

PREVENTION OF TUBERCULOSIS. TACTICS OF A DENTIST FOR ORAL TUBERCULOSIS

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<https://doi.org/10.5281/zenodo.10867936>

Abstract. *The high prevalence of tuberculosis among the population determines the relevance of information on timely diagnosis and treatment, and prevention of this pathology. The clinical manifestations of tuberculosis in the oral cavity are described, depending on the form, and modern diagnostic methods. prevention methods for tuberculosis as well as dentist tactics for oral tuberculosis. **Goal:** The need for knowledge of tuberculosis and its early manifestations, the ability to correctly assess the clinical picture, and conduct a complete history collection patient, as well as navigate the structure of the TB service.*

Keywords: *pulmonology, phthiology, tuberculosis, tuberculosis, phthisiatrician, glossalgia.*

According to statistics: in 2018, morbidity rates in Uzbekistan were 42.6 people per 100 thousand population, and mortality rates were 1.6 people. For comparison: in 2002 these data were 79.1 and 12.3, respectively. That is, today the situation has improved.

According to the Director of the Republican Specialized Scientific and Practical Medical Center for Phthiology and Pulmonology, the current situation with tuberculosis in Uzbekistan. much improved. Imagine the lungs as an upside-down tree. The trunk is the larynx, large branches are the bronchi, the crown is the alveoli. A patient with tuberculosis releases Koch's bacilli into the environment when talking, coughing, or sneezing. The bacterium travels all the way from the bronchi to the alveoli and enters the blood through blood vessels and arteries. This is how infection happens. But this does not mean that an infected person sneezing on a bus will infect everyone. Out of ten healthy people, one or two will get sick. Why? Immunity enters the fray. Those who have a reduced level are at risk. The infection finds weak areas in the body and attacks them first. Thus, tuberculosis of the lungs, bones, skin occurs... The World Health Organization noted that the situation with tuberculosis in the world can be called an epidemic. Does this apply to Uzbekistan? No. Tuberculosis is a chronic infectious disease that affects all organs and systems of the body, but it can be controlled. There are modern drugs that can cure it, but it all depends on the stage of the disease. The main thing is to come to the doctor on time

Tuberculosis still poses a serious problem today, since it is an infectious disease transmitted by airborne droplets from person to person, affecting almost all organs and tissues, but most often the lungs are affected by tuberculosis. A patient with an open form is dangerous because he is a spreader of infection, which, with droplets of sputum, enters the tuberculosis category of common infectious diseases.

The pathogen is given by the environment, on objects. Then, drying out, they rise into the air again with dust. The mycobacterium remains alive for months in dust, on various objects, and lives in soil for up to 3 years. It is resistant to many disinfectants, including alcohol. The closer

others are to a person with tuberculosis, the more likely it is to become infected. Tuberculosis is the ninth leading cause of death in the world.

The development of tuberculosis is promoted by:

- Insufficient and improper nutrition.
- Poor living conditions.
- Stressful situations.
- Smoking.
- HIV AIDS.
- Alcoholism, drug addiction, substance abuse.
- Chronic diseases (lungs, diabetes, peptic ulcers and other diseases)

The appearance of the patients suggests a serious general illness (emaciation, shortness of breath, fever, sweating). Unfortunately, patients suffering from even severe forms of pulmonary tuberculosis are sometimes unaware of their disease. Only the occurrence of ulcers in the oral cavity leads them to a specialist. In such cases, the dentist must assume the specificity of the lesion (make a preliminary diagnosis) and immediately refer the patient for examination and treatment to a phthisiatrician in a specialized anti-tuberculosis institution

Diagnosis of tuberculosis: Complete blood count: nonspecific changes are characteristic: decreased levels of hemoglobin (anemia) and leukocytes (leukopenia). Microbiological diagnostics: detection of *Mycobacterium tuberculosis* in sputum (carried out three times); study of bronchial lavage water; examination of pleural fluid; bronchoscopy with biopsy of bronchial tissue; biopsy of the pleura, lung. Genetic methods: the most common and informative method is the PCR method - polymerase chain reaction. It is based on the detection of fragments of genetic material (DNA) of bacteria in the studied material.

