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**EFFECT OF ODONTOGENIC INFECTION TO PREGNANT  
WOMEN**

Annotation: Odontogenic infection is any secondary infectious process, the source of which is inflammation of the parotid tissues. It includes such nosologies as odontogenic periostitis, osteomyelitis, sinusitis, head and neck phlegmons, lymphadenitis, etc.

Key words: medicine, odontogenic infection, inflammation, microorganism.

Odontogenic infections (OI) are acute or chronic purulent-inflammatory diseases caused by pathological processes in the tissues of the tooth (periodontal). From the stomatogenic focus, microorganisms can spread not only to nearby structures (periosteum, jawbone, paranasal sinuses), but also to organs and tissues removed from the source of infection (neck, mediastinum, brain membranes).

The microbial flora that causes odontogenic infection is more often represented by cocci (beta-hemolytic streptococcus, Peptostreptococcus, Staphylococcus aureus, prevotella, fusobacteria). Also, bacteroids, actinomycetes, spirochetes, proteus, clostridia, candida can be sown from the foci of infection. The microbial landscape in odontogenic infections is usually mixed. The sources of OI in pregnant women various local pathological processes in the oral cavity. Most often they are defects of hard dental tissues and periodontal: deep caries; abscesses of the oral cavity: pulpar (purulent pulpitis), periodontal, periapical; chronic gangrenous pulpitis; acute apical or chronic periodontitis; suppurated tooth cyst, odontoma; pericoronitis; alveolitis.

Sometimes dental manipulations can provoke the manifestation of an odontogenic infection: endodontic treatment, traumatic tooth extraction, sinus lifting, dental implantation. If carried out incorrectly, these procedures contribute to perforation of the maxillary sinus, foreign objects (fragments of teeth, filling

materials) entering the sinuses, the formation of non-healing oroantral fistulas that support the infectious process.

The triggering factors leading to the development of odontogenic pathological processes may be hypothermia, fatigue, stress, blood loss, insolation. OI in pregnant women more likely to develop in patients with a burdened somatic background. The following concomitant pathologies are of the greatest importance:

- diabetes mellitus;
- infections (influenza, tuberculosis, hepatitis);
- oncological diseases;
- chemical dependence (alcohol, narcotic, toxic).

The development of odontogenic infection is influenced by virulence and the number of microorganisms in the primary focus, as well as the state of the macroorganism. The spread of infectious pathogens from the primary stomatogenic focus in most cases occurs by contact. Under certain conditions (a high degree of pathogenicity, a decrease in local and general resistance), pathogens penetrate the lymphatic and bloodstream, migrate through the body.

In the area of the infectious focus in the oral cavity, conditions are created for the unhindered reproduction of microorganisms (venous stagnation, edema, tissue ischemia). Through the tip of the root of the tooth, pathogens can go beyond the focus through the intermuscular, subcostal, cellular space. This is how odontogenic periostitis, ostitis, sinusitis, osteomyelitis arise.

In addition, microbial toxins cause increased vascular permeability, which, in conditions of good vascularization of the parotid tissues, facilitates the penetration of bacterial agents into the vascular bed. In this way, parotid abscesses and phlegmons are formed. The settling of microorganisms in the lymph nodes in violation of the barrier function of the latter is accompanied by the development of regional lymphadenitis.

Depending on the clinical course, periostitis can be acute (serous, purulent) or chronic (simple, hyperplastic). In the area of the affected tooth – the probable source of infection – there is pain radiating into the ear, temple. Often, the swelling

of the cheek is visually noticeable, the asymmetry of the face due to unilateral edema of soft tissues. Mouth opening is difficult. With odontogenic periostitis, general well-being suffers: weakness, febrile fever, headache, sleep and eating disorders. Regional lymph nodes are enlarged and painful.

It is more often diagnosed in men in the age group of 20-40 years, in 68% of cases it affects the lower jaw. Against the background of a pronounced intoxication syndrome, intense local pain in the tooth or diffuse pain in the entire jaw, which extends to the corresponding half of the head, worries. The configuration of the face has been changed due to swelling on the side of inflammation.

There are difficulties in opening the mouth, pain when chewing and swallowing food, impaired speech function, paresthesia of the upper or lower lip. There may be a putrid smell from the mouth. The temperature curve for odontogenic osteomyelitis ranges from 37.5 to 39-40 ° C.

