Prevention Work
District Therapist

Lecture for the 4th year students
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The Department outpatient therapy and general practice

2020
Emergency hospital  Therapeutic department
Plan of The Lecture:

1. Prevention: concepts, types. The main sections of prevention and its main focus. The concept of the health of a healthy lifestyle and its criteria. Sufficient physical activity and good nutrition as the basis of a healthy way of life. The concept of risk factors.


3. Clinical examination of patients with acute tonsillitis, pneumonia. Prevention of these diseases.
Actuality of Theme:

The present level of diagnosis and treatment of internal diseases is quite high, but the morbidity and mortality continues to rise. Therefore, is important to study of prevention the emergence of diseases and their prevention. Prevention work in the clinic performed a therapist. Great importance of prevention takes place in outpatient conditions.
Demographic Features:

- Aging of the population (14% of the population - the elderly). Normal state - up to 7%.
- About 43-44% of adults have high blood pressure numbers.
- Over 13% - with coronary heart disease.
- More than 18 000 people in our country die each year from cancer.
- As of January 1, 2020 in the Republic of Belarus registered 27,115 cases of HIV infection, the number of people living with HIV in Gomel region- 7 973. Temp growth - 1.5%
Gender and age pyramid of the population of Belarus
State Programs

- National Strategy of Sustainable Socio-Economic Development of the Republic of Belarus for the period up to 2020.
- National program on liquidation and minimizing the consequences of the Chernobyl accident.
- Public health programs, "Health of the Nation", "Cardiology", "Diabetes", etc.
- The State Program the formation of healthy lifestyles of the Republic of Belarus.
- The National Programme on Nutrition.
- Presidential Programme "Children of Belarus".
- The State Program for overcoming disability and rehabilitation of invalids.
TASKS OF THE AMBULATORY POLYCLINIC SERVICE

- Identification and registration of risk factors for disease in the population served
- A complex of measures for the prevention and correction of risk factors
- Active detection of diseases and their treatment, the dynamic monitoring
- Prevention work
MAIN TASKS LOCAL THERAPIST OF HOLDING EVENTS ON PRIMARY PREVENTION

- Prevention transition of the state of functional tension in the organism's disease
- Improving public health
Prevention

- Prevention - is the system of complex government and society activities that have their goal to eliminate the factors detrimental to human health.

- Prevention - an independent technical-organizational element of health care system.

- The purpose of preventive medicine - identification of disease, risk factors, improving the health, prolonging life and improvement its quality.
Types Of Prevention
(according to the WHO terminology)

- **The premorbid prevention** - prevention of risk factors for the disease.
- **Primary** - prevention of the risk factors for disease
- **Secondary** - the struggle with the existing risk factors
- **Tertiary** - the identification and treatment of diseases
Different level of prevention

Stage I
Primordial prevention

Stage II
Primary prevention

Stage III
Secondary, tertiary prevention
Types Of Prevention
(the most used in medical practice division)

- **Primary** - a set of measures aimed at preventing the occurrence of diseases
- **Secondary** - a complex of medical measures aimed at early detection and treatment of existing diseases
- **Tertiary** - a set of measures aimed at the prevention of defects, impeding labor activity
Main Directions Of Prophylactic

- Sanitary education
- Participation in carrying out vaccination
- Prophylactic medical examination the population
Participation in carrying out vaccination

Not Vaccinated? No Kisses!
Get the adult whooping cough vaccine.
www.VaccinateYourFamily.org
The socio-economic cost-effectiveness of prophylactic measures to prevent the spread of diseases is determined not so much by the positive dynamics of health, how improvement of the parameters of criteria the quality of life that is the base for sustainable development of society.
Health - a state of complete physical, mental and social well being and not merely the absence of disease or infirmity
Determine The Health Of The Population

- Heredity - 20%
Determine The Health Of The Population

■ Way of life - 50%
Determine The Health Of The Population

- Ecology - 20%
Determine The Health Of The Population

• Medical provision - 10%
Healthy Lifestyle Includes:

- productive work
- rational mode of work and rest
- optimal mode of physical activity
- good nutrition
- eradication of bad habits, etc.