X-ray methods: fluorography, radiography, fluoroscopy. All patients with tuberculosis, regardless of the form of the disease, usually have an unsanitized oral cavity and lack proper hygienic care. The development of the pathological process is due to a decrease in local immunity of the oral mucosa under the influence of processes occurring in the body.

Patients with tuberculosis are susceptible to intensive development of dental caries and chronic inflammatory periodontal diseases. They often have chronic odontogenic infection (85.5%). Hyperesthesia of hard dental tissues, paresthesia of the oral mucosa and glossalgia, and taste perversion are noted.

Treatment by a dentist is aimed at teaching hygienic oral care, eliminating traumatic factors, and treating teeth and periodontal disease. Antiseptic treatment of ulcers and the entire oral cavity against secondary infections, pain-relieving applications and oral baths, ointment dressings, and anti-tuberculosis drugs are used. Aerosols used in dental treatment are often key to the transmission of tuberculosis, and a person can easily become infected with pulmonary tuberculosis through this route of transmission. Preventing the transmission of tuberculosis includes measures to prevent inhalation of contaminated airborne material, usually contaminated droplets exhaled or coughed up by an infected person. Health care workers, including dentists, are increasingly aware of the need for preventive measures to avoid transmission of infection from patients to staff, as well as to prevent the spread of infection within the health care facility itself. At dental appointments, patients are increasingly encountered who constitute high-risk groups, both in terms of transmission of infection and susceptibility to it. Therefore, the dentist must consider each patient as a potential carrier of infection.

As a protective measure, we can recommend that patients present the results of a fluorographic examination during a routine visit to a dentist. Examination of the oral cavity in patients with an active form of tuberculosis and provision of dental care to them should be carried out no earlier than 2-4 months from the start of specific chemotherapy (no bacterial excretion) and on the direction of a phthisiatrician (after removal of symptoms of intoxication and at normal body temperature).

In modern conditions, the organization of qualified dental care for socially significant groups of the population, which includes patients with pulmonary tuberculosis, is very important. The use of modern methods of treating tuberculosis is fundamental in the prevention of tuberculous lesions of the maxillofacial area.

Conclusion. Thus, at present, the role of the dentist and doctor of any profile in the prevention and early detection of tuberculosis of the oral mucosa is increasing. In this regard, tuberculosis alertness is especially relevant, which implies knowledge of its symptoms of tuberculosis its early manifestations, the ability to correctly assess the clinical picture, conduct a complete collection of the patient's medical history, diagnosis, and also navigate the structure of the TB service.

Conclusion for Prevention of Tuberculosis:

In conclusion, the prevention of tuberculosis requires a multifaceted approach that involves both individual and community-level strategies. Key tactics for preventing tuberculosis include:

1. **Vaccination:** The Bacillus Calmette-Guérin (BCG) vaccine is commonly used to prevent tuberculosis, especially in countries with a high burden of the disease. Administering the BCG vaccine to infants can significantly reduce the risk of severe forms of tuberculosis.

2. **Early Detection and Treatment:** Prompt identification and treatment of active tuberculosis cases are crucial to prevent the spread of the disease. Timely diagnosis through methods such as sputum microscopy, chest X-rays, and molecular tests, followed by appropriate treatment with a combination of antibiotics, can help prevent the transmission of tuberculosis to others.

3. **Infection Control Measures:** Implementing effective infection control measures in healthcare settings, such as hospitals and clinics, is essential to prevent the transmission of tuberculosis. This involves ensuring proper ventilation, using respiratory protection for healthcare workers, and implementing protocols for identifying and isolating potentially infectious patients.

4. **Contact Tracing and Screening:** Identifying individuals who have been in close contact with tuberculosis patients and conducting appropriate screening tests can help detect latent tuberculosis infection and provide preventive treatment to reduce the risk of developing active disease.

5. **Education and Awareness:** Raising public awareness about tuberculosis, its symptoms, transmission routes, and preventive measures is vital for prevention efforts. Educational campaigns can help dispel myths, reduce stigma, and promote adherence to preventive measures and treatment.

6. **Addressing Social Determinants:** Addressing social determinants of tuberculosis, such as poverty, overcrowding, and malnutrition, is crucial for effective prevention. Improving living conditions, access to healthcare, and socioeconomic factors can contribute to reducing the risk of tuberculosis transmission.

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