Odontogenic sinusitis accounts for 10 to 30% of all infections of the maxillary sinuses. Acute sinusitis manifests with a headache, a temperature reaction, a feeling of pressure in the projection of the corresponding sinus. Swelling of the nasal cavity increases, breathing becomes difficult, and the sense of smell decreases. After a while, a mucopurulent or purulent secret begins to separate from the sinus. The soft tissues of the under-eye area and cheeks look swollen.

About 57% of purulent infections of the soft tissues of the head and neck have a stomatogenic etiology. Odontogenic abscesses are usually localized in the suborbital, buccal, submandibular, parotid region. Accompanied by the appearance of swelling in the face or neck, hyperemia of the skin over the abscess. With a superficial abscess, a symptom of fluctuation is felt. There is local pain and pulsation in the projection of the abscess. Signs of intoxication are expressed moderately.

By localization, odontogenic phlegmons of the bottom of the oral cavity, submandibular, submandibular, near-pharyngeal space, neck area are isolated. There is a swelling of soft tissues without clear boundaries with the presence of a dense painful infiltrate. The pain is spontaneous, diffuse, constantly present.

Depending on the location of the phlegmon, chewing, swallowing, breathing, and speech are disturbed. Marked deterioration of general well-being, febrile fever, chills is characteristic. It usually develops in the area of submandibular or cervical lymph nodes. It is characterized by their local swelling, soreness, dense consistency. There is an asymmetry of the face. Odontogenic infections can become a source of severe septic diseases. Odontogenic intracranial complications are extremely dangerous in their consequences: brain abscess, meningitis, cavernous sinus thrombosis. Of the cardiac complications, bacterial endocarditis most often develops. Any focus of OI can serve as a source of odontogenic sepsis.

Odontogenic infections are diagnosed based on the identification of their connection with dental diseases (advanced caries, pulpitis, periodontitis) or dental manipulations / operations. Patients need to consult a dentist-therapist, dentist-surgeon, maxillofacial surgeon, otolaryngologist.

If odontogenic infection of soft tissues is suspected, it is necessary to exclude non-odontogenic pathological processes: erysipelas, boils and carbuncles, sialadenitis, adenophlegmon and lymphadenitis of other etiology. Osteomyelitis of the jaws is differentiated by post-traumatic, hematogenic forms of the disease. Sinusitis of rhinogenic, traumatic, allergic genesis is also excluded.

Treatment of any forms of OI should begin with the elimination of the primary pathological focus. In this case, treatment of pulpitis or periodontitis, tooth or implant removal, opening of an abscess, resection of the root tip can be performed. In the future, active treatment of secondary pathology is carried out. If necessary, the patient is hospitalized in the department of maxillofacial surgery.

1. Periostitis and osteomyelitis. A periostotomy is indicated, supplemented with a compactosteotomy for a better outflow of purulent contents. After the operation, the wound is washed with antiseptic solutions. In case of chronic osteomyelitis, sequestrectomy may be required.

2. Sinusitis. Perform instillation of vasoconstrictive drugs into the nasal passages, therapeutic punctures or drainage of the paranasal sinuses with flushing,

the introduction of antibiotics. If necessary, sinusitis is performed, the closure of the oroantral message is performed.

3. Inflammation of soft tissues. An abscess / phlegmon is opened by intraoral or external access, necrectomy. The wound is drained, fractional or continuous dialysis is established.

In parallel with surgical measures, massive antibiotic therapy is prescribed, taking into account the isolated microflora, antimycotic drugs are administered according to indications. Sulfonamides and nitrofurans have not lost their relevance in odontogenic infections. Detoxification, desensitizing therapy, vitamin therapy are carried out. As part of immunocorrection, native and hyperimmune plasma, gamma globulin injected, and autohemotherapy is performed.

Of the methods of physiotherapy, UHF, fluctuation, microwave therapy, UFO, helium-neon laser are used. Hyperbaric oxygenation, plasmapheresis, and hemosorption may be performed.

Timely comprehensive treatment determines a favorable outcome of odontogenic infection. The generalization of the purulent-inflammatory process is fraught with the formation of the most severe complications in its consequences. The anti-infective resistance of the body and the general state of health have a significant impact on the prognosis. Prevention of odontogenic infections consists in regular sanitation of the oral cavity, elimination of foci of stomatogenic infection, performing dental manipulations in strict accordance with the protocol.

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