*Press release MH RB, 2007.*
Quality Of Life

Satisfaction of man their physical, mental and social well-being
Risk Factors

■ Primary - represent negatively affecting human health factors (unbalanced diet, alcohol, smoking, lack of exercise, etc.)

■ Secondary - a disease or syndrome, contributing to the development main noninfectious diseases, (hypertension, impaired glucose tolerance etc.)
Concept Of Risk Factors
Non-communicable Diseases

Risk factor - characteristic of the subject or his environment that are associated with the likelihood of developing his illnesses
Risk Factors

Stress - a risk factor for many non-communicable diseases (about 20% of workers feel stress on work)

Psychosocial factors:

- professional excessive load;
- uncertainty in the job preservation.
"After a nuclear war, famine and plague, the greatest threat to human health - is smoking."

K. Ball
Smoking As A Risk Factor For Several Diseases

- On average, each smoked cigarette is estimated to be 5.5 minutes of lost life.
- Mortality from coronary heart disease in men aged 45 years, daily smoking more than 25 cigarettes, 15 times higher than among non-smokers (nicotine has a thrombogenic effect).
- In Belarus because of illnesses caused by smoking, the life expectancy in the age group 35-69 years was reduced to 21 years.
- In a family where one spouse is a smoker, the risk of a nonsmoker spouse lung cancer is 30% higher than in non-smoking families.
- In tobacco smoke more than 4000 components, including - mutagens, carcinogens (catechin, polonium - 210, etc.)
RISK FACTORS

Smokers → 85% → Lung cancer → Carcinogens → Non smoker

60 → 6 → 1

Smoking 300,000 deaths each year
What Will Give Smoking Cessation?

- After 2-3 weeks, improves function of the lungs and the heart
- After 1-9 months reduces cough, nasal congestion, shortness of breath and fatigue
- After a year, the risk of CHD compared with continuing to smoke will decrease by half
- After 5-15 years, the risk of stroke as nonsmokers
- After 10 years, reduced by half the risk of developing cancer of the lung, larynx, esophagus, bladder, kidney, compared with smokers
Methods Of Treatment Of Smoking

- **Aversive treatment** (aversion therapy)

- **Replacement therapy** (goal - to maintain the level of nicotine in the blood habitual for the patient level for 1-2 weeks, followed by gradual withdrawal of drugs)

- **Adjuvant therapy** (symptomatic)
The five As of smoking cessation.
physical inactivity

PIZZA HAS DESTROYED MY LIFE
Hypodynamia As A Risk Factor For Several Diseases

- Hypodynamia - if the person is not less than 5 hours a day sitting and spends at least 10 hours a week of exercise.

- According to the Framingham study, the risk of coronary disease in inactive individuals is 3 times higher than that of physical activity and the risk of sudden cardiac death by 60% higher.
Role Local Therapist In The Prevention Of Hypodynamia

Evaluation the level of physical activity of the patient
Before the start of exercises:
■ Up to 18 years - medical examination
■ From 30 to 40 - medical examination + ECG
■ Over 40 years - a medical examination + test with exercise (bicycle ergometry)

Persons with obesity are recommended a slower tempo and less time loading
## Healthy diet characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase consumption of fruits and vegetables (≥200 g each per day).</td>
</tr>
<tr>
<td>35—45 g of fibre per day, preferably from wholegrains.</td>
</tr>
<tr>
<td>Moderate consumption of nuts (30 g per day, unsalted).</td>
</tr>
<tr>
<td>1—2 servings of fish per week (one to be oily fish).</td>
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<tr>
<td>Limited lean meat, low-fat dairy products, and liquid vegetable oils.</td>
</tr>
<tr>
<td>Saturated fats to account for &lt;10% of total energy intake; replace with</td>
</tr>
<tr>
<td>polyunsaturated fats.</td>
</tr>
<tr>
<td>As little intake of trans unsaturated fats as possible, preferably no intake</td>
</tr>
<tr>
<td>from processed food, and &lt;1% of total energy intake.</td>
</tr>
<tr>
<td>≤5—6 g of salt per day.</td>
</tr>
<tr>
<td>If alcohol is consumed, limiting intake to ≤100 g/week or &lt;15 g/day is</td>
</tr>
<tr>
<td>recommended.</td>
</tr>
<tr>
<td>Avoid energy-dense foods such as sugar-sweetened soft drinks.</td>
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</tbody>
</table>
Obesity acknowledged by WHO noninfectious epidemic of our time because of its high prevalence in the population at high risk for cardiovascular disease, early disability and premature death.
Clinical examination
Prophylactic Medical Examination

