

**Federal State Budgetary Educational Institution of Higher Education "North Ossetian State Medical Academy" of the Ministry of Health of the Russian Federation**

Department of Surgical Diseases No. 1

DISEASE HISTORY SCHEME

Study guide for medical students

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## DEPARTMENT OF SURGERY OF MECHANICAL DISEASES №1

Head of the department:

(academic title, academic degree)

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(academic title, academic degree)

### DISEASE HISTORY

(surname,  
name, patronymic of the patient)

#### Clinical diagnosis:

The main  
disease

Complications of the underlying disease

diseases

Related

Curator - student (s) of the course group of the faculty

(surname, name, patronymic of the student)

Curation date

## I. PASSPORT SECTION

1. Surname, name, patronymic.
2. Gender.
3. Age.
4. Permanent residence.
5. Profession.
6. Diagnosis of the referring institution.
7. Date and time of admission.
8. Date of supervision.

Explanatory notes to the list : *In the history of the passport officer fills with - emnogo department. The attending physician must clarify all sections of the personal data. The profession and place of work can give a doctor the idea of possible occupational hazards. Place of residence permit includes mainly two issues: Identify - Lenie endemic diseases and providing correspondence after discharge of the patient (examined s from da l ennyh results of staged surgical treatment, work on clinical examination). It is necessary to find out from the card and hospitalization - tion , with any diagnosis of the patient is directed to the hospital , he was done. D iagnoz directed establishment should not induce the physician in a clinic, dispensary or put zna when calling a doctor at home diagnosis - much more difficult.*

## II . COMPLAINTS

When interpreting complaints, it is necessary to follow the sequence of the description, first of all , the main complaints associated with the disease for which the patient turned to the surgeon are indicated . Secondary complaints related to concomitant diseases are presented after the main ones.

At the time of admission, the patient may complain about:

- Pain.

You must specify : localization (anatomy), character ( sharp th , stupid , Separated, stabbing , ZhSU tea , aching th , gripping th), intensity ( weak th , moderate nd , strong th) , duration ( permanent, paroxysmal, cramping lasting minutes, hours, days ) , conditionsarose novena ( at rest, during exercise, coughing, change in body position, sudden movements, respiratory movements, certain positionsand body, emotional stress ) , communication with the reception th food (hunger pains during food, after eating) , daily dependence (arising during the day, at night) , irradiation (anatomical region) relief of pain ( independently, at rest, after eating, after applying heat, after applying cold, after vomiting, with the help of medications , for a certain time).

- Fever:

It is necessary to indicate: the speed and degree of temperature rise , fluctuation

t The temperature during the day , the length

L ihoradochn th period and, with oprovohzde of chills, sweating, weakness, cough, dyspnea, abdominal pain, jaundice. There are the following types of fevers: constant, remitting, hectic, perverted, wavy, intermittent.

- cough ( tussis ) :

You must specify: nature ( dry, with the release of sputum, hoarse "barking" ) , while there was a novena ( day, night, morning ) ,frequency

( continuous, periodic, etc. ristupoobrazny ), provokes the ( deep breath, cold drink, going

outside, smoking ), to drink ( hot drink, medications).

- Sputum: ( sputum ) :

It should indicate: the nature of ( serous, mucous, mucopurulent, purulent consistency ), impurities ( blood ), selection (cross-sectional uniformly e for days on a ) the position e ( standing , lying , sitting ).

- Hemoptysis ( haemoptoe ) :

You must specify the: character (n rozhilki, clots of pure blood and), color ( al athletic , dark athletic , rusty th , raspberries th), triggers ( after eating, drinking, emotional stress, coughing, for no apparent reason ), the amounts of ...

- Shortness of breath ( dvspnoe ) :

You must specify: conditions arose novena ( at rest, during exercise, when you cough, changing body positions ), character (inspiratory th , expiratory th , mixed character ) , the time of occurrence ( day, night, constantly ), a resting ment ( self , at rest, with medications ).

- Choking ( asthma ) :

You must specify: conditions of occurrence ( after coughing, due to physical exertion, after or at the time of smoking, in a stuffy room ), character ( shortness of breath, for tr udnennogo exhalation of breath ), duration of attacks , to the resting ment ( alone, medication drugs , for how long) .

- Palpitations ( palpatio cordis ),

It is necessary to indicate: the presence of a feeling of interruptions in the heart, the conditions for the emergence ( due to physical exertion, emotional stress, food intake ) , the nature ( episodic, paroxysmal, constant ) , frequency and occurrence ( up to once a day, week, month, year) for resting ment ( alone, at rest, medication therapy , for ) .

- Swelling ( oede ma ) :

You must specify: localization (n izhni ie , upper limbs , lower back as well , people of, stomach , local, anasarca), character ( pasty, moderately pronounced, pronounced ), conditions of occurrence ( in the morning, in the evening, during the day, after exercise , constant after drinking load after receiving excess salts ), with scab rise of edema , f actors promoting reduction or disappearance of edema:

- Dyspeptic symptoms:

You must specify: the presence of difficulty swallowing and passage of food through the esophagus ( dysphagia ), nausea s ( the nausea ), vomiting s ( vomitus ), belching , heartburn and bloating ( meteorismus ), conditions of occurrence ( in connection with the meal, on an empty stomach , after meals, while taking into fatty foods, salty, acute, dairy products, overeating ), for abutting sc (independently at rest, the application of cold, while applying heat, after vomiting, medical drugs for ) .

- Changes to a petit

It is necessary to indicate: preserved, decreased, increased ( polyphagia ), completely absent ( anorexia ), perverted.

Aversion to fatty, meaty foods.

- Changes to Toole and

You must specify: the nature ( a rich, moderate, small, locks, decorated, liquid, pasty, solid, "sheep" ), color ( brown athletic , yellow-brown athletic , yellow honest , gray and white first , tarry th), multiplicity ( up to once a day ) .

- Bleeding ;

It is necessary to indicate: signs of esophageal, gastric, intestinal and hemorrhoidal bleeding, vomiting of blood, coffee grounds, black tarry stools ( melena ), fresh blood in the stool.

- Jaundice

is necessary to specify: the time of occurrence , the conditions of emergence ( after a pain attack,

the development of dyspeptic phenomena of eating greasy, spicy, alcohol intake, after eating), accompanying it ( pruritus, changes in colored stool, change in urine color ).

- Change in uroscopy I: \_\_\_\_\_

You must specify: the amount of urine (high, low, full with its setbacks as well), difficulty urinating (trickle, drops, intermittent), the presence of urinary incontinence, false urge to urinate, pain, burning, pain during urination (in the beginning, after or during the entire act of urination), frequent urination, nocturnal urination and changing the color of urine (saturated yellow, dark color of the "beer" red color "meat slops"), the transparency of the urine, and blood impurities in urine (in the beginning or end of urination, in all servings).

- Menstrual irregularities:

It is necessary to indicate: their irregularity, violation of periodicity, quantity, duration, pain, uterine bleeding, other discharge (leucorrhoea).

- Sexual dysfunction:

It is necessary to indicate its changes (increased, decreased, absent).

- Dizziness

You must specify: its character, conditions of occurrence (when walking, when you change the position of the body and head), with or without loss of consciousness, fall).

- State of mind:

It is necessary to indicate: decreased performance, decreased memory, loss of attention, sleep disturbance (disturbance of the depth of sleep, disturbance of duration, insomnia).

- Emotional-volitional sphere:

You must specify: the mood of the character, irritability, lethargy, apathy, alarming suspiciousness, depression, euphoria, with unusual thoughts and intentions.

- The motor sphere:

It is necessary to indicate: weakness in the limbs, trembling, convulsions, other involuntary movements

- For skin sensitivity disorders:

You must specify: the sensitivity (increased, decreased), paresthesia in certain areas and pain along the nerve trunks, radicular pain.

- Sight, taste, smell, hearing

*Explanation to Section: Well COMPLAINTS must study Attention, thoughtfully. It is obtained by a study of complaints information, give the correct orientation of the character of the disease.*

### III . HISTORY OF THE PRESENT DISEASE ( Anamnesis morbi )

Just as thoughtfully and scrupulously it is necessary to study how the disease developed. The onset of the disease is established as precisely as possible. If the disease has appeared MULTI - to hours ago, you should set the hour for the onset of illness: how many hours have passed since the disease. You should try to find out the cause of illness or bond sho Arise - veniya with any previous events. Next in chronological order learn the first symptoms of the disease, their build-up, change over time, has appeared - Lenie new symptoms;changes in the overall condition of the patient in the course of the disease (on - the extent of deterioration, loss of weight, change in temperature, increasing weakness, etc...). At the same time, it is necessary to find out the change in the function of other systems and organs as the disease progresses, which brought the patient to the clinic. It is necessary to fix the first Obra - Reference to the doctor, and the next, made before admission to the clinic research, the results of their treatment were carried out previously and the effectiveness (if the patient remembers). Introducing - mye sick documents on previous studies and treatment are subject to scrutiny.

Paramount importance onset of the disease in acute surgical Patolo - ology, and traumatic injuries.

Option questions: ,

- For how long does he consider himself sick?
- Where and under what circumstances did you get sick for the first time?
- Factors preceding the onset of the disease.
- With what signs did the disease begin? The first visit to the doctor, the results of the research, the diagnosis of the disease, treatment during that period, its effectiveness.
- The subsequent course of the disease:
  - a) the dynamics of the initial symptoms, the appearance of new symptoms and the further manifestation of all signs of the disease;

- b) frequency of exacerbations, duration of remission, complications of the disease;
- c) the medical and diagnostic measures performed (inpatient or outpatient examination and treatment, medications used, physiotherapy, spa treatment, etc.), the results of diagnostic studies (blood, urine, ECG, X-ray data, etc.), the effectiveness of the therapy;
- d) work capacity for the period of the disease.

*Explanations for section y: The study of anamnesis is a difficult and important task. A well-informed and balanced -GOVERNMENTAL patients medical history to collect easily in other patients the study of history is through - exceedingly difficult or impossible (the patient and the unconscious or critically ill, the deaf-mute, in patients with mental disorders, from being in alcoholic or narcotic intoxication, in young children). In the latter case in the study of medical history to help relatives, parents or people, dos -tativshie patient in the hospital. You can not go blindly in the wake of the diagnosis, delivered at a pre - previous investigations, even performed in .zhe institution.*

#### IV . LIFE STORY ( Anamnesis vitae )

The social status of the family in which the patient was born.

Childhood development. After questioning the patient about early childhood (height, weight), about school, about the time of the appearance of secondary sexual characteristics, the doctor receives a pre - representation of the mental and physical development of the patient, his reaction to illness, injury, about puberty and so on..

It is clear that frequent childhood illnesses, colds, poor school performance, and developmental delays compared to peers indicate unfavorable conditions for the formation of the body.

Education and work history : n achalo work: at what age, by whom and where he began to work. Further work activity in chronological FOLLOW - consistently indicating the jobs and positions. Working conditions and regime (night shifts, stay in a draft, prolonged static stress, physical and psycho-emotional stress, temperature regime, etc.). Professional harmful - STI (exposure to toxic chemical compounds, ionizing radiation and Drew - GIH hazards).

Heredity: P For a driver, brothers, sisters, children: the state of their health, diseases, causes of death (specify at what age). Family history: the presence of relatives of malignant novooob - mations, cardiovascular (myocardial infarction, angina, hypertension, stroke), endocrine (diabetes, thyrotoxicosis, etc.) And for mental - boleваны, hemorrhagic diathesis, alcoholism. The presence of the closest kinship - kov a history of tuberculosis and syphilis.

Material and living conditions . Housing and sanitary and hygienic conditions in everyday life (area of premises, their characteristics, availability of amenities). Number lived - vavshih on this housing officials. Climatic conditions. Stay in areas of environ -cal disasters. Regime and the regularity of supply, the nature and variety of food, calorie - riynost etc.

Postponed diseases, injuries, contusions, injuries, operations. When the study - Research Institute for an illness or injury, we must first pay attention to the previously occurred disease. It should be clarified when it was rescheduled for infectious - diseases that once it has proceeded, whether the complications were, where (in a hospital, at home) were treated, ka - Kie were the consequences when they are gone, the duration of treatment of disease and wasps - complication in the. It is of great importance to obtain comprehensive information about the transferred tuberculosis, hepatitis, syphilis, HIV. Knowledge of the presence of infection in the patient at the time of admission to the surgical hospital is necessary when choosing IU - Toda treatment, as well as carrying out sanitary-epidemiological measures.

Family and reproductive history: For women - a brief history of gynecologic -Detailed study the physiology and pathology of the sexual sphere: the time of puberty, the appearance and character of menses, and especially their change with the onset of sexual zhiz -none; postponed pregnancies, childbirth, abortions, their features and complications; diseases of the genital area, previous operations and applied methods of treatment. Be sure to indicate the start date of the last menstruation. Marital status at the time of osmot - pa, the number of children.

