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MANIFESTATION OF SYMPTOMS IN THE ORAL CAVITY IN PATIENTS WITH TUBERCULOSIS INFECTION

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Annotation

According to the Ministry of Health of Uzbekistan, in 2013 the incidence of tuberculosis in 2013 was 66 cases per 100 thousand people, and the death rate was just over 12 cases per 100 thousand. population). Men in all regions suffer from tuberculosis 3.2 times more often than women, while the rate of increase in the incidence in men is 2.5 times higher than in women. The most affected are persons aged 20–29 and 30–39 years. At the same time, among the permanent population, there is an increase in the incidence of tuberculosis associated with HIV infection (2009 - 4.4; 2011 - 5.6; 2012 - 5.9 per 100 thousand population) [1, 4,]. Tuberculosis is the second leading cause of death from any single infectious agent, behind only HIV/AIDS. In 2013, 9 million people fell ill with TB and 1.5 million people died from the disease. The problem remains the epidemiological situation of tuberculosis in the institutions of the penitentiary system. Today, 35,000 tuberculosis patients are kept in the institutions of the Federal Penitentiary Service. Every year more than 4,000 TB patients are detected at the level of pre-trial detention centers. In 2013, an estimated 480,000 people worldwide developed multidrug-resistant TB. The number of people who fall ill with tuberculosis every year is decreasing, albeit very slowly. For the period from 1990 to 2013. mortality from tuberculosis decreased by 45% [2, 4].

Keywords: tuberculosis infection, mycobacterium tuberculosis, tuberculous lupus, symptom apple jelly, Pospelov phenomenon

Introduction

The causative agent of tuberculosis is a bacterium (Mycobacterium tuberculosis), which most often affects the lungs and is transmitted by airborne droplets [2]. About one third of the world's population has latent TB. The risk that people infected with TB bacteria will get it during their lifetime is 10%. However, people with weakened immune systems are at a much higher risk of the disease. A specific lesion of the oral mucosa is a rare form of tuberculosis. Due to the fact that in recent years the influx of

migrants has increased significantly, knowledge of the characteristics of the course of this lesion is of diagnostic value in providing dental care to patients with pulmonary tuberculosis. Migrants, internally displaced persons and refugees are a group of people at increased risk of TB. This is facilitated by a low standard of living, non-compliance with sanitary and hygienic standards, stressful situations, and a decrease in protein nutrition. Wars and military conflicts, the economic crisis, the lack of adequate housing, poor living and working conditions in the incidence of tuberculosis are of paramount importance. The negative role of insufficient or vegetarian nutrition, low level of education, culture and health literacy is also great. Migrants and refugees statistically significantly increase the number of patients with acute and rapidly progressive forms of tuberculosis, such as caseous pneumonia, as well as with chronic destructive forms - disseminated and fibrous-cavernous pulmonary tuberculosis. At the same time, close family or work contact with people who cough up Mycobacterium tuberculosis with sputum is the most dangerous [8]. The mucous membrane of the mouth, due to the phenomena of colonization resistance, is an unfavorable environment for the reproduction of Mycobacterium tuberculosis. As a rule, they die quickly, but in the presence of damage to the oral mucosa, mycobacteria can cause ulcerative lesions. Tuberculous lesions of the oral mucosa can be observed in 1% of adult patients with respiratory tuberculosis. Primary tuberculosis (primary tuberculosis complex) practically does not develop in the oral cavity of adults. Secondary tuberculosis of the oral mucosa as a consequence of tuberculosis of the lungs or skin occurs mainly in two forms - tuberculous lupus and miliary ulcerative tuberculosis. Colliquiative tuberculosis (scrofuloderma) is extremely rare [3, 5]. The main clinical and morphological forms of tuberculosis of the oral mucosa are infiltrative and ulcerative. The color of the tuberculous infiltrate varies from bright red in acute forms with a predominantly exudative component of inflammation, to pale gray in the presence of fibrous layers. Tuberculous ulcers have the appearance of small cracks, sometimes hiding in the folds of the oral mucosa, or extensive ulceration, accompanied by edema with a rash of miliary (small-focal) grayish-yellow nodules. The pain symptom in various forms of tuberculous lesions of the oral cavity is not very pronounced, depends on the localization of the process and occurs as an independent phenomenon or when eating. The pathological process affects the mucous membrane of the oral cavity, gums, cheeks, hard and soft palate, tongue, red border of the lips. Symptoms of oral tuberculosis vary depending on the severity, nature, form and localization of the process. Clinically, they are characterized by a number of general functional disorders of the body, characteristic of tuberculous intoxication, and local symptoms, including manifestations of pulmonary lesions and