It's a method of handling with healthy and sick people, the meaning of which is to examine the health status of the population and work with him. Main goal of dispensary - reducing morbidity and disability, increasing the average duration of life of patients and their functionality.
Prophylactic Medical Examination

Dispensary observation of the adult population of the Republic of Belarus includes:

- dispensary examination;
- dispensary dynamic monitoring of the health;
- promoting healthy lifestyles and raise interest in and responsibility for their health.
Stages Of Prophylactic Medical Examination

- Annual medical examination of the population with the implementation of minimum standard, laboratory and instrumental studies
- Require further examination using additional methods of diagnosis
- Identification and assessment of the health of an individual patients (identification of healthy individuals, healthy and patients with various diseases)
- Development and implementation of a complex of necessary medical and social, events, dynamic monitoring of the health of the population
- Annual review of the effectiveness and quality of medical examination.
Contingent Of Persons Subject To Mandatory Periodic Medical Examination

- children and adolescents
- pupils
- students
- women and childless women of childbearing age
- pregnant women
- workers of shops and professions in harmful working conditions
- workers leading trades in agricultural production
- invalids and veterans of the World War II and equated to them;
- citizens affected by the Chernobyl accident and related categories of the population
Groups Of Dispensary Dynamic Observation

- **D (I)** - healthy citizens, without complaints on the state of health, whose history of life, or results of regular medical examination reveal no acute or chronic dysfunction of individual organs and body systems, and with minor variations in health status (without tendency to progress), that don't affect to the work capacity;

- **D (II)** - almost healthy citizens with risk factors of chronic diseases, acute illnesses, which can lead to chronic disease process (including frequent or long-term ill citizens. Citizen are often (6 or more times year) or long term (more than 40 days a year in total) suffering acute diseases, as well as persons with chronic diseases in remission without disorders of the organs and body systems), or risk factors for chronic diseases;

- **D (III)** of dispensary observation - citizens with chronic diseases with impaired function of organs and body systems and (or) periodic exacerbations;
Multiplicity of outpatient examination and the volume of the survey, including the appointment of additional medical examinations of medical specialists, diagnostic tools and laboratory tests are determined by the attending physician performing outpatient observation, taking into account the degree of functional impairment, the frequency of relapses (exacerbations).
Citizens serving in the dispensary supervision group D (I), are observed at least 1 time in two years.
People of working age, employed in work with harmful and (or) hazardous working conditions or work, for which according with the laws there is a necessity in the professional selection, undergo a medical examination in accordance with the resolution of the Ministry of Health of the Republic of Belarus 12th of August 2016 № 96 "on Approval of the Procedure for mandatory medical examinations of workers and Repeal of certain provisions of the Ministry of health of the Republic of Belarus."
Citizen's denial of outpatient examination or dynamic observation is fixed in the medical ambulatory card and in the card of registration dispensary supervision, certified by his signature and stamp of physician health organization.
In the presence in the healthcare organization automated system of dispensary registration is allowed keeping dispensary observation cards in electronic form, with a hard copy in the ambulatory patient card.
Dispensary examination is performed in a volume of studies identified for each age group of adults:

- **18-39**: measurement of blood pressure, BMI, blood tests (ESR white blood cells, hemoglobin), urine, blood glucose (if necessary), fluorography, survey of gynecologist and breast checkup (women); blood glucose, blood cholesterol (by prescription), ECG, fluorography, obstetrician-gynecologist and breast (women);

- **40 and older**: the measurement of blood pressure, BMI, blood tests (ESR white blood cells, hemoglobin), urine, blood glucose, blood cholesterol, assessment of risk of cardiovascular disease in the table SCORE, intraocular pressure measurement, ECG, examination of obstetrician-gynecologist and breast (women), the study of the prostate (men) and fluorography, Fecal occult blood refers to blood in the feces.
How to use the risk estimation charts

To estimate a person’s 10-year risk of CVD death, find the table for his/her gender, smoking status, and age. Within the table, find the cell nearest to the person’s BP and TC. Risk estimates will need to be adjusted upwards as the person approaches the next age category.