Bad habits: Smoking - duration and quantity. The use of alcoholic beverages, drugs.

Transferred operations . In the study of patients transferred operations necessary to you - yasnit which was an operation, when and where it is performed, whether after surgery oslozh - neniya. Particular attention should be given to postoperative bleeding, suppuration, complications from vascular (thrombophlebitis, embolism), response to the application of an - antibiotic treatment, sulfa drugs, other drugs, reaction to transfusion. Means it is necessary to find out the operators was performed under any kind of anesthesia - radio, portability novocaine, postanesthetic complications

Allergic history: clarifies intolerance to food, medical preparation - governmental drugs, vaccines and serums and it is manifested. In the presence of allergenic - Sgiach reactions (vasomotor rhinitis, urticaria, angioneurotic edema), specify the cause and frequency of their occurrence.

Insurance history: availability of a policy of compulsory and voluntary insurance.

Disability (from what age, reason, disability group).



## **The V . PRESENT STATE ( Status praesens ) .**

### **GENERAL INSPECTION .**

Objective research should be carried out in a bright room, preferably with natural light. The study begins with a general examination of the patient, noting the total consisting - of which may be assessed as satisfactory, moderate, severe and very severe.

Consciousness : clear, to be confused - stupor, stupor, coma, delirium, hallucinations. Reaction to the environment : restrained, indifference, increased interest. Mood : smooth, on - pressure, euphoria.

The patient : active (walking), active in bed, forced (eg, pulled his legs to his stomach because of pain), passive (with paralysis, patients without consciously - Nia).

Build: right and wrong, give a description of the constitutional type (normostenichesky, hypersthenic, asthenia), height and weight (indicated in Correspondingly - vuyuschih units).

Nutrition : normal, decreased, increased, obesity (degree) , cachexia .

Posture (straight, stooped), gait (fast, slow, atactic, spastic, paretic),

Body temperature : sick people are measured, as a rule, 2 times a day: in the morning on an empty stomach (from 7 to 9 hours) and in the evening before the last meal (from 17 to 19 hours).

Facial expression : calm, indifferent, mask-like, melancholy, stradalche - skoe, excited, tired, etc. Corvizar's face, ( facies febris ,facies nefritica , facies Hypocratica , facies mi tralis facies Basedovica ), etc.

Skin, nails and visible mucous membranes : Color (pale pink, dark, red , cyanotic, icteric, pale, earthy). Pigmentation and depigmentation (leucoderma), their localization. Eruptions: a form of rash (roseola, papules, pustules, vesicles, erythema, spot, famously -radochnye rashes - herpes ), localization of lesions, single or multiple (drain) rash. Vascular changes: telangiectasias, "spider veins", their localization and number. Hemorrhages : localization, size, number, severity.

Scars: location, color, size (in inches), shape, cohesion with the surrounding - conductive fabrics, mobility, pain. Trophic changes: ulcers, pressure sores, their location, size, nature of the over - Nost, etc.

Visible tumors: myoma, angioma, atheroma, etc., their localization, size.

Skin moisture, skin turgor. Hair type.

Nails: Form ( "hour glass" koilonychia et al.), The color (pink, bluish, Bled - ny), transverse or longitudinal striations, brittle nails ,

Visible mucous membranes: the color (pink, pale, bluish jaundice, red), you - rolling in on the mucous (enantherma), their localization and severity, in lazhnost mucous.

Subcutaneous fat: development (moderate, weak, excessive), nai place - more fat deposits (on the stomach, arms, thighs), edema, their localization (limbs, back, abdomen), the prevalence of (local go anasarca), severity (pastoz Mr. spine, moderate pronounced go), the consistency of edema.

Swelling is determined by pressing on the skin of a finger tip (still slowly vypol - sculpt the fovea). When expressed better swelling pressure burns / cm to produce a Oblas - ti bones - tibia or above the ankle bone.

Soreness on palpation of the subcutaneous fat, the presence of crepitus (with air emphysema of the subcutaneous tissue).

Lymph nodes: Localization of palpable lymph nodes (occipital, near the - ear, submandibular, cervical, supraclavicular and subclavian, axillary, elbow, inguinal, popliteal). Their size, shape, consistency, soreness, mobility, adhesions between themselves and with surrounding tissues, the condition of the skin over the lymph nodes.

Palpation should be performed so as not to cause any discomfort to the patient. The doctor's hands should be warm and dry. If in the cold season it is not possible to quickly warm your hands, you must warn the patient about this with an apology. You - suppl hand palpation (hands, fingers) should fall gently on Correspondingly - pertinent part of the body, and

immediately take the form of that part of the body, relieve th her. Pal - patsiyu carried out carefully with your fingers penetrating deep into the tissue and making sliding and circular movements with your fingertips, and sometimes the whole hand. Each group of lymph - cally nodes requires a special reception palpation.

Pharynx: discoloration, redness, swelling, plaque. Tonsils: value, red, swelled - lethargy, attacks.

Muscles: degree of development (satisfactory, weak, atrophy, muscle hypertrophy). Tone: preserved, decreased, increased (muscle stiffness). Muscle strength. Soreness and hardness to the touch.

Bones: bone shape, presence of deformities, pain on palpation, effleurage, the state of the terminal phalanges of the fingers and toes (symptom of "drum fell on a check ").

Joints: Configuration, swelling, tenderness to palpation, hyperemia and local temperature of the skin over the joints. Movements in the joints: their soreness, crunching during movements, the volume of active and passive movements in the joints.

When examining the osteoarticular system, it is necessary to note the proportionality of the parts of the skeleton, the preservation of the normal contours of various parts of the body (head, neck, trunk, limbs) and the preservation of a normal range of motion in the joints (taking into account their shape). An indispensable condition in the study each patient is a surgical examination, performance of active and passive movements, check rea - tion to the load along the length of the spine and palpation. A study of the spine, joints and bones, as well as all other tissues and organs, should be very PICs - goad, especially in cases of suspected pathological changes in them.

## **RESPIRATORY SYSTEM**

### **INSPECTION**

Nose: changes in the shape of the nose, breathing through the nose (free, difficult). Otdetrolled from the nose, its nature and quantity. Nosebleeds.

Larynx : Deformity and swelling in the larynx region. Voice (loud, quiet, clear, hoarse), no voice (aphonia).

Chest : Chest shape: normosthenic. hypersthenic, ac - tenicheskaya pathological form (emphysematous, barrel, paralytic, navicular, rachitic, funnel). Intensity supra- and subclavian pits (made, sunken, drawn), the width of the intercostal spaces (moderate, Shiro - Kie narrow) value epigastric angle (straight, obtuse), the position blades and clavicle (not protrude, protrude moderately clearly winglike blade ), the ratio of anteroposterior and lateral dimensions of the chest, chest symmetry (Uwe - lichenie or reduction of one of the halves, local protrusions or depressions).

Spinal curvature : kyphosis, lordosis, scoliosis, kyphoscoliosis.

Chest circumference, chest excursion during inhalation and exhalation.

Breathing: breath type (thoracic, br S. hydrochloric mixed). Respiratory Symmetry - - negative movements (lag in respiration one half). Participation in breathing aux - gatelnoy muscles. Breaths per minute. Respiratory depth (superficial, glu - bokoe, including Kussmaul respiration). Breathing rhythm (rhythmic, arrhythmic, including Cheyne-Stokes and Biot breathing). The ratio of inhalation and exhalation . Inspiratory, expiratory and mixed dyspnea.

When counting the number of breaths, one should not focus the patient's attention on this. It is necessary to pretend that the pulse is considered - patients are accustomed to this study.

### **PALPATION**

Identification of painful areas and their localization. Determination of resistance (elasticity of the chest). Determination of voice tremor in symmetrical sections (the same, enhanced or weakened on one side).

### **LUNG PERCUSSION**

Comparative percussion: the nature of the percussion sound on symmetric lan - kah chest (sound clear lung, blunted, boxed, tympanic, tympanic-blunting) with a precise definition of the boundaries of each sound in the ribs and topographic lines (in cm.).

Topographic	Perk in ssiaus siya:	
	On right	Left
<b>The upper border of the lungs</b>		
the height of the tops in front	-	-
standing height of the tops behind	-	-
width of Kroenig fields	-	-
<b>Lower border of the lungs</b>		
along the sternal line	-	Not t defined
along the midclavicular line	-	Not t defined
along the anterior axillary line	-	-
along the mid-axillary line	-	-
Rear- th axillary line	-	-
along the scapular line	-	-
on whether the paravertebral nand and	-	-
<b>Respiratory excursion of the lower edge of the lungs</b>		
sredinnoklyuchichnoy on whetherany , and	-	-
along the mid-axillary line	-	-
along the scapular line	-	-

#### AUSCULTATION

Major respiratory sounds: nature of the main respiratory noise symmetry - ary parts of the chest (vesicular, attenuated, amplified, hard, armor - hialnoe, amforicheskoe lack souffle).

Side breathing noises: wheezes (dry or wet), crackling noise tre - Niya pleura plevroperikardialny noise, their localization and characterization.

Bronchophonia: definition of bronchophonia over symmetrical areas of the chest (the same on both sides, strengthened or weakened on one side).

### CIRCULATORY SYSTEM

#### INSPECTION

Examination of the neck: The condition of the veins and arteries of the neck, their pathological changes.

Examination of the region of the heart: protrusion of the region of the heart ( Gibbus cordis ). Visible pulsations (apical impulse, cardiac impulse, epigastric pulsation, atypical - naya pulsation of the heart), their characteristics (location, abundance, strength, related to the phases of cardiac activity).

The position of a patient with vascular pathology in bed is forced: with a raised or bent leg in the knee joint to reduce pain. It is necessary to pay attention to the presence of cyanosis to the railway and stations, and blanching of fingers. At the same time, should pay attention to the peeling of the skin, lack of development of the hair cover, brittle nails, and ulcerations on Teschin number f e, ie, signs of tissue trophism disorders. Particularly noted are the expansion of the veins and their individual nodes, hyperemia of the skin along the veins, as well as the intradermal expansion of small veins in the form of "nets" and "stars".

#### PALPATION

Apical impulse: its localization (indicate the intercostal space and relation to the left midclavicular line), strength (weakened, strengthened, elevating), area (limited, diffuse).

Cardiac impulse: its localization, area.

Epigastric pulsation: its nature (connection with the pulsation of the abdominal aorta, angry - tsa, liver), the prevalence of (limited or diffuse).

Trembling in the heart ( fremitus ): ero localization, relation to the phases serdech - Noah activities (systolic or diastolic).

PERCUSSION :

<b>The boundaries of the relative dullness of the heart:</b>	
Right	
Left	
Upper	
Cross-section of relative dullness of the heart	cm
Vascular bundle width	cm
Heart configuration	(normal, mitral, aortic)
<b>Absolute dullness of the heart</b>	
Right	
Left	
Upper	

AUSCULTATION

Heart rate (rhythmic or arrhythmic forms indicating arrhythmia - respiratory arrhythmia, atrial fibrillation, arrhythmia, loss of cardiac contractions). Heart rate.

Tones: the first tone, its loudness (attenuated, amplified, flapping), splitting - Leniye first tone or split.

The second tone, its loudness (attenuated, amplified - accented) splitting - Leniye second tone or split.

Additional tones: presystolic and protodiastolic gallop rhythm, quail rhythm, systolic gallop.

Murmurs: Relation to the phases of cardiac activity (systolic, diastolic, presystolic, protodiastolic, meso-diastolic, etc.).

The best place to listen to noise. Conducting noise.

Character noise (soft blowing, scrubbing, rough, etc.), a tone (high and low), the volume (silent, loud), length (short, long, Naras -melting, decreasing et al.).

Changes in noise depending on the position of the body, holding the breath during inhalation and exhalation and after exercise.

Pericardial friction murmur: The place of the best listening, the nature of the noise (rough and loud, quiet, gentle).

RESEARCH OF VESSELS

Determination of palpation pain and areas of hyperesthesia. On palpation should find out muscle soreness, dryness to - Ms and its temperature. Pulsation of the arteries in the lower extremities is defined in months - max projection of large vessels.

- The femoral artery is on the border of the inner and middle third of the pupar ligament (with its conditional division into 3 parts).
- Popliteal artery - in the midline in the popliteal fossa.
- Posterior tibial artery - posterior and below the inner ankle.
- The dorsal artery of the foot - along the projection of the line connecting the middle of the distance between the ankles and the first interdigital space.

Palpation along the veins note seal portions in the form of cord and bole - nennost along the veins.

