

Memo on tuberculosis

What is tuberculosis?

Tuberculosis (consumption) is an infectious disease caused by *Mycobacterium tuberculosis*, often called Koch's bacilli. The disease develops only in response to the multiplication of these microbes in the human body.

When the modern reader is faced with this name of the disease, then the image of a pale, emaciated person constantly coughing arises in the majority. Most sincerely believe that tuberculosis is only contracted in places not so remote, and if you are not a vagabond, then the disease does not threaten you. In reality, almost anyone, with the exception of hermits who do not leave their homes, is at risk of infection, and hence the possibility of getting TB.

Tuberculosis is a problem for all mankind. To date, about a third of the world's population is infected with *Mycobacterium tuberculosis* (this microorganism is the causative agent of tuberculosis). Every year, 1% of the world's population is infected with tuberculosis. Approximately 8.4 million new cases of tuberculosis are registered annually and approximately 2 million people die from this disease.

Tuberculosis is not just a socially determined disease, but an infectious disease. A disease that is transmitted from person to person by airborne droplets, that is, when coughing and even talking.

Unfortunately, it is not possible to identify an epidemically dangerous patient by appearance.

Tuberculosis is not for nothing called the "insidious" disease. And it is true! The pronounced symptoms of the disease, alas, often appear only with irreversible changes in the lungs. In most cases, a person with tuberculosis feels well for a long time.

How can you get tuberculosis?

The main source of tuberculosis infection is a person who has pulmonary tuberculosis. From the respiratory tract, especially during coughing, sputum containing *Mycobacterium tuberculosis* is separated. Small drops of sputum can enter the respiratory tract of a healthy person nearby. Phlegm can settle on the surface of the floor or the ground, on objects and things. The infection can enter the human body due to poor hygiene - for example, if you do not wash your hands after contact with handrails in public transport or eat unwashed vegetables and fruits, poorly processed meat and unboiled milk.

What happens when you inhale tubercle bacilli?

In most cases, if a person's immune system is normal, inhalation of tubercle bacilli does not lead to the disease in the active stage. A host of defense cells rush to the mycobacteria that have entered the respiratory tract, which absorb and kill most of the pathogens. But some mycobacteria can survive and remain inactive for a long time. Thus, the "attack" of pathogens on the body remains without consequences. However, after months and even years, when immunity is weakened as a result of some other disease, malnutrition or stress, tuberculosis bacteria begin to multiply, destroying the host cell with their mass and laying the foundation for the development of active tuberculosis.

In some cases, the first time an infection enters the body, the bacteria can multiply, causing serious damage to the lung tissue. These are cases of active pulmonary tuberculosis, which can become a source of further spread of infection.

In some cases, pathogenic bacteria, once in the lungs, can be transferred through the lymphatic vessels or with the bloodstream to other parts of the body, getting into the kidneys, bones and joints, the brain, etc. With good body defenses, mycobacteria remain inactive for a long time, but when the body is weakened, tuberculosis can also develop in these parts of the body.

What can lower your body's defenses?

If too many tubercle bacilli, mycobacteria, enter the respiratory tract, the body may not be able to cope with such an onslaught. If you communicate with a TB patient for a long time, your body is constantly attacked, and there may come a time when it can no longer effectively resist the infection.

There are also other factors that contribute to the development of mycobacteria in the body:

- stress - mental or physical strain;
- immoderate consumption of alcohol;
- smoking;
- insufficient or malnutrition;
- other diseases that weaken the body.

Children, teenagers, pregnant women and the elderly are more susceptible to infection.

How to protect yourself from the disease?

In order not to get sick with tuberculosis, it is necessary to lead a healthy lifestyle. Good health requires a healthy nervous system, so it is important to avoid stress. Food should be complete, must contain a sufficient amount of protein. An important condition for maintaining health should be daily

normal physical activity. Dusty unventilated rooms favor the spread of tuberculosis bacteria. For prophylaxis and diseases, it is necessary to ventilate the premises.

Where can you get tested?

A fluorographic examination of the chest can be done at the clinic at the place of residence. If tuberculosis is suspected, the local doctor or specialist doctor, after a clinical additional examination, will refer you for a consultation to a TB specialist in an anti-tuberculosis dispensary.

How to protect a child from tuberculosis?

It is possible to reduce the risk of developing tuberculosis in a child by carrying out BCG vaccination, which is mandatory and free of charge for all children in the maternity hospital in the first 3 days of life (in the absence of medical contraindications). Children who are not vaccinated at the maternity hospital are vaccinated in the pathology departments of newborns or in a children's clinic, while at the age of over 2 months before BCG vaccination, a Mantoux test with 2 TU must first be given and vaccination is carried out in case of a negative test.

Re-vaccination - BCG revaccination - is carried out at 6-7 years. BCG revaccination is carried out by non-infected with Mycobacterium tuberculosis (MBT) tuberculin-negative children and adolescents. Frequently ill children or children with chronic diseases are at risk for tuberculosis. Special attention is paid to this category of children, additional treatment and preventive measures are taken, which are determined by the district doctor, specialist doctor, medical worker of the children's institution. If there are medical indications, the child is referred for a consultation with a phthisiatrician at the place of residence. In order to protect the child from the disease, adults themselves must be sure that they are HEALTHY and undergo medical examinations in a timely manner.

How can I tell if I have a disease?

The main symptoms characteristic of tuberculosis:

- cough for 2-3 weeks or more;
- chest pain; weight loss; presence of blood in sputum;
- sweating at night;
- periodic increase in temperature;
- general malaise and weakness;
- enlargement of peripheral lymph nodes.

If you find these symptoms in yourself, contact your doctor immediately!

Can I infect others?

A sick person is a source of infection until he starts intensive treatment. But once treatment is started, the risk of infecting others quickly decreases. This can be confirmed by a sputum test for tubercle bacilli. If they cannot be detected by microscopic examination, then the risk of infection for relatives and friends in the event of your illness is small. However, if you have started taking anti-TB pills, it is very important to complete the full course of treatment, that is, take all the prescribed medicines without exception without interruption, even if you start to feel better.

Can tuberculosis be cured?

Currently, there are many anti-tuberculosis drugs, the use of which allows you to completely cure the disease. The main conditions for the treatment of tuberculosis are timely detection through preventive examinations and early treatment of patients for specialized medical care to a phthisiatrician. A patient with tuberculosis must take timely treatment in full, prescribed by his doctor. Interruptions in treatment lead to the development of a drug-resistant form of TB that is much more difficult to cure.

What to do if there is a TB patient in the family?

If there is a tuberculosis patient in the family, then, first of all, he himself must be aware that a lot depends on his culture and discipline. Naturally, the patient must comply with the rules of personal hygiene. But no less important is the literacy in matters of hygiene of all family members and relatives living in the focus of tuberculosis.

The patient should have his own room, and if this is not possible, then his own corner. The bed should be placed closer to the window, fenced off with a screen. You can not sleep on the sofa, which is used during the day by other family members, on which children play. The patient should have his own dishes, all things should be stored separately. The spittoon must be handled by the patient himself.

How to help the patient, how to disinfect his belongings, clean the room, process sputum - they will tell you about this at the tuberculosis dispensary. The whole family of the patient should be observed in the dispensary by contact, be examined in time and undergo preventive courses of treatment in accordance with the recommendations of the phthisiatrician.