Risk is initially assessed on the level of TC and systolic BP before treatment, if known. The longer the treatment and the more effective it is, the greater the reduction in risk, but in general it will not be more than about one-third of the baseline risk. For example, for a person on antihypertensive drug treatment in whom the pre-treatment BP is not known, if the total CV SCORE risk is 6%, then the pre-treatment total CV risk may have been 9%.

Low-risk persons should be offered advice to maintain their low-risk status. While no threshold is universally applicable, the intensity of advice should increase with increasing risk.

The charts may be used to give some indication of the effects of reducing risk factors, given that there is apparently a time lag before the risk reduces. In general, people who stop smoking halve their cumulative risk over a relatively short period of time.

BP = blood pressure; CV = cardiovascular; CVD = cardiovascular disease; SCORE = Systematic Coronary Risk Estimation; TC = total cholesterol.
Risk estimation charts for different countries

The **low-risk charts** should be considered for use in Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Netherlands, Norway, Malta, Portugal, Slovenia, Spain, Sweden, Switzerland, and the UK.

The **high-risk charts** should be considered for use in Albania, Algeria, Armenia, Bosnia and Herzegovina, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lebanon, Libya, Lithuania, Montenegro, Morocco, Poland, Romania, Serbia, Slovakia, Tunisia, and Turkey.

Some countries have a cardiovascular disease mortality rate >350/100,000, and the **high-risk chart may underestimate risk**. These are Azerbaijan, Belarus, Bulgaria, Egypt, Georgia, Kazakhstan, Kyrgyzstan, North Macedonia, Republic of Moldova, Russian Federation, Syria, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.
Factors modifying Systematic Coronary Risk Estimation risks

<table>
<thead>
<tr>
<th>Factor</th>
</tr>
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<tbody>
<tr>
<td>Social deprivation: the origin of many of the causes of CVD.</td>
</tr>
<tr>
<td>Obesity and central obesity as measured by the body mass index and</td>
</tr>
<tr>
<td>waist circumference, respectively.</td>
</tr>
<tr>
<td>Physical inactivity.</td>
</tr>
<tr>
<td>Psychosocial stress including vital exhaustion.</td>
</tr>
<tr>
<td>Family history of premature CVD (men: &lt;55 years and women: &lt;60 years).</td>
</tr>
<tr>
<td>Chronic immune-mediated inflammatory disorder.</td>
</tr>
<tr>
<td>Major psychiatric disorders.</td>
</tr>
<tr>
<td>Treatment for human immunodeficiency virus infection.</td>
</tr>
<tr>
<td>Atrial fibrillation.</td>
</tr>
<tr>
<td>Left ventricular hypertrophy.</td>
</tr>
<tr>
<td>Chronic kidney disease.</td>
</tr>
<tr>
<td>Obstructive sleep apnoea syndrome.</td>
</tr>
<tr>
<td>Non-alcoholic fatty liver disease.</td>
</tr>
</tbody>
</table>

CVD = cardiovascular disease.
### SCORE Cardiovascular Risk Chart

**10-year risk of fatal CVD**

**High-risk regions of Europe**

#### WOMEN

<table>
<thead>
<tr>
<th>Age</th>
<th>Non-smoker</th>
<th>Smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>12 13 14 15</td>
<td>17 19 20 21</td>
</tr>
<tr>
<td>55</td>
<td>12 14 16 15</td>
<td>16 18 21 24</td>
</tr>
<tr>
<td>50</td>
<td>12 15 17 19</td>
<td>15 17 20 20</td>
</tr>
<tr>
<td>45</td>
<td>12 14 15 13</td>
<td>16 18 21 24</td>
</tr>
<tr>
<td>40</td>
<td>13 14 15 12</td>
<td>14 18 21 24</td>
</tr>
</tbody>
</table>