A study of the arteries: Inspection and palpation of the temporal, carotid, radial, horseshoes - PARTICULAR arteries and arteries of the rear foot; severity of pulsation, elasticity, smoothness of the arterial wall, tortuosity of the arteries. Determination of the pulsation of the aorta in the jugular fossa. Listening to the carotid and femoral arteries (double tone of Traube, double noise of Vinogradov-Durozier, etc.).

Arterial pulse: pulse on radial artery: comparison pulse on both ru - kah, frequency, rhythm (arrhythmias and heart deficiency), filling, supply, led - rank, the speed, the shape of the pulse.

Blood pressure (BP): on the brachial arteries in mm Hg. (according to the Korotkov method, systolic and diastolic blood pressure is determined).

The study of veins: Inspection and palpation of the neck veins, swelling them, visible bullets - satsiya, the presence of negative or positive venous pulse.

Listening to the jugular vein ("spinning top").

The presence of varicose veins of the chest, abdomen, extremities decree - Niemi place and the degree of expansion.

Condensation and tenderness of veins with indication of vein and extent of induration or tenderness.

The plan for the study of the cardiovascular system includes the determination of arterial and venous pressure and the verification of some functional tests. Sample Stange conclude - chaetsya that the patient is asked to hold his breath after a deep breath. The holes - mal conditions of people hold their breath for 40 - 60 seconds. Saabrase test - the maximum holding of breath after exhalation. A decrease in the indicators of the Stange test to 20 seconds, and Saabrase - to 10 - 12 seconds indicates a failure of the reserve function of the cardiac and respiratory systems.

## **SYSTEM OF THE DIGESTIVE ORGANS .**

*Excellent knowledge of the methods of investigation of the digestive system is of particular values - set, as the vast majority of general surgeons, both in planning and in emergency chi - rurgii most faced with the pathology of these organs. To digestive otno - true not only of the stomach, and of its bodies, but also other regions of the gastrointestinal tract, including the mouth. All the digestive organs are in close anatomical and functional relationship - a disease of the body inevitably leads to functional - nye, and then morphological changes in other organs and often the entire digestive system .*

### **INSPECTION**

Oral cavity: Language (coloring, humidity, state of papillary layer, the presence Nala - comrade, fissures, ulcers). Condition of teeth. Gums, soft and hard palate (discoloration, plaque, hemorrhage, ulceration).

In every surgical patient, the study should begin with the oral cavity. Hos - Mothra carried out always with a spatula and always wear gloves. It is important not only to find out whether the tongue is wet or dry, what kind of plaque it is coated with (this is of particular importance in the pathology of the digestive system), but also to get an idea of the state of the oral mucosa, pharynx and teeth. The presence of sores on the lip or mucous will necessitate additional The investigations - dovany and other specialists, purulent tonsillolith and carious teeth yavyatsya contraindication to elective surgery and will require treatment. Upon detection of patho - logical changes in the buccal cavity (.. Sores, swelling, cysts, etc.) should resort to palpation that better perform in gloves.

Esophagus: almost inaccessible to objective research. Normally, only auscultation can provide information about the condition and function of the esophagus. Stethoscope or fonendo - Osprey is placed in the front angle formed by the xiphoid process and the left costal arch or behind the level VII thoracic vertebrae on the left of the spine. When swallow - liquid Vania two

noise arises: the first at the beginning of ingestion, and 7-10 seconds, the second one. ND Strazhesko characterized the first swallowing murmur (the beginning of swallowing) as "the noise of a splashing stream", and the second weak (when the fluid passes in the lower part of the esophagus) compared with the bursting of large bubbles. If you suspect a violation of the patency of the esophagus, these research methods can be applied. In other patients, it is enough to find out whether food passes freely through the esophagus.

Belly. Examination of the abdomen is carried out strictly according to the scheme: 1) inspection, 2) active movement, 3) percussion, 4) palpation surface, 5) palpation deep, 6) ausculting, 7) is checked by specific symptoms and abdominal measurement (if Patolo - gies) , 8) examination with a finger through the rectum. On examination, pay attention to the shape of the abdomen, its symmetry, participation in the act of breathing, visible peristalsis same - ludka and intestine, venous collaterals.

For the most accurate determination of localization of detectable changes before - nyuyu abdominal wall is divided into regions, which is performed mentally two horizontal lines (one on the lowermost departments X ribs, and the second - between the upper front awns iliac crests). The first area above the first horizontal line is the epigastric ( epigastrium ), the second - between the horizontal lines - celiac ( mesogastrium ), the third - below the second horizontal line - hypogastric ( gipogastrium ). In addition, the two vertical lines passing along the outer edges of the rectus muscles Ms - vota b lobrazuyut 9 areas:

- 1) Regio epigastrica - epigastric region;
- 2) Regio hypogastrica dextra - right hypochondrium;
- 3) Regio hypogastrica sinistra - left hypochondrium;
- 4) Regio umbilicalis - the umbilical region;
- 5) Regio abdominalis lateralis dextra - right lateral region ;
- 6) Regio abdominalis lateralis sinistra - left lateral region ;
- 7) Regio ilioinguinalis dextra - right iliac - inguinal region ;
- 8) Regio ilioinguinalis sinistra - left ilio - inguinal region ;
- 9) Regio suprapubica - suprapubic region.

After the completion of the examination, active movements are checked: they ask the patient to cough, strain and raise his head and shoulder girdle without using his hands. It is necessary to get answers to follows - blowing questions: Do pain arises whether there are protrusions on the abdominal wall - ke, whether the configuration is amended and the severity of protrusion of the abdominal wall, identified during the inspection.

Active movements Testing reveals abdominal pain, occurring with a load, free hernia (invisible in a late state), carry out a preliminary differential diagnosis of tumor localization (at voltage abdominal muscles tumor originating from the abdominal cavity, disappear or become less conspicuous).

Measuring the abdomen also makes sense if there is a pathological process in the abdominal cavity. The circumference of the abdomen should be measured at the level of the navel (it is advisable to mark other points through which the measuring tape passes). In Bulges Ms - vote furthermore measure the distance between spinae ilei anterior superior and the distance between the xiphoid process and the pubis.

#### PERCUSSION

The nature of the percussion sound. The presence of free or encapsulated fluid in the abdominal cavity.

Performing abdominal percussion, the doctor must answer, basically, four questions: is there percussion pain (localization and severity), a change in the percussion sound (dullness, high tympanitis), determine the boundaries of the liver and spleen. Percussion, at first the quietest (there may be a sharp soreness), is performed along the white line of the abdomen, then over the rectus muscles, outward from them and, finally, the sloping places are percussed. When the suspected presence of fluid in the abdominal cavity of the patient is rotated to the side and comparing - are the blunting zone at the position of the patient on one side and on the back.

## PALPATION

Superficial palpation: the painful area, the tension of the abdominal wall muscles (muscle protection - defance musculaire ), the difference of direct abdominal muscles and the presence of the white line hernia , umbilical hernia, peritoneal sympto - we (symptom-Shetkina Blumberg et al.), Mendel symptom. The presence of surfactants races - laid tumor formations. Surface (tentative) palpation determine the presence of muscle tension, soreness and get the total (preliminary - Noah) idea of protrusion (tumor, hernia, infiltration). Simultaneously Prove - ryayut state of the white line of the abdomen, the umbilical ring and superficial inguinal ring and femoral canals.

Palpation should be performed with both hands, beginning with his palm, then fingers, from two sides, to obtain comparative data on the localization - conjugation muscles, its intensity (subtle, mild, sharp), as well as the localization and intensity of pain. The information obtained after superficial palpation complements the data of previous research methods and is oriented towards a more rational performance of deep palpation.

Articles deep sliding palpation exemplary Strazhesko Sigma - prominent blind, ascending, descending, colon, large curvature of the stomach, the pylorus (a predetermined lower stomach border by percussion , percussion palpation - determining swash noise as well as by auskulta-tive percussion ). Determined localization, tenderness, size, shape, Konso - stentsiya, the nature of the surface mobility and rumbling different areas of the intestine and stomach. In the presence of tumor formations, their size, consistency, soreness, displacement, localization and possible connection with one or another abdominal organ are described.

Deep palpation can only be done after superficial palpation; palpation should be carried out carefully, gradually penetrating into the depths of the abdominal floor five (in no case be immediately yanked abruptly go into the stomach - it causes pain even zdo - rovogo man, and the patient could harm); when 'palpation of the liver and spleen should be favor - vatsya bimanual method of research, and the study of one hand to fix Drew - goy corresponding costal arch position of exhalation (to limit the displaceability body and that make it more accessible to palpation).

## AUSCULTATION

Characteristics of the audible intestinal murmurs . Peritoneal rubbing noise. Sosa - kyanite noise (in the projection of the abdominal aorta, renal arteries).

We must accustom ourselves to listening to the abdomen of a healthy person and a patient with no patho - ogy bodies .zhivota, get the hang of changing audio signals in different pathologies - iCal processes. Then abdominal auscultation will be an integral part of the study chi - rurgicheskogo patient. Well-known sound changes in abdominal obstructions kishech - nickname, in peritonitis, after injuries, etc...

## LIVER AND GALL BLADDER .

The presence of a limited protrusion in the area of the right hypochondrium, limitation of this area in breathing.

## PERCUSSION

Beating along the right costal arch: The presence of Ortner- Grekov's symptom .

<b>Borders of the liver according to Kurlov (indicate on which edge ):</b>	
The upper limit of the absolute dullness of the liver:	
on the right of the mid-clavicular line	
The lower limit of the absolute dullness of the liver:	
on the right mid-clavicular line	
along the anterior midline	

along the left costal arch	
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Dimensions of the liver Kurlovu (for percussion determining boundaries of liver IU - Tod exemplary Strazhesko) liver dimensions are measured:

- on the right anterior axillary;
- along the median-clavicular;
- along the peri-sternal and anterior median lines;
- on the right mid-clavicular line (in cm);
- along the anterior midline (in cm);
- along the left costal arch (in cm).

Gall bladder : Characteristics of the gallbladder, it proshchupyaemost painfully - STI, sizes. The presence of a Kerr, Murphysymptom and a phrenicus symptom.

#### **PALPATION**

Liver : clarification of the lower borders of the liver along the mid-clavicular and anterior midline. Characteristic of the edge of the liver (sharp or rounded, soft or hard, painful or painless). Characteristics of the liver surface (with its increase): the surface is smooth, granular, bumpy.

#### **AUSCULTATION**

The presence of a rubbing noise of the peritoneum in the right hypochondrium.

### **SPLEEN**

#### **INSPECTION**

The presence of a limited protrusion in the area of the left hypochondrium, limitation of this area in breathing.

#### **PERCUSSION**

Determination of the longitudinal and transverse dimensions of the spleen in cm.

#### **PALPATION**

Palpability of the spleen when lying on the side and on the back. Characteristic - Single spleen lower edge (sharp or rounded, painful or painless). Characteristics of the surface of the spleen (with a significant increase): the surface is smooth or bumpy, painful or painless.

#### **AUSCULTATION**

The presence of a rubbing noise of the peritoneum in the left hypochondrium.

### **PANCREAS**

#### **PALPATION**

When pancreatic study should consistently Palpi - Rowan head region localization and tail of the pancreas. Head podzhel - zling gland is projected onto the anterior abdominal wall in Shaffar zone, which has the shape of a triangle, located in the right upper quadrant nadpupochnoy area. On palpation, the right palm is placed on the stomach to the right of the midline so that the fingers are directed towards the costal arch and cover the Shaffar area. In this case, the tips of closed and slightly bent fingers should be 2-3 cm above the previously identified lower border of the stomach, then moving the skin fold in front of the fingers, palpation of the pancreas head from top to bottom is carried out on exhalation according to the Obraztsov method. At the same time there is a feeling of rolling Cum - Cove fingers through cross-lying soft, smooth, painless roller diameter of 1.5-2 cm for the tail of the pancreas palpation right palm placed longitudinally at the outer edge of the left rectus abdominis muscle, so that the tips of the fingers are at left. costal arch. In the future, the palpation technique is the same as in the study of the head of the gland. Investigation method greatly facilitates bimanual palpation when the left palm, a wound to the right under the back of the patient, is applied in the transverse direction under the left lumbar region A direct- venno below the ribs. During palpation of the left hand on the inspiration you need to file the ass - nyuyu abdominal wall in the direction of the right hand gropes. Palpation pancreas is most effective when it increased significantly - Britain and seal, as well as expressed visceroptosis and sagging of the anterior abdominal wall.