directly a picture of tuberculosis of the oral mucosa. In the acute stage, it is possible to attach nonspecific inflammation caused by fungi of the genus Candida, and erysipelas is also a complication of lupus erythematosus. Infrequently, in 1-10% of cases, there are ulcers that degenerate into lupuscarcinomas. The most common localization of lupus erythematosus in the oral cavity is the upper lip, gums and alveolar process of the upper jaw in the region of the anterior teeth, hard and soft palate. The primary element of the lesion is a specific tuberculous tubercle (lupoma), soft, red or yellow-red in color, 1–3 mm in diameter. Tubercles are located in groups. They grow along the periphery of the focus, and in the center it is easily destroyed, leading to the appearance of ulcers with soft, slightly painful, swollen edges. The entire lesion has the appearance of a superficial ulcer, covered with bright red or yellow-red pure or with a yellowish coating, easily bleeding papillomatous growths resembling raspberries. The bone tissue of the interdental septa is destroyed, the teeth become mobile and fall out. The affected lip swells strongly, increases in size, becomes covered with abundant bloody-purulent crusts, after the removal of which ulcers are exposed. There are painful cracks on the lips. A symptom of apple jelly and a test with a probe are characteristic of lupus erythematosus. When pressing the glass slide on the skin or the red border of the lips, the affected tissue turns pale, lupomas become visible in the form of yellowish-brown nodules, similar in color to apple jelly (apple jelly symptom). 2014 5 When pressed, the bellied probe easily falls into the loop (probe test, Pospelov's phenomenon). The general condition of patients changes dramatically: emaciation, excessive sweating, shortness of breath, fever, hypersalivation are observed. Regional lymph nodes enlarge and thicken. Pirke's reaction in most cases is positive. In ulcers, Koch's bacilli are found very rarely, even with repeated studies. In patients with a long-term lupus process, smooth, shiny scars develop at the site of the lesion. When localized on the lip, they strongly deform it, which leads to difficulty in eating, speech distortion. Without treatment, the process lasts indefinitely, fresh bumps may appear on the scars. Lupus foci in the oral cavity are often complicated by a secondary infection (cocci, Candida fungi). Malignancy of lupus ulcers with localization in the oral cavity or on the lips occurs in 1-10% of cases. On the oral mucosa, miliary ulcerative tuberculosis develops a second time as a result of autoinoculation of Koch's bacilli from open foci of infection, most often from the lungs with a severe progressive course of the process. Reactivity to the pathogen in such individuals is reduced. Mycobacterium tuberculosis, being excreted in a significant amount with sputum, penetrates into the mucous membrane at the sites of injuries, typical tuberculous tubercles develop, after the collapse of which an ulcer forms in the center of the focus. Typical localization of ulcers is the mucous membrane

of the cheeks along the line of closing of the teeth, the back and sides of the tongue, the soft palate. The number of ulcers is usually from one to three. The ulcer is usually shallow, with uneven undermined soft edges, painful. Its bottom and edges have a granular structure due to undecayed tubercles, covered with a yellowish-gray coating. Surrounding tissues are edematous, small abscesses can sometimes be found around the ulcer - the so-called Trill grains. With prolonged existence of an ulcer and secondary infection, its edges and bottom become denser. In the tongue or transitional fold, ulcers may take on a slit-like shape when the bottom of the ulcer is wider than the inlet. Regional lymph nodes may not be palpable at first, later enlarged, elastically dense, painful ones are palpated. Collicative tuberculosis, or scrofuloderma, on the oral mucosa is extremely rare, mainly in children. Characteristic is the formation of nodes in the deep layers of the mucosa, soldered to the skin or mucous membrane, without a pronounced inflammatory reaction. The nodes gradually increase, soften and open. Mildly painful ulcers of irregular shape with undermined edges are formed. The bottom of the ulcers is covered with sluggish granulations and a grayish-yellow coating. After the ulcers heal, retracted, disfiguring scars form. Unfortunately, patients suffering from even severe forms of pulmonary tuberculosis are sometimes unaware of their disease. The occurrence of ulcers on the oral mucosa leads them to the dentist. In such cases, the main task of the dentist is to make or assume the correct diagnosis and immediately refer the patient for examination and treatment to a phthisiatrician. Inflammatory changes revealed during examination of the oral cavity are differentiated from Vincent's ulcerative necrotic stomatitis, traumatic, trophic and cancerous ulcers. Tuberculous lupus is differentiated from tubercles that occur with tertiary syphilis. Syphilitic tubercles are larger and more dense. The edges of ulcers with syphilis are even, dense, and with tuberculous lupus - soft, pitted. Unlike lupus, syphilitic rashes do not reappear on scars. The symptom of a falling probe and apple jelly is absent in syphilis. Changes in the type of scrofuloderma on the oral mucosa are differentiated from syphilitic gumma or actinomycosis. Syphilitic gummas differ from tuberculosis nodes in greater density, rapid opening with the formation of crater-like ulcers with infiltrated edges. After healing of syphilitic ulcers, retracted star-shaped scars are formed. The final confirmation of the syphilitic origin of the process is positive RIF and RIBT. With actinomycosis, the nodes in the oral mucosa and skin are very dense, after they soften, fistulas are formed, not ulcers. Druses of the radiant fungus are found in the discharge from the fistulas [7]. If changes in a specific etiology are suspected, a triple microscopic examination of a purulent discharge of an ulcer or a smear-imprint of an ulcer with Ziehl-Nelsen stain is indicated to detect acid-fast bacteria. A cultural study