#### MEN

<table>
<thead>
<tr>
<th>Age</th>
<th>Non-smoker</th>
<th>Smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>24 26 30 33</td>
<td>25 31 37 39</td>
</tr>
<tr>
<td>65</td>
<td>33 36 40 45</td>
<td>34 40 47 51</td>
</tr>
<tr>
<td>60</td>
<td>40 44 50 55</td>
<td>45 50 55 60</td>
</tr>
<tr>
<td>55</td>
<td>40 45 50 55</td>
<td>45 50 55 60</td>
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<td>50</td>
<td>40 45 50 55</td>
<td>45 50 55 60</td>
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<tr>
<td>45</td>
<td>40 45 50 55</td>
<td>45 50 55 60</td>
</tr>
<tr>
<td>40</td>
<td>40 45 50 55</td>
<td>45 50 55 60</td>
</tr>
</tbody>
</table>

#### Systolic blood pressure (mmHg)

<table>
<thead>
<tr>
<th>Age</th>
<th>Non-smoker</th>
<th>Smoker</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>160 150 140 120</td>
<td>170 160 150 140</td>
</tr>
<tr>
<td>65</td>
<td>160 150 140 120</td>
<td>170 160 150 140</td>
</tr>
<tr>
<td>60</td>
<td>160 150 140 120</td>
<td>170 160 150 140</td>
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<td>160 150 140 120</td>
<td>170 160 150 140</td>
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<td>45</td>
<td>160 150 140 120</td>
<td>170 160 150 140</td>
</tr>
<tr>
<td>40</td>
<td>160 150 140 120</td>
<td>170 160 150 140</td>
</tr>
</tbody>
</table>

#### Total cholesterol (mmol/L)

- <3%
- 3-4%
- 5-9%
- ≥10%

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Cardiovascular risk categories

<table>
<thead>
<tr>
<th>Very-high-risk</th>
<th>People with any of the following: Documented ASCVD, either clinical or unequivocal on imaging. Documented ASCVD includes previous ACS (MI or unstable angina), stable angina, coronary revascularization (PCI, CAGB, and other arterial revascularization procedures), stroke and TIA, and peripheral arterial disease. Unequivocally documented ASCVD on imaging includes those findings that are known to be predictive of clinical events, such as significant plaque on coronary angiography or CT scan (multivessel coronary disease with two major epicardial arteries having &gt;50% stenosis), or on carotid ultrasound. DM with target organ damage, or at least three major risk factors, or early onset of T1DM of long duration (&gt;20 years). Severe CKD (eGFR &lt;30 mL/min/1.73 m²). A calculated SCORE ≥10% for 10-year risk of fatal CVD. FH with ASCVD or with another major risk factor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-risk</td>
<td>People with: Markedly elevated single risk factors, in particular TC &gt;8 mmol/L (&gt;310 mg/dL), LDL-C &gt;4.9 mmol/L (&gt;190 mg/dL), or BP ≥180/110 mmHg. Patients with FH without other major risk factors. Patients with DM without target organ damage, with DM duration ≥10 years or another additional risk factor. Moderate CKD (eGFR 30—59 mL/min/1.73 m²). A calculated SCORE ≥5% and &lt;10% for 10-year risk of fatal CVD.</td>
</tr>
<tr>
<td>Moderate-risk</td>
<td>Young patients (T1DM &lt;35 years; T2DM &lt;50 years) with DM duration &lt;10 years, without other risk factors. Calculated SCORE ≥1% and &lt;5% for 10-year risk of fatal CVD.</td>
</tr>
<tr>
<td>Low-risk</td>
<td>Calculated SCORE &lt;1% for 10-year risk of fatal CVD.</td>
</tr>
</tbody>
</table>

ASCVD = atherosclerotic cardiovascular disease; ACS = acute coronary syndrome; BP = blood pressure; CAGB = coronary artery bypass graft surgery; CKD = chronic kidney disease; CT = computed tomography; CVD = cardiovascular disease; DM = diabetes mellitus; eGFR = estimated glomerular filtration rate; FH = familial hypercholesterolaemia; LDL-C = low-density lipoprotein cholesterol; MI = myocardial infarction; PCI = percutaneous coronary intervention; SCORE = Systematic Coronary Risk Estimation; T1DM = type 1 DM; T2DM = type 2 DM; TC = total cholesterol; TIA = transient ischaemic attack.