## **STUDY OF THE RECTAL COLUMN ( Per rectum ) .**

An objective study of the digestive system should be completed with an indispensable digital examination of the rectum in each surgical patient. This EC - following should be carried out regardless of age, sex, and the lack of complaints about Bo - whether in the rectum and anus. Suffice it to say that the implementation of this rule will reveal a large number of early cancers and other symptoms occurring Zabolev - Niya rectum and adjacent to her organs. Rectal examination allows us to study not only the state of the anus, rectum (at a considerable Length - NII), but also to get an idea about the state of the internal reproductive organs in women (if you can not perform vaginal research), prostate and behold - variables bubbles in men, the bottom of the urinary bladder, distal ureters, pelvic bones and peri-rectal tissue, as well as identify the inflammatory response of the peritoneum.

Research carried out in the position of the patient on all fours, in the supine position with her legs spread, and bent in a standing position in the lateral position and in a position squatting. Before inserting a finger into the rectum, it is necessary to move the buttocks apart, examine the anus and the entrance to the rectum. Then, the index finger of a gloved hand smeared with petroleum jelly is carefully inserted into the anal canal. When the finger is inserted, the mucous membrane of the anus, the sphincter are felt, and then, as the finger moves, all the walls of the rectum are examined, turning the finger clockwise. At the same time, attention is paid to the condition of the adjacent organs and tissues. When a pathological substrate is detected (infiltration, bladder tumor, etc.) . And the investigation should be done with two hands. The left hand is placed in the suprapubic or ilio-groin areas. Special and additional methods of investigation organs of digestion, as well as other organs and systems are carried out in the presence of disease and should be carefully justified.

## **SYSTEM OF URINARY ORGANS .**

### **INSPECTION**

Lumbar region: the presence of hyperemia of the skin , swelling, smoothing of the contours of the lumbar region.

Suprapubic region: the presence of a limited bulging in nadlob - kovoy area.

### **PERCUSSION**

Lumbar region: definition of Pasternatsky's symptom.

Suprapubic about - domain: the nature of the percussion sound over the pubis; with an increase in urinary bladder - uro - bottom position Wen bladder.

### **PALPATION**

Kidneys: Kidney palpability supine and standing, an increase in renal -their tenderness, texture, size, shape, motility, the presence symptom score - lotirovaniya. Bladder: palpability of the bladder, with its increase - the level of the location of the bottom of the bladder, tenderness on palpation. Painful points : the presence in pain on palpation of vertebral edge-point and in the course of urine Tocnik (ureteric point) .

## **GENITAL ORGAN SYSTEM .**

### **INSPECTION AND PALPATION**

Secondary sexual characteristics: type of hair growth (male, female), hair in the armpits, on the face, on the abdomen, in the pubic region. Gynecomastia. Voice (high, low). Signs of hirsutism, eunuchoidism, virilism, feminism.

Mammary glands (in women), breast cancer (men): the degree of development, with - standing skin, pigmentation, local OTE to as a "lemon peel" vtyazhe Niya. Symmetry of the glands. The shape of the nipples, the presence of erosions and ulcers, deformation of the glands. Yn - lotneniya, tyazhistost and tumor formation by palpation glands.

External genitalia (male) : scrotal size, testicles, scrotum swelling, tenderness of the testicles, Nali - Chiyo tumor formation. Underdevelopment of the testicles (anorchism, cryptorchidism). Erosion and a language - you penis. Anomalies and deformities of the penis.

Prostate gland (in men) : Size, consistency, palpation tenderness of the prostate gland on rectal examination.

Gynecological to some research (for women) : With TATUS external genitalia - new, vagina, uterus, appendages when viewed in the mirror and bimanual palpation.

## ENDOCRINE SYSTEM .

### INSPECTION AND PALPATION

Disorders of growth, physique and proportionality of individual parts of the body.

Obesity: severity, predominant localization of fat. Iskhuda - set, cachexia.

Skin condition: humidity, thinning, or roughness, giperpigmen - skin tation, skin folds (localization), the presence of stretch marks, atypical body hair, Luneau - shaped face. An increase in the size of the tongue, nose, jaws, ears, hands, feet.

Palpation of the thyroid gland: size, shape and location of units and konsisten - tion, sensitivity, displaceability. The thyroid study important its inspection and Palpa - tion, and the study of ocular symptoms.

Increasing the thyroid (goiter, tumors, inflammatory processes) proyav - lyayutsya swelling on a front surface and a neck located below the thyroid cartilage.

On examination, it is necessary to fix attention on the act of swallowing, when the apparent swelling, if it is associated with the thyroid gland, together with the larynx moves kver - xy and then downwards. In addition, the color of the skin over the gland, its temperature, the presence of a venous network and adhesion of the skin with a deeper formation are noted.

Palpate the thyroid gland should be inserted to the right and slightly in front of the pain - Foot and slightly inclined forward the patient's head. Palpation of the thyroid pro - usual right hand and the left hand fixes the patient's neck. The upper and lower lobes of the thyroid gland are palpable both at rest and at the time of swallowing.

## NERVOUS SYSTEM AND SENSE BODIES .

### INSPECTION

State of the psyche: consciousness, orientation in place, time and situation.

Intelligence: meets or does not correspond to the level of development. The weakening of the Institute - Intellectual functions (weakening of attention, memory loss, impaired criticism, narrowing the range of interests).

The behavior of the patient in a wedge Ike, the degree of sociability, balance, vanities - livost, restlessness.

If the patient signs a coma, to determine its severity it is advisable to use **w Glasgow feces**

### Scale Glasgow for determining the severity of coma

Indicator	Number of points	Maximum value
<b>Opens eyes :</b> spontaneously to the hail with painful irritation no reaction	four 3 2 one	four
<b>Speech :</b> distinct confused incoherent words unintelligible sounds absent	five four 3 2 one	five
<b>Movement :</b> executes commands can indicate a sore spot	6 five	

withdraws limbs in pain	four	
annoyance		
flexion in response to pain	3	
extension in response to pain	2	
absent	one	6

**The best indicator is 15; Stun 13-14; Sopor 9-12; Coma 4-8; Brain death - 3.**

A study of the cranial nerves: visual acuity, diplopia (diplopia - Pius), ptosis, volume of movements of the eyeballs, the reaction of the zrachkov born. Symmetry but labial folds with teeth grinning. Swallowing disorders. Dysphonia. The position of the tongue when protruding.

Meningeal symptoms: stiff neck, Kernig and Brudzinski symptoms.

Motor areas: the nature of gait with open and closed eyes (the usual - naya, ataxic, parietic, other forms). Stability when standing with eyes open and closed (Romberg test). Finger-nose and knee-heel tests.

Convulsions: clonic and tonic, fibrillar twitching, tremors (tremors) and other involuntary movements. Muscle contractures (localization). Range of motion and strength in the limbs.

Sensitive area: palpation pain along the nerve trunks and co - tails. Skin and deep sensitivity disorders (localization). Symptoms on -stringing, symptom Lassega.

Reflexes: corneal, pharyngeal. Tendon reflexes: knee, Achilles. Pathological reflexes: symptoms of Babinsky and Rossolimo.

Speech: aphasia (motor or sensory), dysarthria.

Autonomic nervous system:

Eye symptoms: the width of the palpebral fissure, the width of the pupil, exophthalmos, anophthalmos. Horner's symptom.

Skin: type of dermatographism, temperature asymmetries, hypertrichosis, alopecia, trophic ulcers, impaired sweating .

## **Vi . LOCAL MANIFESTATIONS OF DISEASE ( Status localis ) .**

N When you have finished the general objective examination of the patients proceed to the study - adherence to "the local manifestations of the disease» - the Status localis . The object of study locally - of the status of becoming an organ or even a system of organs, which are found places - nye changes . The presence in history the Status localis - a distinctive feature of the surgical history. Assessment of Status localis is extremely important, since it is surgeons who meet in their work with wounds, ulcers, tumors and other pathological conditions with vivid local manifestations.

An objective study is necessary to solve the following problem: perform the sequence - telnost studies without exposing the patient several times. Of course, it would be better to completely expose the patient at once. But at the same time there are two disadvantages: 1) of the full exposure of poorly tolerated, 2) in strict compliance with the scheme , after a study of the abdomen would have, for example, to see the patient The per the rectum , then remove the glove to perform IC - adherence to the urogenital organs. For examination of the genitals and examination of the per rectum or reg v aginum , patients are invited to a separate room ( examination room).

When examining the zone of pathological changes, it is necessary to assess the nature of the painful process (swelling, wound, protrusion, neoplasm, deformation, ulcer), its localization, size, color of the skin in this area and the severity of the vascular pattern . In case of violation of the integrity of the skin (wound, ulcer) - the nature of the defect, the shape and depth of the defect, the type and amount of discharge . We should carefully anthropometry to study (of length n and a circle and limb), the amount of active movements. It is important to emphasize the importance of examining symmetrical areas of the body (both limbs) to compare the affected and intact areas.

On palpation, it is necessary to determine the pain, local temperature, the nature of the border of the painful process with healthy tissues, to examine the pulsation of the main

arteries and regional lymph nodes. It is important to find out the amount of passive movement. When studying a tumor-like formation, it is additionally necessary to assess its consistency (soft-elastic, dense-elastic, stony density), mobility in relation to the skin and underlying tissues, the nature of the surface (smooth, bumpy).

With percussion, the nature of the percussion sound over the formation, the pathological focus (dullness, tympanitis) is determined, and special symptoms are revealed.

Auscultation is performed to detect vascular murmurs in the area of education and some special symptoms (determination of intestinal motility, conduction of heart sounds, weakening of respiratory murmurs, "splash noise", etc.).

After the completion of an objective study do rationale preliminary - Foot diagnosis.

### **Vii . PRELIMINARY DIAGNOSIS .**

Statement of preliminary diagnosis of produce with the use of an optionally - go database of complaints, medical history, medical history and objective studies - Niya. Simultaneously it is necessary to characterize the state of vital organs, reflection - Ziv the changes that have patient to be operative or conservative - Nome treatment. These data allow us to immediately start some elements predopera -translational training (combat intoxication, treatment of cardiovascular insufficient - Nosta, etc..).

The preliminary diagnosis formulation should be allocated to follow - boiling points:

a) Diagnosis of the underlying disease, including indication of the degree (stage), severity, form of the disease, the nature of the course (acute, subacute, chronic, recurrent, protracted, etc.), the phase of activity of the pathological process, the degree (stage) of functional disorders;

b) Diagnosis of complications of the underlying disease;

c) Diagnosis of concomitant disease.

Justification diagnosis finalizing the plan, the nature and scope of the additional - Telnih methods.

### **VIII P LAN SURVEY .**

Patient survey plan is developed, based on the preliminary diagnosis to determine the final clinical diagnosis and differentiation of -ential diagnosis. Specifies a list of necessary laboratory and the Tools - Basic Research, as well as expert advice. The examination plan should be planned and recorded in the medical history on the day of the initial examination of the patient. The volume of additional research is determined by the peculiarity of the disease and the results of the clinical examination. Among additional studies, it is necessary to single out those that are mandatory for each patient, regardless of the disease (general blood test, general urine analysis, chest fluoroscopy, Wasserman reaction, etc.) and motivated (dictated) by the peculiarity of the pathological process. In predoperatsi -Onn period necessary to fulfill the following mandatory laboratory and Institute - strumentalnih research:

- General clinical blood test;
- General clinical urine analysis;
- Biochemical blood test (necessarily bilirubin, urea, creatinine);
- Determination of blood group and Rh factor;
- Blood test for HIV, syphilis, hepatitis;
- Study of the state of the coagulation and anti-coagulation systems;
- Blood sugar;
- Chest x-ray;
- ECG.

For additional methods of investigation include various laboratory, en - doskopicheskie, ultrasound, X-ray, instrumental, morphological - skie (biopsy), isotopic and others. These methods have their own characteristics for various surgical diseases. Additional studies give the doctor bo - More complete picture of the state of the patient and can play an important role in the

Spend - SRI differential diagnosis. Additional laboratory studies on - allows one to specify the diagnosis, to find out the state of the patient's organs and systems.

Immunological studies: study of cellular immune factors - that - the number of lymphocytes, T and B lymphocytes, immunoglobulin levels (A, M, the G ), the level of lysozyme, complement and other factors.

Microbiological research - isolation of microorganisms from exudate, pus, blood, urine, sputum; determination of the type of microorganism, its pathogenic properties and sensitivity to antibacterial drugs. Cytological and histological studies are especially important to clarify the diagnosis of cancer. Vi - materials under study to serve as punctate, pieces of tissue taken during surgery, endo -scopic investigation; smears from the surface of the tumor, the sediment of the fluid obtained from the pleural, abdominal cavities.

Functional studies are used to evaluate the physiological with - standing bodies. To this end, make electrocardiography, oscilloscopes, sleep - rometriyu, electroencephalography.

X-ray methods occupy an important place in the examination of a patient with surgical diseases. Produce X-rays, X-rays, tomogra -fiyu, angiography, lymphography, fistulography.

