_\_\_\_\_.

The criteria for the effectiveness of chest compressions are as follows:

- one. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_