

TREATMENT OF HEAVY PURULENT INFECTION IN THE FLEGMONA OF THE BOTTOM OF THE MOUTH AND THE NECK

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Actuality theme: In recent years, they have not lost their scientific and practical importance and remain one of the leading problems of maxillofacial surgery. Despite the development of new methods to combat purulent infection, the incidence of inflammatory complications of odontogenic infection continues to increase. In the structure of primary treatment in the maxillofacial hospital, the frequency of odontogenic inflammatory processes, according to different authors, reaches 36%. It is known that one of the ways to increase the effectiveness of antibacterial treatment of purulent-inflammatory processes is to improve the methods of delivering antibiotics to the site of a purulent- Eseptic focus. Along with intramuscular and intravenous administration of antibiotics, intra-arterial, endolymphatic and lymphotropic modes of administration are known. However, their use in clinical practice is rather limited.

The purpose of our work was: to increase the effectiveness of treatment of acute purulent infection of the maxillofacial region and neck by optimizing regional antibiotic therapy.

Materials and methods: The classification of tissue infections by the level of lesion is of considerable help in choosing the tactics of treatment. According to this classification, infection of the first level includes erysipelas, to second-level infection, cellulite, abscess, adenophlegmon. All processes associated with bacterial infections occurring in the fascial lining (fasciitis) are characteristic of a third-level infection. Defeat of muscles and deep fascial structures are considered as infections of the fourth level.

In the study of purulent exudate obtained during surgical interventions, we found that among all identified species an anaerobic microflora predominates in purulent-necrotic phlegmon of an odontogenic nature. In the fields of abscesses and superficial phlegmons of non-dodon- togenic etiology, aerobic microflora predominates. When carrying out smear microscopy of exudates from purulent foci, with Gram stain: staphylococci with a small number of gram-negative rods prevailed in the purulent foci of non-dontog- enous etiology (in some cases, Gram- negative rods prevailed); In purulent foci of odontogenic etiology, streptococci (to a greater extent) were identified in association with staphylococci, Gram-positive rods and actinomycetes; Gangrenous foci were used to determine gram-positive and gram-negative rods in association with streptococci and staphylococci.

Knowledge of this level of microbiological interrelation helps in choosing a rational starting treatment, which is further adjusted in the analysis of each specific clinical situation and the results of culture studies.

Results: For the period 2016-2018. In the department of maxillofacial surgery of the Tashkent State Dental Institute, 38 patients with foci of purulent infection in the face and neck of the 3rd and 4th levels aged 18 to 67 years were treated. Of these, 25 men and 13 women.

By spreading and localization of the inflammatory process, the patients were distributed as follows: putrefactive necrotic phlegmons of the bottom of the oral cavity, the root of the tongue 7 (18.4%) patients; sero-necrotic phlegmon of the parotid-temporal region 8 (21%), complicated in one case by stony sinus thrombosis; phlegmon of the pristine and cheek-cheek areas 7 (18.4%); phlegmon of the submaxillary region 9 (23.7%); phlegmon of the near-pharyngeal, parapharyngeal spaces of the neck with necrotizing fasciitis 4 (10.5%) and pyogenic myositis 3 (7.9%), including the development of mediastinitis in 5 (13.1%) patients. All the patients were in serious or extremely serious condition. The pathogenic landscape of purulent foci of the study group is presented in Table 1.

The tactics of surgical intervention was based on the principle of complete, adequate and early elimination or delimitation of all the main, additional and potential sources (foci) of endogenous intoxication, both microbial and nonmetabolic. This involved a broad access to the infectious inflammatory focus, the performance of wound lavage and sanitation of wound cavities.

Intensive therapy of the inflammatory process was based on generally accepted principles and included: empirical antibacterial therapy, with the appointment of 2-3 antibacterial drugs, further taking into account the sensitivity of the pathogen; detoxification infusion therapy; medicinal prophylaxis of DIC-syndrome (dezagreganty, anticoagulants, antiferment); Immuno-corrective and symptomatic therapy.

Empirical antibiotic therapy in all cases consisted of a combination of systemic and regional administration of antibiotics using methods of round-the-clock administration of medicines. At the initial stage, the choice of antibiotics was carried out on the basis of clinical data, assessment of organoleptic properties of wound exudate, results of a smear-print with Gram staining. For 2-3 days, preparations were prescribed for the first series, in the absence of positive dynamics, they switched to second-line drugs, later antibiotics were prescribed taking into account the revealed sensitivity.

In the localization of the inflammatory process in the face and upper neck regions, the intra-arterial and lymphotropic pathway was used for regional administration of antibiotics, while the localization of the inflammatory process in the region of the lower parts of the neck, the lymphotropic pathway was used for regional administration of antibiotics.

With the intra-arterial administration of antibiotics to overcome the disturbed venous outflow and more efficient transport of antibiotics to the area of the infectious focus, anticoagulants, antispasmodics, hormones, anti-enzyme preparations are usually alternately administered. To this end, along with the above listed drugs, we administered intraarterially a solution of furosemide, which has a strong anti-inflammatory and anti-inflammatory effect.

When choosing antibacterial drugs of the first series, semisynthetic penicillins, lincosamides and cephalosporins of II, III age groups were preferred. However, they do not cover anaerobic excitors, so we used them only in combination with metronidazole. For lymphotropic administration of antibiotics, aminoglycosides of the second generation were used more often. The algorithm for empirical antibacterial therapy is presented in Table 2.

The average duration of treatment in the department was $14 + 1.3$ days. Analyzing the data of empirical antibiotic therapy for severe soft tissue infections by case histories of the patients presented, it should be noted that cephalosporins of II, III generation and inhibitor-protected penicillins retain sufficiently high activity against the main causative agents of mixed etiology. In all patients of the present group, treatment with prescribed antibiotic therapy regimens was successful. Of these, in 27 (71%) cases, the appointment of antibiotics of the 1st series was sufficient and coincided with the data of the revealed sensitivity. High (66.7%) activity against *Staphylococcus aureus* and *Escherichia coli* was observed in the regionally administered amikacin

Thus, the urgency of the problem of purulent surgical infection in recent years is determined not only by the increase in the number of purulent diseases and antibiotic-resistant microflora, but also by a huge medical and social problem. Purulent-septic diseases of the soft tissues of the maxillofacial region are currently mainly affected by a socially unprotected and low-income population. These are pensioners, people without a specific place of residence, for various reasons temporarily disabled, disabled. The severity of the condition in such patients suggests the use in the treatment of expensive drugs: modern antibiotics, antiseptics, etc. Therefore, the development of economical methods of therapy (the use of relatively inexpensive antibiotics, short courses, preferably limited to one series) becomes particularly relevant. In our opinion, the inclusion in the algorithm of antibacterial therapy of regional methods of delivery of antibiotics

allows you to limit the course of treatment with drugs of the first series and reduce the duration of treatment Table 2

Schemes of antimicrobial therapy with drugs of 1, 2-nd series in patients with infection of the 3rd, 4th levels.

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