Endoscopic methods. The use of flexible fiberoptic endoscopy can provide information for the diagnosis both due to possible inspection internal - it surfaces of organs - the stomach (gastroscopy), colon (colonoscopy), pleural - Noah (thoracoscopy) and abdominal (laparoscopy) cavities, the bronchi (bronchoscopy), Wednesday - Walls (mediastinoscopy ), bladder (cystoscopy), and by receiving ma. -Therians for cytological or histological examination by aspiration biopsy, swab or a piece of tissue from the mucosa of ulcer or tumor.

Ultrasonic research methods - ultrasound, e holokatsiya, Doppler - can detect gallstones, and kidney tumors, cysts, abscesses of internal organs and the brain, intracranial hematoma, identify with - standing excretory ducts, internal organs, the presence of inflammatory infiltration Comrade.

Radioisotope methods of study based on the principle of selective - absorption and distribution in the body of certain substances with a radioactive label. Ex - polzuemye isotopes have a short half-life and do not adversely affect the organism. Distribution in the body radioactive pharmaceuticals fixes - camping with a special indicator - gives an image storage apparatus by prep - ta.

Computed tomography. The method is based on a computer for identifying and - the structure of the image the extent of absorption of X-rays in the organs in the presence of anatomical changes in them (tumors, cysts, lesions degradation, abscesses, stones, Sun - - inflammatory infiltrates). The method allows to precisely determine the location of pathological - Skogen process in all the internal organs, brain, bones, set the process activity and select the most efficient surgical access if necessary opera - tive treatment.

Magnetic resonance imaging (MRI). It is based on identify - Leniye resonant magnetic radiation arising in the body by the action direction - lennogo powerful electromagnetic radiation. Information is recorded and processed - etsya on the computer. The method allows to determine the shape, size, topography bodies presence formations (tumors, cysts, abscesses) with cross or meat - gittalnogo body slice .

## **IX DATA OF LABORATORY INSTRUMENTAL METHODS OF RESEARCH AND CONSULTATION OF SPECIALISTS .**

This section presents the results of all the additional and obja - optional laboratory and instrumental methods of investigation, as well as the conclusion of specialist consultants. The sequence and the amount of appointment of additional studies should be in direct proportion to the nature of the disease, indie - vidual characteristics of the patient and determines the result obsheklinicheskogo ICs -repetition .

Summarized information obtained during clinical examination the pain - Foot with special laboratory, functional, instrumental studies, allows you to put a clinical diagnosis and determine a treatment plan.

But as a doctor doing research to make additions to the previously made by you - the water of the diagnosis, and after completion of the study provides a detailed study of the diagnosis and writes the indications for surgery or conservative treatment.

### **The X . CLINICAL DIAGNOSIS AND ITS RATIONALE .**

Clinical diagnosis should be delivered and recorded in the history of the disease within the first three days of stay in hospital, after receiving the results of labo - by the laboratory and instrumental methods of research and specialist consultants. Clinical diagnosis should be formulated in accordance with the on - scheprinyatymi classifications and includes:

- 1) A detailed diagnosis of the underlying disease, including:
  - name of the disease,
  - clinical, clinical-morphological or pathogenetic form,
  - the nature of the flow,
  - stages, phases, degree of activity of the process,
  - the degree (stage) of functional disorders or the severity of the disease;
- 2) Diagnosis of complications of the underlying disease;
- 3) Detailed diagnosis of concomitant diseases.

Justification of the clinical diagnosis, which is advisable to describe according to the following approximate plan:

- a) make a reference to the justification of the preliminary diagnosis without repeating it in detail;
- b) to take revenge on the results of laboratory and instrumental examinations, the conclusions of specialist consultants, and also to analyze the dynamics of the clinical picture of the disease during 1-3 days of observation of the patient in the hospital. Indicate whether this new data confirms a previously made provisional diagnosis;
- c) indicate what changes, additions and clarifications were made to the diagnosis in accordance with the new clinical, laboratory and instrumental data;
- d) if it becomes necessary to abandon a previously exposed preliminary diagnosis, these changes should be carefully argued;
- d) should prove refinement, additions, or changes in post and Novki clinical diagnosis, complications and concomitant illnesses.

### **XI . DIFFERENTIAL DIAGNOSIS .**

This section provides the differential diagnosis of the main leading sim - ptomu and syndromes found in this patient. The task of the differential di - agnosia is the elimination syndrome-related diseases. To this end:

- 1) In the clinical picture of the disease, the most striking and characteristic pathological symptoms and syndromes stand out ;
- 2) a number of similar diseases are listed in which similar symptoms and syndromes are observed ;
- 3) it is proved that the patient has a number of significant pathological symptoms and syndromes that are not characteristic of these similar diseases;
- 4) prove that the patient lacks a number of essential symptoms and syndromes characteristic of differentiable similar diseases;

H and the basis of this comparison of the clinical picture, available in a given b ol, with clinical signs of said disease similar make conclusions about the true nature of the disease and the correct clinical diagnosis.

### **XII . PLAN OF TREATMENT AND ITS RATIONALE .**

This section sets out the goals, objectives, basic principles and modern methods and means of treating this disease and preventing its complications (regimens, diet, medication and physical means, spa treatment), indicating the effectiveness of a particular therapy.

After that, based on ideas about the individual characteristics of the clinical course of the disease, the morphological and functional state of organs, as well as taking into account the social and psychological status of the patient, specific, most optimal therapeutic and preventive measures for this patient are developed.

First of all, it is necessary to determine the real goals of the treatment of this patient: complete recovery, elimination or reduction of the exacerbation of the disease, its complications, suspension of progression or regression of the disease, improvement of prognosis, and working capacity.

Next, it is necessary to determine the ways to achieve the set goals, i.e. the main directions of treatment. These include:

a) Etiological treatment, which involves the elimination or correction of causative, provoking factors, risk factors, antimicrobial agents, etc.;

b) Pathogenetic treatment aimed at influencing the basic mechanisms of the disease in a given patient (inflammation, allergy, functional disorders, deficiency of certain factors, intoxication, etc.);

c) Symptomatic treatment used when the first two are ineffective or impossible.

In relation to each direction, it is necessary to determine and justify the choice of specific therapeutic measures, to clarify the dose, route and frequency of administration in relation to this patient.

## **XI II . PREOPERATIVE EPICRISIS. (indications and contraindications for surgery).**

Preoperative epicrisis is one of the most important sections of the medical history of a surgical patient. It should be drafted in such a way that, creating a general understanding of the patient, the need for the surgical intervention is understood. The preoperative epicrisis must contain the following sections:

- passport part;
- anamnestic data about the underlying disease;
- motivated diagnosis and its evidence base;
- indications and contraindications for surgery;
- the degree of preparedness of the patient for the operation;
- operation plan;
- the type and nature of pain relief;
- the degree of operational and anesthetic risk;
- blood groups and Rh factor;
- indication of the patient's informed consent to the operation;
- the composition of the surgical team.

Preoperative epicrisis in patients who are to elective surgery, issued by the attending physician and signed by the head of the department, and then epicrisis reported at medical conferences, whose decision on the need for surgery and the timing of its implementation assertion Well given its chairman.

**Example:** Patient Ivanov A.I. 30 years admitted to the hospital complaining of aching pain under the right - vzdoshnoy area, dry mouth, nausea.

From anamnesis it is known that during the 19 hours before entering the blade pointed aching pain around the abdomen, which after 3 hours "passed" and were located on the right under - vzdoshnoy area. The pain is constant, without irradiation, aggravated by a change in body position and by coughing, decreased after taking the baralgin tablet. Along with pain, he noted nausea, dry mouth, single vomiting. These symptoms are "forced" patient Obra - titsya on an ambulance, which took the patient to the hospital with a diagnosis of the guide "Acute appendicitis." On admission, pain in the right iliac region persists. When viewed .zhivot not

swollen, palpation in the right iliac region is determined by a painful tension of the muscles of the abdominal wall, positive symptoms Shchetkina-Blumberg, Shchetkina - senskogo, Sitkovskiy, Rovzinga. Organs and systems, as well as rectal studies - SRI pathological abnormalities were detected.

Diagnosis: Acute phlegmonous appendicitis. This disease is an indication for emergency surgery. It is planned to perform an appendectomy from the Volkovich-Dyakonov incision. The operation will be performed under epidural anesthesia. There are no contraindications for anesthesia and surgery. The patient is informed about the upcoming operation. Receive email - Noah consent to anesthesia and surgery. Blood group A (1 I) Rh (+).

Doctor's signature

Signature of the head of the department



**Statement of informed consent for surgery under general anesthesia**

"- \_\_\_\_\_ " \_\_\_\_\_ 200 \_\_\_\_\_ h . \_\_\_\_\_ min.  
(filled in with the patient's own hand)

I, the patient (legal representative), \_\_\_\_\_  
\_\_\_\_\_ (Full name is filled  
in by the patient himself)

In accordance with Articles 30, 31, 32, and 33, Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens of July 22, 1993, I was informed that I need to perform surgical intervention

\_\_\_\_\_  
(To be completed by the attending physician)

under general anesthesia.

1. I have been informed that the purpose of this operation is to obtain the most favorable treatment result from those that are possible with my condition. The basic steps of anesthesia were explained to me. I understood what is the meaning of the operation and anesthesia, and I have no questions about this to the medical staff. I agree to carry out anesthesia in the proposed volume. I gave information about the presence of concomitant and past diseases.

2. I know that the mere fact of performing an operation does not automatically lead to recovery. I understand that in order to achieve the desired result, in addition to the operation, long-term treatment will be required. I understand that the operation is performed on diseased organs of my body, the ability of which to heal is reduced. I know that there can be no 100% guarantee of good results of both surgery and treatment in general.

3. I am aware that any surgical intervention is associated with a health risk. I understand that during anesthesia, surgery or after them, unforeseen adverse circumstances may appear. In this case, doctors may be faced with the need to significantly change the treatment plan brought to my attention. Additional surgery may be required. The duration of treatment may be lengthened.

4. It has been brought to my attention that the planned operation is not connected with the elimination of an immediate threat to my life, therefore the need for it is not absolute. On the other hand, I understand that prolonged postponement or refusal of the operation will lead to \_\_\_\_\_

\_\_\_\_\_ which ultimately can adversely affect my health and worsen my quality of life.

Therefore, being aware of all of the above, I turn to the department staff with a request to carry out surgery under general anesthesia with drugs with minimal side effects. I undertake to follow all the recommendations of the doctors in the postoperative period.

5. I also know that if I do not comply with the medical prescriptions or the internal regulations of the medical institution, the attending physician has the right to refuse to observe and treat the patient.

Date signed by the patient \_\_\_\_\_

Date, signature of the attending physician \_\_\_\_\_

**Info rmirovannoe patient's consent to medical  
medical and diagnostic intervention.**

" \_\_\_\_\_ " \_\_\_\_\_ 200 \_\_\_\_\_ h \_\_\_\_\_ min.

For \_\_\_\_\_ intervention \_\_\_\_\_

\_\_\_\_\_  
(name, manipulation, research)

I, the patient (legal representative)

\_\_\_\_\_  
F. And . O. ( filled in by the patient himself)

I agree voluntarily.

I was informed about its volume, features, risk, possible consequences and complications, the method of pain relief and the composition of the operating team in accordance with Art. 30, 31 and 31 of the Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens from 22.07.93.

Patient's signature

(or his legal representative) \_\_\_\_\_

**Informed Disclaimer  
from surgery and anesthesia.**

" \_\_\_\_ " \_\_\_\_\_ 200 \_\_\_\_ h \_\_\_\_ min  
(filled in with the patient's own hand)

I, the patient (legal representative), \_\_\_\_\_

\_\_\_\_\_  
(Full name is filled in by the patient himself)

informed about the diagnosis of the disease made to me (the principal)

\_\_\_\_\_  
(the diagnosis is completed by the attending physician)

and that I need to perform medical intervention

\_\_\_\_\_  
(the name of the operation is filled in by the attending physician)

In accordance with article 33 of the Fundamentals of the legislation of the Russian Federation on the protection of the health of citizens, the patient (his legal representative)

\_\_\_\_\_  
\_\_\_\_\_  
(Full name is filled in by the patient himself)

refuses \_\_\_\_\_  
(it is listed which interventions the patient refuses)

Possible consequences of refusal of interventions have been explained to me - prolonged postponement or refusal of the operation will lead to \_\_\_\_\_

\_\_\_\_\_  
which ultimately can adversely affect my health, worsen my quality of life and cause death.

"Acquainted"

Deputy chief physician for medical work

" \_\_\_\_ " \_\_\_\_\_ 200\_y.

Patient's signature

(or his legal representative) " \_\_\_\_ " \_\_\_\_\_ 200\_\_.