allows you to determine the species of mycobacteria (M. tuberculosis, M. bovis and M. africanum). Most often, about 90% of cases, M. tuberculosis is isolated. M. bovis is detected less frequently, in only 10-15% of cases. Isolation of MBT of the bovine species is observed in residents of rural areas with the alimentary route of infection [6]. A diagnostic biopsy of the edge of the ulcer is performed for histological and bacteriological examination. When studying biopsy specimens of the mucous membrane, to confirm tuberculous etiology, it is necessary to detect Pirogov-Langhans cells. Polymerase chain reaction (PCR) is also used to detect MBT DNA. Decisive in the diagnosis are the results of cytological and bacterioscopic studies [4]. Recently, due to the increase in the number of persons with secondary T-cell immunodeficiencies (including those infected and AIDS patients), in addition to the detection of MBT, the isolation of NTMB is recorded. Non-tuberculous mycobacteria, in conditions of decreasing nonspecific resistance, can cause changes in the soft tissues of the oral cavity in the so-called "opportunistic infections". Very often, mycobacterioses are morphologically and clinically similar to tuberculosis. Diagnosis of tuberculosis. Complete blood count: nonspecific changes are characteristic: a decrease in the level of hemoglobin (anemia) and leukocytes (leukopenia). Microbiological diagnostics: detection of Mycobacterium tuberculosis in sputum (performed three times); study of bronchial washings; examination of the pleural fluid; bronchoscopy with a 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 the genetic material (DNA) of bacteria in the test material. X-ray methods: fluorography, radiography, fluoroscopy, tomography. In children, the main diagnosis for suspected tuberculosis is periodic tuberculin tests [4, 6]. Tuberculosis of the oral mucosa is a manifestation of a common tuberculosis infection, so the general treatment of patients is carried out in specialized anti-tuberculosis dispensaries. Dental care is provided to patients with tuberculosis of the respiratory organs with strict observance of the measures of the sanitary and anti-epidemic regime. Examination of the oral cavity in patients with an active form of tuberculosis and the provision of planned dental care to them is carried out in the direction of a phthisiatrician after the main course of etiotropic therapy. Planned care is provided no earlier than 2-4 months from the start of treatment, after the cessation of M. tuberculosis excretion with sputum. Due to the reduced resistance of the body in patients with active pulmonary tuberculosis, which is manifested by an increase in the accumulation of soft plaque and the severity of inflammation in periodontal tissues, dental treatment begins with a full oral hygiene, its sanitation, anti-inflammatory therapy of periodontitis,

periodontitis, caries and preventive antibacterial measures. In patients with pulmonary tuberculosis, as part of complex therapy, in agreement with the phthisiatrician and the patient, endodontic treatment of teeth with chronic apical periodontitis is performed with well-permeable root canals. Local treatment is aimed at eliminating traumatic factors, treatment of hard tissues of teeth and periodontium. The treatment of the oral mucosa with antiseptic and analgesic preparations in the form of oral baths and applications is also used [1]. Contraindications to conservative treatment are: chronic periodontitis with the presence of II–III degrees of tooth mobility and severe gum atrophy; significant destructive changes in the periodontium and adjacent bone tissue (radicular cysts and cystogranulomas); tuberculous and other ulcerative-necrotic processes in the area of the affected tooth.

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