*Target organ damage is defined as microalbuminuria, retinopathy, or neuropathy.
CKD-EPI Equations for Glomerular Filtration Rate (GFR)

The CKD-EPI equation, expressed as a single equation, is:

\[
GFR = 141 \times \min(\frac{\text{Scr}}{\kappa}, 1)^{\alpha} \times \max(\frac{\text{Scr}}{\kappa}, 1)^{-1.209} \times 0.993^{\text{Age}} \times 1.018 \text{ [if female]} \times 1.159 \text{ [if black]}
\]

Scr is serum creatinine (mg/dL), \(\kappa\) is 0.7 for females and 0.9 for males, \(\alpha\) is -0.329 for females and -0.411 for males, \(\min\) indicates the minimum of \(\frac{\text{Scr}}{\kappa}\) or 1, and \(\max\) indicates the maximum of \(\frac{\text{Scr}}{\kappa}\) or 1.
On every citizen is filled a report form 131 - D "The registration card of dispensary observation," according to the application and the tally sheet of preventive cancer examinations for controlling the attendance.
With a systematic failure to implement recommendations and prescriptions during the calendar year by the patient the physician may cease the dispensary observation with reflection causes of refusal in the medical records, except for students and persons of military age.
Criteria Of Effectiveness Dispensary Observation Groups D1 And D2

- absence of disease
- maintaining the health and working capacity
- improvement of the physical condition
- complete recovery (after acute disease)
Clinical examination of patients with acute tonsillitis, pneumonia.
Prevention of these diseases
Acute tonsillitis (Latin tonsillae -. Amygdala) - an infectious disease characterized by acute inflammation of the components of the lymphatic pharyngeal ring, usually the tonsils caused by streptococci or staphylococci, rarely other microorganisms, viruses and fungi.
J03 Acute tonsillitis

(Acute tonsillitis)
A health disorder that belongs to the acute respiratory infection of the upper respiratory tract

2,404,759 people confirmed the diagnosis Acute tonsillitis
274 died with a diagnosis of Acute tonsillitis
0.01% disease mortality Acute tonsillitis
Diagnosis Acute tonsillitis is put to men at 17.56% more often than women.

1 299 443 men are diagnosed with acute tonsillitis. For 186 of them, this diagnosis is fatal.

0.01% mortality in men with the disease Acute tonsillitis.
1 105 316

women are diagnosed with acute tonsillitis. For 88 of them, this diagnosis is fatal.

0.01%

mortality in women with the disease Acute tonsillitis
Risk group for the disease Acute tonsillitis men aged 1-4 and women aged 1-4

The disease is most common in men aged 1-4

In men, the disease is least likely to occur at the age of 95+

In women, the disease is least likely to occur at the age of

The disease is most often found in women aged 1-4
Etiology

ARVI is caused by a variety of pathogens, among them (parainfluenza viruses, adenoviruses, rhinoviruses, reoviruses, etc.) and more than 300 of their subtypes. All of them are very contagious (infectious), because they are transmitted by airborne droplets. There is evidence that ARVI viruses are effectively spreading through bodily contact, for example, when shaking hands.

Clinical picture

The main symptoms of acute respiratory viral infections are a runny nose, coughing, sneezing, headache, sore throat, eyeballs, weakness.
Diagnosis Acute tonsillitis at the 1st place according to the incidence of diseases in the rubric acute respiratory infections of the upper respiratory ways

The most common are:
acute tonsillitis
acute upper respiratory tract infections
acute laryngitis and tracheitis

Disease Acute tonsillitis in 6th place according to the danger of diseases in the rubric acute respiratory infections of the upper respiratory ways

The most dangerous:
acute obstructive laryngitis [croup] and epiglottitis
acute upper respiratory tract infections
acute pharyngitis
Clinical examination of patients surviving an acute tonsillitis.