Signature of the attending physician " \_\_\_\_ " \_\_\_\_\_ 200\_\_.

**Rationale for medical intervention  
without the consent of the patient.**

" \_\_\_\_ " \_\_\_\_\_ 200 \_\_\_\_ \_\_\_\_ h \_\_\_\_ min

Consilium consisting of \_\_\_\_\_

---

in accordance with Articles 31 and 34 of the Fundamentals of the Legislation of the Russian Federation on the Protection of Citizens No. 5487-1 of 22.07.93. a decision was made on the need for urgent medical intervention

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without the consent of the patient in his interests.

Reasons (underline as required):

1. The patient's condition, which does not allow him to express his will

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2. Absence of a legal representative of the patient:

a) under 15 years of age;

b) who is legally incapacitated.

Signatures of the members of the council \_\_\_\_\_

---

"Acquainted"

Deputy chief physician for medical work

\_\_\_\_\_ 200 \_\_\_\_

" \_\_\_\_ "

---

"Acquainted"

The signature of the legal representative is " \_\_\_\_ " \_\_\_\_\_ 200 \_\_\_\_.

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#### **XIV PROTOCOL OF OPERATION.**

Example:

Date Operation No.

Starting H name currently operations: appendectomy, DSB .

Ending

Under epidural anesthesia after 21 hours from the onset of the disease and after 1 hour 20 min. after receipt of an oblique cut along alternate Volkovich-Dyakonovu by opening the abdominal - lethargy. There is a small amount of clear effusion in the abdominal cavity, which is taken for culture. The dome of the cecum with a vermiform appendix was introduced into the wound. Last 8 cm length -hydrochloric, thickened, tense, vascular injection and touch of fibrin.

Intraoperative diagnosis: Acute phlegmonous appendicitis .

The mesentery of the appendix is fractionally ligated with nylon with suturing. Produced appendzhto - Miya immersion process in purse string stump and Z -generators nylon sutures after its treatment with iodine. Abdominal effusion is drained. In the right lateral channel is set silicone - vy drainage: through a separate incision in the abdominal wall. Hemostasis is dry. Layer-by-layer wound closure. Aseptic sticker.

Operated by: Assisted

Operating room nurse Anesthesiologist

#### **X V DIARY OF THE HISTORY OF THE DISEASE.**

Date Course of the disease

In compressed form set out complaints, history of time follows Preda duschego visit and objective data with an emphasis on local signs of the disease and other major features. In operated patients, a description of the changes in the postoperative wound, dressing, physiological functions of the drainage state.

Body temperature, dynamics of laboratory parameters are reflected separately.

Appointments:

#### **X V I EPICRISE .**

Stage, discharge, posthumous. In compressed form surname, WHO - Rast number history when he entered, with some complaints as the main subject - GOVERNMENTAL signs of the disease, some were diagnosed, what treatment is carried out and what results were obtained. If the patient is discharged, then with what recommendations. In you - Pisnya epicrisis indicate prognosis for life, for the functions of organs and systems for the Sun - the formation of the general and occupational disability. Advice to Physician ambu -latornoy network.

#### **XV II INDEX TO USED LITERATURE .**

In alphabetical order, the literary sources used when working with the medical history are indicated. A certain sequence should be adhered to: the initials of the author, the title of the work, where it was printed, the year of publication, volume, number, pages).

#### **ADDITIONS TO THE HISTORY OF THE DISEASE.**

1. Symptoms most common during the course of surgery. Appendix # 1
2. Nomenclature of dietary TABLES. Appendix # 2

### **SYMPTOMS MOST COMMONED IN GENERAL SURGERY COURSE**

**Symptom Bartol and e - Michelson** is a sign of acute appendicitis: pain on palpation of the cecum, aggravated in the position of the patient on the left side.

**Basler's symptom** is a sign of appendicitis: when pressing on the abdominal wall at a point located in the middle between the navel and the anterior superior iliac spine , and when the pressure is directed more to the right, the patient experiences a sharp pain;

**Symptom Ben - Asher** - a sign of acute appendicitis: during deep respiratory - Niya and coughing patient physician presses the tips of two fingers on his left upper quadrant; in the case of appendicitis, pain appears in the ileocecal region;

**Berger's symptom** is a sign of obliterating arteriosclerosis or endarteritis : the patient lying on his back holds his legs raised up until slightly tired. - sti; soles of the affected limb receives pallid color, and Th - cut 2-3 minutes after dropping down the foot of the affected limb receives cyanotic color;

**Symptom Bernstein** - a possible sign of perforated gastric ulcer or duodenal ulcer: pulling the testicles to the external opening of the inguinal canal and the penis to the anterior abdominal wall as a result of a reflex - the first reduction in the erector muscle of the egg and the superficial fascia of the abdomen;

**Blinov's symptom** - a possible sign of mesenteric thromboembolism - a significant increase in blood pressure;

**Blumberg's symptom** is a sign of inflammation or irritation: with slow pressure on the abdomen, the patient almost does not experience pain; Acute pain does appear - camping with the rapid withdrawal of the hands;

**Symptom Boyce** - possible sign diverticulum esophagus: the pushing - SRI on the side surface of the neck is heard rumbling;

**Valya's symptom** is a sign of intestinal obstruction: local flatulence or protrusion of the proximal intestine;

**Symptom Volkovich - Kocher** - sign of acute appendicitis: pain originally appearing in the epigastric region (sometimes directly below the xiphoid process), after a few hours is localized in the right iliac region;

**Volsky's symptom** is a sign of acute cholecystitis: soreness with a light blow with the edge of the palm in an oblique direction from bottom to top along the right hypochondrium;

**Symptom Voskresenskiy** - sign of acute appendicitis: the rapidly Prove - palm Denia on the front abdominal wall (top of jacket) from right edges - Nogo edge down the patient experiences pain;

**Symptom Grekov** - an early sign of perforated stomach ulcer or dvenad - tsatiperstnoy gut: slow pulse immediately after the perforation;

**Symptom Grunwald** - a possible symptom of acute pancreatitis: ecchymosis in - circle navel;

**Symptom Delbo - Perthes** - flag deep venous obstruction to the bottom - finiteness: a patient who is in upright position, impose ela - -terrorist harness in the upper third of the femur (the tension of the harness calculated only sda- phenomenon saphenous veins). The patient is offered to walk around the room. If after this the saphenous veins are emptied and collapsed, consider that the deep veins are passable; if they do not subside, then the patency of deep veins is impaired;

**Kera's symptom** is a possible sign of intra-abdominal bleeding: severe pain in the left shoulder;

**Kera's symptom (2)** - a sign of cholecystitis - pain when inhaling during palpation of the right hypochondrium;

**Kerte's symptom** is a sign of acute pancreatitis: the presence of abdominal wall resistance in the form of a belt, corresponding to the topographic position of the pancreas;

**Symptom Kloyberga** - radiological signs ileus - STI: the fluoroscopic observation of the abdominal cavity are detected horizontal levels of liquid and gas bubbles over them;

**Krasnobaev's symptom** is a sign of peritonitis: tension of the rectus abdominis muscles;

**Symptom Krymov** - a sign of perforation of stomach ulcer or dvenadtsatiper - stnoy gut: tenderness umbilicus fingertip;

**Symptom Mack - Bernie** - indication of appendicitis: painful to palpation point - ka, located midway between the navel and the front top spine podvzdosh - hydrochloric bones right;

**The Marburg symptom** is a sign of circulatory disorders in the main arteries of the leg: cyanotic spots on the pale plantar surface of the foot:

**Mathieu's symptom** is a sign of complete intestinal obstruction: with rapid percussion of the supra-umbilical region, a splash noise is heard;

**Symptom Mayo - Robson** - a sign of acute pancreatitis: pain on palpation in the left upper quadrant;

**Meir's symptom** is a sign of deep thrombophlebitis of the lower leg: pain when pressing at the medial edge of the tibia in the lower third of the lower leg;

**Symptom Mendel** - a sign of peritoneal irritation or increase significantly - zheniya smooth muscle (gases, moving stones) with gentle tapping - SRI fingertips on the wall of the stomach, there is pain;

**Symptom Murphy** - a sign of gallbladder disease: uniformly pressured - Vai thumb on the area of the gall bladder, offer the patient to take a deep breath; while it "captures" the breath and noted considerable - tion pain in this area;

**Symptom Michelson** - a sign of acute appendicitis in pregnant women: increased pain in the right half of the abdomen in the position of the patient on the right side (after - Corollary pressure vospalennny center);

**Symptom Musso** - a sign of the defeat of the gallbladder (often acute lobby - cystitis): tenderness between the legs sternoclavicular co-stsevidnoy muscles;

**Obraztsov's symptom** is a sign of chronic appendicitis: increased pain during palpation in the ileocecal region, while the right leg is raised;

**Symptom Obukhov Hospital** - a sign of sigmoid volvulus: races - extension and an empty vial of the rectum during rectal examination;

**Ortner's symptom** is a sign of liver and gallbladder disease: tapping with the edge of the palm along the right costal arch causes pain;

**Ott's symptom** is a sign of appendicitis: when positioned on the left side, the patient experiences a pulling pain;

**Symptom Razdolsky** - a possible sign of acute appendicitis: the trans - cussions mallet finger or abdominal pain is detected in the right iliac region; c udnoy muscles: the patient removes the arm on the affected side to a right angle, ac - tively straining muscles; in this position, the tumor is motionless;

**Symptom Rovzinga** - sign of appendicitis or tiflita: palpation left iliac region and simultaneous downward pressure on the separated about - zling intestine pressure through gases is transferred to the ileocecal region that with - accompanied by pain;

**Symptom Rozanov (Roly-Poly symptom)** - an indication of intra-abdominal bleeding in the spleen rupture: the patient lies on his left side with pursed to the stomach hips; when trying to turn the patient onto his back or the other side, he immediately turns over and takes the same position;

**Symptom Sitkovskiy** - a sign of appendicitis: the position of the patient on the le - tion side pain appears in the ileocecal region;

**Spasokukotsky's symptom** is a possible sign of intestinal obstruction: the sound of a falling drop is determined by auscultation;

**Spizharsky's symptom** is a sign of perforation in gastroduodenal ulcers: the disappearance of hepatic dullness and the appearance of high tympanitis over the liver;

**Symptom Trendelenburg** - a sign of varicose veins, and insufficient - the accuracy of the venous valves: in the horizontal position, the pain - None offer to keep the leg elevated until the heat of veins, then pressed the great saphenous vein from where it flows into the femoral vein and ask the patient to - Straw take a standing position; in the presence of this pathology, after the withdrawal of the fingers, the veins are immediately filled;

**Symptom Cheyne - Stokes** - at various abnormal breathing Destroy - SHALL CNS: interleaving increased respiratory movements, reduce them - Nia and breath hold;

**Schlange's symptom** is a sign of intestinal paralysis: when listening to the abdomen , complete silence is noted;

**Symptom Eleri** - a possible sign of obliterating endarteritis athero - sclerosis: pale and cool the feet .

Appendix No. 2

## NOMENKLA TOUR OF DIET TABLES

(developed at the Clinic of Medical Nutrition of the Institute of Nutrition of the Russian Academy of Medical Sciences)

**Diet number 1a** . It is indicated for acute exacerbation of peptic ulcer disease, acute exacerbation of chronic gastritis - the one with high acidity. Ingredients: milk (4-5 glasses), slimy cereals, for example semolina, milk or wheat bran soups with butter; liquid porridge, pureed, lactic - nye; soft-boiled eggs (2-3 times a day) or in the form of steam omelets; steam soufflés from lean varieties of fish, meat; unsalted butter (70-80 g daily) or olive oil (added to the dishes), the drain - ki; jelly berries and fruit (sour) and milk, carrot, fruit juices, broth shi - povnika, weak tea with milk (sugar and 50 grams per day). Limit salt to 5-8 g (remember that 3-5 / salt is contained in products, 5-8 g - in bread), free liquid no more than 1.5 liters. Add - Tel'nykh vitamins A, C, group B ( B1 , B 2, RR). Ingestion at bedrest through kazh - Dyje 2-3 hours in liquid and semi-liquid form, the form of heat. When poor tolerance of milk (pu - chenie abdomen, diarrhea), it is recommended to give small quantities, dilute weak tea.

**Diet number 1 b** . Indicated for remission exacerbation of peptic ulcer and chronic gastritis with acidity composition: besides meals listed above, steam is allowed meat, fish dishes in a quenelle, steam cutlets, pureed dairy Soup rice, Cell # - Neva, pearl barley with mashed vegetables; mashed porridge in milk; wheat rusks up to 100 g. Salt is limited to 8 g, additionally - vitamins A, C, group B. Nutrition six times in semi-liquid and puree form.

