

Tuberculosis

Tuberculosis is an infectious disease that is caused by the mycobacterium tuberculosis and rarely by other types of mycobacteria. It may affect any organ of the body but most commonly it affects the lungs.

Transmission of tuberculosis - Infection from the mycobacterium tuberculosis

Tuberculosis is transmitted from person to person by aerosol droplets containing the mycobacterium tuberculosis. Patients with an active disease of the lungs expel very small droplets containing the mycobacterium tuberculosis through coughing, sneezing and when speaking loudly.

Most people have the ability to defend against the growth of mycobacterium tuberculosis. They don't become sick, they don't develop tuberculosis and they don't present any symptoms. However, some persons and mainly those whose immune system is weak for any reason might develop active tuberculosis at a later stage.

Early detection of tuberculosis cases is very important. Immediate treatment and chemoprophylaxis will stop the further spread of the disease.

It is important to emphasize that if a pulmonary tuberculosis case is not diagnosed early and the patient continues to spread droplets through coughing, sneezing and talking to others, then he can infect 10-15 other people per year.

The persons infected by the mycobacterium tuberculosis, usually, transmit the disease to persons with whom they have prolonged or frequent contact, as in the case of family, friends or colleagues.

How can it be tested if somebody is infected by the mycobacterium tuberculosis

The Mantoux test is used to verify if a person is infected by the mycobacterium tuberculosis and this test can be accompanied by a chest X-ray.

Mantoux is a skin test administered intradermally into the volar aspect of the arm with a small quantity of tuberculin protein. Tuberculin is an antigen that derives from the tubercule bacilli.

The reaction to the test is interpreted 48-72 hours later and the results indicate whether somebody was exposed to the mycobacteria tuberculosis or not.

Vaccine against tuberculosis

The vaccine against tuberculosis is BCG (Bacillus Calmette Guerin). The vaccine is administered to infants and small children in countries where tuberculosis occurs frequently. In Cyprus, tuberculosis is not included in the National Immunisation Scheme of the Ministry of Health because the prevalence of the disease is low.

Treatment of tuberculosis

Tuberculosis can be treated with the administration of the appropriate medicines. Treatment consists of more than one type of drugs and the patient has to receive treatment for a long period of time because of the heavy load of mycobacteria present.

Treatment administered consists of a combination of various drugs so that all mycobacteria are defeated and for the prevention of development of multi drug resistant tuberculosis.

Why tuberculosis treatment should never be interrupted

Mycobacterium of tuberculosis is destroyed very slowly. Usually the patient begins to feel better a few weeks after the initiation of the treatment.

However you need to be careful! If the patient does not take the prescribed regimen appropriately, there is a great danger that the mycobacteria will start growing and multiplying again.

In addition the mycobacterium of tuberculosis may become multi drug resistant tuberculosis.

As a result, tuberculosis cannot be cured effectively with the administration of drugs and patients even run the risk of dying.

It is of importance to note that when a patient with multidrug resistant tuberculosis transmits the mycobacterium of tuberculosis to another person, then the person who gets infected faces the same problem of multidrug resistant tuberculosis.

Investigation of the patients' environment

An investigation of all cases of tuberculosis is carried out by health professionals who immediately after diagnosis visit the patient's place of residence. It is important to investigate tuberculosis cases for two main reasons:

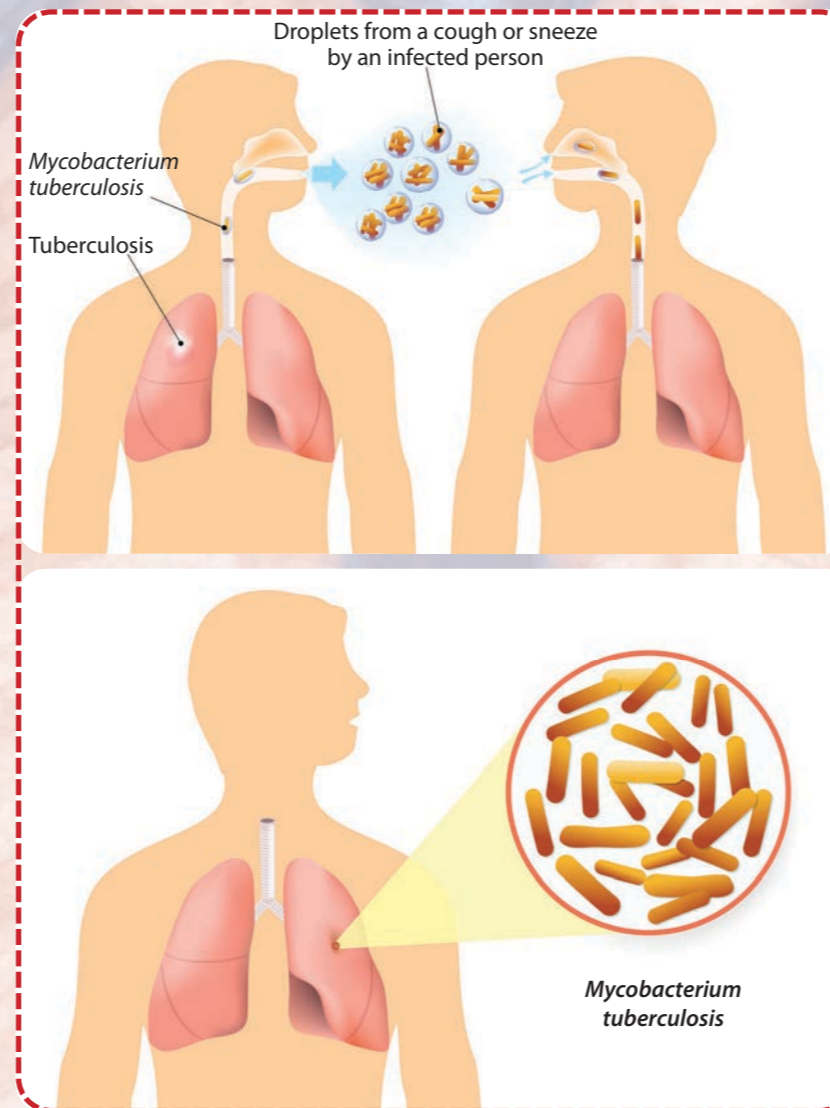
- **To identify and treat the source of infection**, i.e. the person who transmitted tuberculosis to the patient. This is done in order to prevent the spread of the disease.
- **To identify and treat other infected cases in the environment of the patient** before they develop tuberculosis.

Prevention of transmission of tuberculosis to others

For the effective prevention of the spread of tuberculosis to other people, patients with tuberculosis should:

- Receive their medication exactly as these are prescribed by the doctor.
- Be followed up regularly by their doctor, who is going to monitor their condition.
- Ask their doctor for anything that worries them.
- Cover their mouth and nose with a tissue when coughing, sneezing or when they laugh. * Dirty tissues should be placed in a plastic bag that should be closed tightly before thrown away.
- Avoid close contact with others for the duration requested by their doctor.
- Air their room regularly by opening the windows.
- There is no danger of contacting the disease through the sheets, plates and kitchen utensils, glasses, cups or toilets.
- Usually 2-4 weeks after the initiation of treatment, the disease is no longer contagious.
- Patients with tuberculosis can return to their everyday activities only with their doctors' permission.

In general, healthy living - adequate sleep, avoiding exhaustion, healthy diet, no smoking and generally maintaining high levels of hygiene - protects from tuberculosis



Tuberculosis-Consumption

What you should know