- After suffering tonsillitis patients observed divisional therapist for months (group dynamic dispensary observation D III). During this period the patient must be examined by two times (every two weeks) and examined (general blood tests, urinalysis, ECG). In the absence of complaints, normal rates of objective, laboratory and instrumental studies the patient is removed from the dispensary observation about suffering tonsillitis.
Pneumonia - an inflammation of lung tissue, usually of infectious origin, mainly affecting the alveoli (the development of the inflammatory exudation) and interstitial lung tissue.
J18 Pneumonia

(Pneumonia without clarification of the pathogen, Inflammation of the lungs)
An acute infectious-inflammatory disease of the lungs involving all structural elements of the lung tissue with mandatory damage to the alveoli and the development of inflammatory exudation therein.

17 253 428 people were diagnosed with pneumonia

1 473 542 died with a diagnosis Pneumonia

8.54% disease mortality Pneumonia
Pneumonia is diagnosed for men at 29.63% more often than women

9,739,786

men are diagnosed with pneumonia. For 792,411 of them, this diagnosis is fatal

8.14%

mortality in men with the disease Pneumonia

7,513,642

women are diagnosed with pneumonia. For 681,131 of these, this diagnosis is fatal.

9.07%

mortality in women with the disease Pneumonia
Short description

Pneumonia does not describe any one specific infection. What doctors call pneumonia can have more than 50 different causes. The development of the disease can result in bacteria, viruses, fungi and chemical irritants.

Etiology

Among the causes of pneumonia, the first place is a bacterial infection. The most common pathogens of pneumonia are:

- Gram-positive microorganisms: pneumococci (40 to 60%), staphylococci (2 to 5%), streptococci (2.5%);
- Gram-negative microorganisms: Friedlander's stick (from 3 to 8%), hemophilic rod (7%), enterobacteria (6%), protheus, E. coli, Legionella, etc. (from 1.5 to 4.5%)
- mycoplasma (6%);
- viral infections (herpes viruses, influenza and parainfluenza, adenoviruses, etc.);
- fungal infections.

Also, pneumonia can develop due to the influence of non-infectious factors: chest injuries, ionizing radiation, toxic substances, allergic agents.

The risk group for the development of pneumonia includes patients with congestive heart failure, chronic bronchitis, chronic nasopharyngeal infection, congenital malformations of the lungs, severe immunodeficient conditions, weakened and emaciated patients, patients long on bed, and elderly and senile patients.

Smoking and alcohol abusers are especially vulnerable to the development of pneumonia. Nicotine and alcohol vapors damage the bronchial mucosa and depress the protective factors of the bronchopulmonary system, creating a favorable environment for the introduction and reproduction of the infection.
Clinical examination after pneumonia

- The frequency of observation: when full recovery - at 1 month after treatment, with clinical recovery with radiographically defined post-inflammatory changes in the lung and pleura - 2 times a year (at 1 month after treatment, and after 1 year). Inspections of medical specialists: pulmonologist - indicated.

- Laboratory and instrumental investigations: - the blood, the general analysis of sputum, spirography; (the frequency of the examination is determined individually)

- 1 time per year - with clinical recovery;

- X-ray - 1 month after the treatment and after 1 year - with clinical recovery.

- Time observation and deregistration criteria: recovery.

- Performance criteria of clinical examination: recovery.
- Supervision by a local GP physician (general practitioner) - 6 months

- Supervision by a local physician (general practitioner) - 1 year (in the absence of negative dynamics).

- In the presence of negative dynamics - consultation of a pulmonologist
Preventing of tonsillitis and pneumonia

- Preventive measures directed at carrying out general hygiene measures: mode of work, the fight against dust, pollution, overheating and overcooling, airing facilities and isolation ill patients. Personal prevention involves hardening of the body, physical education and tourism, nutrition, sanitation foci of infection. Of great importance are the timely and correct treatment of acute respiratory diseases.