**Diet number 1** . It is shown in further exacerbation of peptic ulcer disease remission at Length - SRI 6-12 months. after an exacerbation, as well as with gastritis with high acidity. Ingredients: pureed dairy and vegetable (except cabbage), mucous cereal soups (but not meat or fish); vegetables in boiled chopped (pureed) form or in the form of steamed puddings; pro - grated porridge with butter, milk; boiled lean meat, boiled fish of low-fat varieties (cod, perch, pike), meat, fish steamed cutlets, boiled chicken without skin; slivoch - Noah, olive oil, sunflower oil; milk, non-acidic curdled milk, cream, fresh low-fat, better pureed cottage cheese, non-acidic sour cream; soft-boiled eggs or steamed omelettes; white stale bread, white dry crackers; sweet varieties of berries and fruits, vegetable, fruit, berry juices, rosehip infusion, jelly, compotes from sweet berries, pureed fruits, sugar, jam, tea, cocoa - weak, with milk. As the general condition improves, food is given boiled, but not mashed. Table salt is limited to 8 g. Vitamins A, C, group B are added. Food is often taken 5-6 times a day, chewing it well; It should hut - causeway too hot or too cold food.

**Diet number 2** . Shown in chronic gastritis with reduced acidity or of its - presence of chronic colitis (without exacerbation) Composition of soups and vegetables, cereals, pureed, in meat, fungus, fish broth; lean meat (minced, .zharenoe), cooked chicken, steam -stems, steamed, fried cutlet without coarse crust lean ham, fish from lean - Varney well soaked minced lean herring, caviar; milk (if not cause diarrhea), butter, kefir, yogurt, cream, sour cream, non-acidic, fresh cheese nekis - ly, mild cheese, grated; soft-boiled eggs, fried omelet; porridge, well boiled or mashed (buckwheat, semolina, rice); Flour dishes (except for baking), stale bread, white, behold - ing, nesdobnye crackers; vegetables, fruits, boiled, raw, grated; fruit, vegetable juices



(also sour); tea, coffee, cocoa on water with milk, marmalade, sugar. Table salt up to 12-15 g. Vitamins C, B1, B2, PP are added. Power fivefold, preferably in pyureob - different forms.

**Diet number 3.** It is indicated for atonic constipation. Composition: foods rich in plant fiber, such as raw or cooked vegetables and fruits in a large amount, compotes apple and others, prunes, figs (figs), vegetables, fruit juice, beet, mor - Kovno puree, mashed cooked dried fruits (prunes, dried apricots), black bread, yogurt, Molo - to, cream, day yogurt, honey, oatmeal, buckwheat, barley crumbly, meat, fish fried, butter and vegetable, sugar. Drinking plenty of fluids, including gassed en nye mineral in - dy. Excluded: strong tea, cocoa, slimy soups, jelly. Spastic constipation, svya - associated with increased motor IBS, sharply restrict foods rich in plant fiber (permissible few vegetables - cooked and raw pureed).

**Diet number 4.** It is indicated for the acute intestinal diseases and exacerbations during continued - zhayuschegosya diarrhea. Ingredients: strong tea, cocoa, strong coffee on the water, stale white crackers, fresh cheese grated, one boiled egg per day, mucous soups on water, pureed ri - sovaya, semolina porridge on water, meat, fish, boiled, steam in chopped form with adding rice instead of bread to the minced meat, low-fat three-day kefir, a decoction of dried black currants, blueberries, jelly, blueberry jelly. Limit table salt, add vitamins C, B1, B2, PP. Meals 5-6 times a day.

**Diet number 4a.** It is indicated for colitis with a predominance of fermentation processes. The composition is the same as that in the diet №4, but severely limit the foods and dishes containing a large quantitative - ve carbohydrates (cereals, bread, no more than 100 grams per day, the sugar is more than 20 grams a day); increase containing - of proteins by meat, grated cheese and so forth.

**Diet number 4b.** It is indicated for chronic colitis in the stage of fading exacerbation. Ingredients: white bread, yesterday's baking, non-sweet biscuits, dry biscuit; cereal soups on weak fish - rated or meat broth, broth with meatballs, mashed cereals except millet, on the water with up - bavleniem 1/3 milk, vegetables boiled and steam grated cheese mild, non-acidic sour cream, kefir, yogurt, fruit drinks, jelly sweet berries, pureed fruits, tea, coffee with milk, butter (to be added to ready-made meals). Table salt 8-10 g. Vitamins C, group B are added. Food 4-6 times a day. Food is served warm.

**Diet number 5.** It is indicated for diseases of the liver, gallbladder, biliary tract outside the stage of exacerbation. Ingredients: vegetarian fruit, milk soups, cereal soups with vegetable broth, boiled meat, low-fat poultry, boiled low-fat fish, milk, fresh yogurt, kefir, acidophilic milk, cottage cheese up to 200 g per day, cereals and flour dishes (excluding muffin), white bread, black stale, ripe fruits, berries (except for sour varieties) in raw, baked, boiled form, vegetables and herbs in boiled form and raw (especially carrots, beets), jam, honey, sugar (up to 70 g in day), vegetable, fruit juices in significant quantities, weak tea with milk. Limit fats (cream, butter up to 10 g, vegetable oil 20-30 g), an egg (one per day). Salt added to 10 g. vitamins A, C, B1, B2, B12, folic acid, PP, K. Eating 5 times a day in divided form. SUP - chayut: alcoholic beverages, liver, brains, bacon, beans, mushrooms, spinach, sorrel, onions, pastries, fatty meats, fish, fried, spicy, smoked products, extractives of meat, fish, spices, vinegar, preserves, ice cream, cocoa, soft drinks, chocolate, credit - we (in chronic lesions .zhelchnogo bubble occurring with the stagnation of bile, the amount of fat should be increased to 120-150 g, including 60% of vegetable fats).

**Diet number 5a.** It is shown in chronic pancreatitis: different from the diet increased №5 - nym protein (up to 150 g, of which 80-85% of animal origin) products god - ies lipotropic factors limiting carbohydrates moderate fat diet. All dishes are prepared in a steam, mashed, chopped form.

**Diet number 6.** Shown in gout, nephrolithiasis with discharge of the stones, consisting - boiling predominantly of urate. Ingredients: milk, dairy products, bread, white and black, Ca - har, honey, soups, vegetarian vegetable, milk and fruit cereals, all sweet fruits, jams, juices, fruit and berry, carrot, lettuce, cucumbers. Seasonings - lemon, vinegar, bay leaf. Eggs, meat, low-fat

fish - 2-3 times a week. The amount of salt is decreased to 6-8 g: introducing the liquid in a large amount (up to 2-3 liters) was added vitamins C and B1. Excluded are: spicy extractives, meat soups and broths, liver, SMO - ki, brains, fried, smoked meat, fried fish, fish ear, lard, herring, sardines, anchovies, sprat, anchovy, pastes, mushrooms, beans, spinach, coffee, cocoa, chocolate, alcoholic drinks.

**Diet number 7.** It is indicated for chronic kidney disease with no symptoms of chronic renal failure. Ingredients: soup vegetarian, dairy, fruit, lean meats, poultry, cooked piece, chopped and pureed fish lean boiled, rube - naya and mashed bread white, gray, bran, is baked without salt, one egg in children, cereals, pasta in the form of cereals, puddings, flour dishes, milk, lactic acid products, fats, except refractory (lamb, pork, beef), cottage cheese, raw vegetables, boiled, greens (cut radish, celery, spinach), berries, fruits, especially apricots, dried apricots, pumpkin, watermelons, melon, sugar, honey, jam Limit cream, sour cream. To improve the taste can be used cumin, Vösu - Weighted dill, cinnamon, citric acid. Salt 5.3 g (issued on hand and food Prep - vyat without salt). Add vitamins A, C, B1, B12, K. Free liquid up to 800-1000 ml per day. Meals 6 times a day. Excluded are: soft drinks, beans, pastries and creams, meats - nye, fish, mushroom broth, pickles, snacks, meats, canned

**Diet number 7a.** It is indicated for acute renal diseases (nephritis acute or exacerbation - Nia). Ingredients: mainly boiled, mashed vegetables, fruits, especially rich in potassium salts (dried apricots, apricots, raisins), cereals and flour dishes in moderate quantities (buckwheat porridge with milk), tea with milk, salt-free white bread, sugar up to 70 g, butter up to 30 g. Vitamins C, K, group B are added. Food is fractional. Liquids up to 600-800 ml; table salt is completely excluded. When developing uremia daily amount of protein reducing - added to 20-25 g of (primarily should reduce the content of plant proteins - legumes, cereal, flour products, like bread, etc., since bioavailability they are inferior yarn. - votnym proteins and only overload body harmful products of protein metabolism: large amounts of glucose or sugar are prescribed (up to 150 g per day).

**Diet number 7b.** Indicated for remission of acute inflammation in the kidneys, a transition from the table to the table 7A №7 (white bread salt-free, lean meats, fish broth - SG as 1-3 times a week, salt and 2 g per hand, the liquid to 800-1000 ml in produk - max used for cooking food contained 2-4 g of salt).

**Diet number 8.** It is indicated for obesity. In the diet, carbohydrates are sharply limited, and fats are also limited while maintaining or increasing the norm of proteins.

**Diet number 9.** It is indicated for diabetes mellitus. Ingredients: meat, fish, birds, animals and grow - tion butter, eggs, cheese, cottage cheese, milk products, vegetables and herbs, sour varieties Fruko - comrade and berries. Limit carbohydrates, increase protein content. Vitamins A, E, group B, C are added. Food intake every 3 hours. In severe diabetes with the development of acidosis - a diet strictly individualise: severely limit fats significantly increases - NTRY carbohydrates.

**Diet number 10.** Shown in diseases of the cardiovascular system with absence of phenomena - Nij circulatory failure (hypertensive disease, angina, atherosclerosis, etc.). Composition: lean meats, fish boiled (or boiled, and then fried - nye) doctoral sausage, lean ham, herring soaked (1-2 times per week), milk, mo - lochnokislye products, buttermilk, low-fat cottage cheese, low-fat cheeses, oatmeal, buckwheat, loose millet porridge, vegetable vegetarian, cereal, dairy, fruit soups (low-fat meat soup 1-2 times a week), white, black bread 200 g per day, vegetables, fruits in the form of vinaigrettes, salads with vegetable oil (cabbage fresh, pickled cabbage, cucumbers, by -Midori, squash, pumpkin, moderate amounts of potatoes, beans, peas), foods rich lipotropics, potassium and magnesium. Table salt is limited to 3-7 g, and during an exacerbation, it is temporarily excluded (the patient receives only salt contained in natural products). That limits the quality of life is, digestible carbohydrates (sugar, jam, honey, sweets), butter, sour cream (at least 1/3 of the amount of fat should make up races - vegetable oils). The amount of free liquid is limited to 1000-1200 ml (weak tea, coffee, rosehip broth)

Vitamins A, B1, B2, B6, C, PP are added. Food intake - 5-6 times a day. Exclude - camping: strong tea, coffee, cocoa, alcoholic beverages, pastries, spicy, salty snacks, canned food, spices, meat, fish broth, salt, smoked products, kidneys, liver, brain, fatty meats, fish, fish oil, refractory fats, ice cream.

**Diet number 10a**. It is shown in diseases of the cardiovascular system with symptoms of peripheral circulation. The same foods and dishes that in the medical table №10, with certain restrictions: restrict meat, fish up to 50 grams per day, and only boiled vegetables boiled and mashed form, fruit raw and cooked only in a shabby, bread white devil - salt. With severe circulatory insufficiency, table salt is sharply limited - up to 1-2 g per hand (food is prepared without salt), free liquid - up to 0.6 liters. Added vitamins A, B1, B2, C, PP. Fractional meals (for the whole day of bread 150 g, sugar 40 g, butter 30 g).

**Diet number 10b**. Shown in atherosclerosis as a diet with a maximum limit of products, containing cholesterol, and enriched with vegetable oils and products containing essential lipotropics. Recommended: rye bread from wheat flour, oats, buckwheat, lean meats, fish (cod), egg whites, low-fat cottage cheese (not less - it 100-150 grams per day), soy products, fresh vegetables, fruit, berries, juices, fruit infusion spines - nickname, unrefined vegetable oils (sunflower, sesame, corn, cottonseed, soybean) 30 g per day. Useful oil, sour cream in moderation as milk fats, although they are cholesterol suppliers simultaneously serve as an important source of vitamin A and lecithin. The liquid is limited to 1 liter, salt - up to 3-5 g per hand (dishes are prepared without salt). Vitamins C, P, group B are added. Brewer's yeast is recommended, 75 g per day. Protein - 5-6 times a day. It is necessary to reduce by 20-60% the proportion of easily digestible carbohydrates, primarily for persons prone to obesity, by increasing carbohydrates rich in fiber (vegetables, fruits, berries, oatmeal). With regard to eggs should be noted that the yolk is rich in lecithin, the amount of which is 8-10 times higher than the content of the egg - a sterol; one egg per day is recommended.

**Diet No. 11**. It is indicated for diseases of the lungs, tuberculosis in the absence of diseases of the gastrointestinal tract.

**Diet number 12**. It is indicated for functional diseases of the systemic overflow. So diverse - ny; excluded are spicy seasonings, strong rich soups, smoked meats, fatty, fried foods, especially meat, which stimulate the nervous system, alcohol, strong tea, coffee, somewhat restrict meat and salt. Dishes from the liver, tongue, dairy products and legumes containing phosphorus salts are recommended.

**Diet number 13**. It is indicated for acute infectious diseases. Structure; dairy products, soups, pureed cereals, vegetables, meat, fish, low-fat varieties boiled, meat boules - ones, mashed cereal porridges, boiled eggs and eggs, fruits, berries boiled, jelly, fruit drinks, fruit juices. The increased amount prescribed vitamins, especially ascorbic - a new acid and B vitamins increase the flow of liquid. Power fractional - Noah; table salt is moderately restricted.

**Diet number 14**. It is indicated for nephrolithiasis with the release of stones, consisting mainly of calcium oxalates. Composition: dishes from cereals, flour food, sugar, honey, jam, bread - white and black, bread made from wheat bran, cooked meat, fish, vegetables, fruit soups, eye-soup, fruit (excretion of oxalate contribute apples, pears, quince, ki - zil) . Limit oil, foods rich in calcium salts, meat, fish soups; Cook - hydrochloric salt - up to 8.5 g; add vitamin C; plentiful drink (mineral waters "Essentuki" No. 4, 17, 20, "Smirnovskaya"). Excluded foods rich oxalic acid (spinach, parsley, beans, gooseberry, chocolate), and extractives, spices, alcoholic beverages. When the removal of calculi consisting essentially of phosphates are shown: bread - white, black bran, flour, cereals (also of pastry), boiled meat, fish, sugar, honey; in limited quantities - meat, fish soups, canned meat, fish, oil; salt - to 5-8, the added vitamins A, C and Group B. Excluded alcohol - istic beverages, spices, strong tea, coffee, tapas, fruits, berries, herbs, vegetables, except cranberries, beans.

**Diet number 15**. Shown to practically healthy people and convalescents. This includes the floor - fledged, varied food to meet the basic conditions for a balanced diet.

Diet therapy is effective only when the patient strictly follow the prescribed diet and it does not add (to the personal initiative) unforeseen diet products or changes the conditions of cooking.

## DIRECTORY OF BASIC LABORATORY AND FUNCTIONAL HUMAN HEALTH INDICATORS

### HEMA LOGICAL STUDIES

Peripheral blood	
Erythrocyte sedimentation rate	Husband. 1-10 mm / h female 2-15 mm \ h
Hemoglobin	Husband. 130-160 G / p Female 120-140 g \ l
Color index	0.86 - 1.095
Red blood cell count	Husband. $4 \times 10^{12} \setminus l$ - $5,1 \times 10^{12} \setminus l$ Female $3.7 \times 10^{12} \setminus l$ - $4.7 \times 10^{12} \setminus l$
Leukocyte count	$4 \times 10^9 \setminus l$ - $8.8 \times 10^9 \setminus l$
Leukocyte formula	
Myelocytes	Absent
Metamyelocytes	Absent
Stab] -6%	$0.040 - 0.300 \times 10 / l$
Segment-core 47-72%	$2.0 - 5.5 \times 10 / L$
Eosinophils 0.5-5%	$0.2 - 0.3 \times 10 / l$
Basophils 0 - 1%	$0 - 0.065 \times 10 / l$
Lymphocytes 19-37%	$1.2 - 3.0 \times 10 / l$
Monocytes 3-11%	$0.09 - 0.6 \times 10 / l$
Plasma cells	Absent
Erythrocyte diameter according to the Price-Johnson erythrocytometric curve	
Normocytes	$68 + 0.4\%$
Microcytes	$15.3 + 0.4\%$
Macrocytes *	$16.7 + 0.47\%$
Average erythrocyte diameter	$7.55 + 0.009 \mu m$
Hematocrit	Husband. 40 - 48% Female 36 - 42%
Platelet count	$180 - 320 \times 10 / l$
Thrombocytogram	
Young	0 - 0.8%
Mature	90.3-95.1%
Old	2.2 - 5.6%
The number of reticulocytes	0.2-1.2%
Bleeding time (Duok's method)	2-5 minutes
Retention (adhesion) of platelets	20 - 55%
Platelet aggregation	10-60 s.
Retraction of a blood clot Qualitative method	30 - 60 min 40 - 95%
Quantitative method	
2. Bone marrow	

Number of myelokaryocytes	50 - 250 thousand per $\mu$ l
Number of megakaryocytes	23- 103 in 1 $\mu$ l
Basophils of all generations	0 - 0.6%
Lymphocytes	9.4-14.4%
Monocytes	0.5-1.9%
Megakaryocytes	0 - 0.2%
Reticular cells	0 - 0.5%
Plasma cells	0.1 -0.9%
Granulopoiesis cell mitosis	0.2 - 0.4%
Erythropoiesis cell mitosis	0.2-1.0%
Leuko-erythrocyte ratio	3: 1 to 4: 1
Neutrophil Maturation Index	0.62 - 0.78
Maturation index of the cytoplasm of erythrblasts and normoblasts	0.73 - 0.85

## General clinical research

1. Study of urine	
The amount of urine per day	800 - 1500 ml.
Relative gravity in the morning portion	1002 - 1030
Color	Straw yellow
Transparency	Slightly cloudy
Reaction	Neutral, slightly acidic, slightly alkaline 6.25 + 0.36
Protein	Missing or traces
Sugar	Absent
Acetone	Absent
Ketone bodies	Absent
Urobilin bodies	Absent
Bilirubin	Absent
Ammonia	Absent
Porphobilinogen	Up to 2 mg / l
Hemoglobin	Absent
Macroscopic examination of urine	
Squamous epithelium	Insignificant amount
Transitional epithelium	Insignificant amount
Renal epithelium	Absent
Leukocytes	3 -5 in p / sp
Cylinders	Single in the preparation
Slime	Insignificant amount
Bacteria	Absent or insignificant
Inorganic sediment	In an acidic reaction - crystals of urinary to - you. With an alkaline reaction - amorphous phosphates, ammonium urate, tripel phosphates; Oxalates - for any urine reaction. All salts defined - lyayutsya in small quantities
Quantitative study of urinary sediment according to the Nechiporenko method	In 1 ml. Urine contains: leukocytes 2,000, erythro - tsitov 1000, cylinders 0- 1 na.4 counting chamber
Zimnitsky test	Daily quantity of urine is 65 - 75% bittern -of the liquid. Daily urine output is 2/3 -3 / 4 days. Relative density 1004 - 1024
2. Study of feces	
Quantity per day	100-250 g.
Consistency	Decorated (soft and tight)
The form	Cylindrical
Color	Brown
Reaction	Neutral

Mucus, blood	Absent
Stool microscopy	
Muscle fibers	No or sporadic digested fiber
Neutral fat	Absent
Fatty acid	Absent
Soap	Insignificant amount
Vegetable cellulose A) perivariable B) indigestible	Single cells or cell groups Contained in varying amounts
Starch, mucus, epithelium	Absent
Leukocytes	Single in the preparation
3. Study of gastric secretion	
A. Gastric juice	
number	2-3 liters in 24 hours
Relative density	1005
Reaction	1.6-2.0
B. Gastric contents on an empty stomach	
number	5-40 ml
Relative density	Not more than 20-30 mmol / l
Free hydrochloric acid	Up to 15 mmol / L
B. Study of basal secretion	
The total amount of contents collected in four servings within 60 minutes after emptying a serving on an empty stomach	50-110 ml
Total acidity	40 - 60 mmol / l
Free hydrochloric acid	20 - 40 mmol / l
Associated hydrochloric acid	10-15 mmol / l
Debit-hour of total hydrochloric acid	1.5 - 5.5 mmol / l
Debit-hour of free hydrochloric acid	1.0 - 4.0 mmol / l
D. Study of stimulated gastric secretion	
Hourly juice volume	100-140 ml
Total acidity	80-100 mmol / l
Free hydrochloric acid	65 - 85 mmol / l
Associated hydrochloric acid	10-15 mmol / l
Debit-hour of total hydrochloric acid	8-14 mmol / l
Debit-hour of free hydrochloric acid	6.5 - 12 mmol / l
4. Examination of the contents of the duodenum	
Daily amount of bile	50-1000 ml
A. Study of the duodenal contents of Portion "A"	
number	20 - 35 ml (1 ml in 1 min)
Color	Golden yellow



Transparency	Transparent
Relative density	1007-1015
Reaction	Weakly alkaline
B. Study of gallbladder bile Portion "B"	
number	30-60 ml
Color	Dark brown (olive)
Transparency	Transparent
Relative density	1016-1032
Reaction	Alkaline
B. Study of the bile of the hepatic ducts. Portion "C"	
number	30 ml.
Color	Golden yellow
Transparency	Transparent
Relative density	1007-1010
Reaction	Alkaline
5. Research of cerebrospinal fluid	
number	100-150 ml
Relative density	1003-1008
Pressure	150 - 200 mm water column in the supine position, 300 -400 mm water column sitting
Color	Colorless
Cytosis	Ventricular fluid 0 - 1 Tank liquid 0 - 1 Lumbar fluid 2-3
Reaction	7.35 - 7.8
Total protein Lumbar fluid Cisternal fluid Ventricular fluid	0.15-0.45 g / l 0.22 - 0.33 g / l 0.10-0.22 g / l 0.12-0.2 g / l
Glucose	2.78 - 3.89 mmol / l
Chlorine ions	120 - 128 mmol / l

## Biochemical research.

1. Indicators of carbohydrate metabolism	
Glucose Plasma Whole capillary blood	4.22-6.11 mmol / L 3.38 - 5.55 mmol / L
Glucose tolerance test Capillary whole blood	Fasting <5.55 mmol / L After 120 minutes <7.8 mmol / L
Sialic acid	2.0 2.33 mmol / L 135-200 standard units
Glycated hemoglobin	4.5 - 6.1 molar%
Lactic acid	0.99 - 1.75 mmol / l

2. Indicators of lipid metabolism	
Total cholesterol	<5.2 mmol / L
Alpha Lipoprotein Cholesterol	> 0.9 mmol / L
Beta-lipoprotein cholesterol	<4.9 mmol / L
Atherogenic coefficient	Up to 3.0 units
Beta lipoproteins	Up to 55 units
Triglycerides	> 2.3 mmol / L
Unesterified fatty acids	400-800 mmol / l

3. Indicators of protein metabolism	
Total protein	65 - 85 g / l
Albumen	35 - 50 g / l
Thymol test	0-6 units
Seromuroid	0.13-0.2 units
Haptoglobin	0.9-1.4 g / l
Creatinine: Blood Urine	44 - 115 mmol / l 4.4 - 17.7 mmol / l
Urea: Blood Urine	2.5 - 8.3 mmol / L 330 - 58 mmol / L
Glomerular filtration	80-120 ml / min
Tubular filtration	97 - 99%
Uric acid Blood Urine	Female 0.16-0.4 mmol / L Male 0.24 - 0.5 mmol / 2.4 6.0 mmol / day
Medium molecule level blood Urine	0.22 - 0.26 units 0.3 - 0.33 units

4 enzymes	
Aspartate amino transferase (AST) Optimized optical test Reitman-Frenkel method	Up to 40 ME or up to 666 nmol / (cl)  0.1 - 0.68 $\mu$ mol / (hhml) or 28-190 nmol / (chl)
Alanine aminotransferase (ALT) Optimized optical test Reitman-Frenkel method	Up to 40 ME or up to 666 nmol / (cl)  0.1 - 0.68 $\mu$ mol / (hhml) or 28 - 190

	nmol / (chl)
Alpha-amylase Karavey Method	Blood - 3.3 - 8.9mg / (chhml) or 12-32 mg / (chhml) Urine - up to 44mg / (chhml) or up to 120 mg / (chhml)
Alkaline phosphatase pelvisAbout ptimizirovanny	Up to 280 ME or up to 4666 nmol / (cl)

**Some physiological parameters of an organism forehead - CENTURY**

Age in years	Blood pressure in mm. rs.st.		Heart rate
	women	men	
10-20	115/75	118/75	60-90
20-30	116/78	120/76	60-65
30- 40	125/80	124/80	65-68
40-50	140/88	127/82	68-72
50 - 60	155/90	135/85	72-80
70- 80	175/95	155/89	84-85