



IMPROVEMENT OF THE TREATMENT OF FURUNCLES AND CARBUNCLES OF THE MAXILLOFAQIRAL REGION

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Relevance

The number of patients hospitalized in purulent departments of maxillofacial surgery is steadily growing and amounts to 10-12% of the total number of such patients. The problem of purulent surgical infection remains relevant, despite the constant search for new methods of treatment (Yanushevich O.O., Yarema R.I. 2009; Meingassner J.G., Di Padova F., Hiestand P. 2001; Habif T.P. 2004). Along with the growth of odontogenic inflammatory processes, there is an increase in the frequency of diseases of non-odontogenic etiology, among them boils, carbuncles predominate (Supiev T.K., 2001; Vinnitsky L.I., Bunyatyan K.A., 2002)

Furuncles and carbuncles of the face are the most common purulent-inflammatory diseases of soft tissues and occur in 30% of cases (Tsarev V.N., Ushakov R.V., 2004; Laube S., 2004). The course of facial carbuncles is complicated in 13-15% of patients, and with the rapid progression of the disease, complications are observed in 80-85% of patients. Despite the use of various methods of treatment, mortality in this case ranges from 9 to 65% (Zarichansky V.A., 2007; Baddour L.M., et al., 2008).

The problem of treating patients with boils and carbuncles of the face is now becoming increasingly important, since environmental degradation, changes in traditional nutrition, chronic stress disrupt the neutrophil-phagocytic and humoral immunity (Kalinina N.M., 2003; Kalthoff F.S., Musser P., Stuetz A., 2002).

Many issues of etiology, pathogenesis, treatment and prevention of the furuncle of the maxillofacial region continue to remain unresolved, which explains the interest of researchers in this problem (Shulga I.A., 1994; Volkova E.N. et al., 2004; Shcherbakova O. A., 2004; Katunina O.R., 2005; Chiller K. et al., 2000; Brook I., 2007).



Boils and carbuncles are infectious diseases of the subcutaneous tissue, characterized by acute purulent-necrotic inflammation of the hair follicle and sebaceous glands with the inclusion of the surrounding skin and subcutaneous tissue in the process. Unlike boils, with carbuncles, several hair follicles are involved in the purulent process simultaneously or sequentially (Zarichansky V.A. 2007, Habif T.P. 2004; Baddour L.M. et al. 2008).

The danger of boils and carbuncles of the face ("face fire") was pointed out by I. F. Bush in 1814. N. I. Pirogov called the carbuncle of the face, complicated by thrombophlebitis, "malignant", and this term has since been found in the literature. The "malignant" course of boils is associated mainly with an attempt to extrude them, as well as prolonged and inadequate treatment of such patients in polyclinics [1,2,3,5].

The aim of the study is to develop and improve complex methods for the treatment of boils and carbuncles with the introduction of an antibacterial drug by the lymphotropic route in combination with phytotherapy.

Materials and Methods of Research

When analyzing the incidence of furuncle and carbuncle on the face of residents of the city of Samarkand, who were treated in the Department of Maxillofacial Surgery of the Samarkand City Medical Association in the period from 2016 to 2020, we obtained the following data. During this period, the total number of patients with boils and carbuncles of the face was 161 cases. Of these, 54 women, 93 men and 14 children. Mostly at the age of patients, this is a young and able-bodied age of 18-49 years (61%) (Fig. 1).



Figure 1. Age range of patients.



Of these, 28.6% of patients with furuncle and 71.4% with facial carbuncle. When analyzing the seasonality of the disease, it was found that the majority of patients sought medical assistance in the spring-autumn period. Researchers T.K. Supiev and I.S. Klimov indicate that this is due to seasonal fluctuations in temperature and a characteristic change in the immunological status of the organism at the indicated times of the year.

Most patients complained of the following: swelling and soreness of soft tissues in the affected area, weakness, chills, worsening sleep, loss of appetite and headaches. More often, the furuncle and carbuncle were localized on the right in areas of the skin with a dense arrangement of hair follicles and sebaceous glands. It was revealed that in 25% the inflammatory focus was localized in the nose, in the upper lip 18%, in the lower lip 13%, in the buccal region 12.4%, in the chin, frontal, zygomatic, infraorbital and temporal regions - 5% each, parotid and submandibular areas - 3.1% each (Fig. 2).

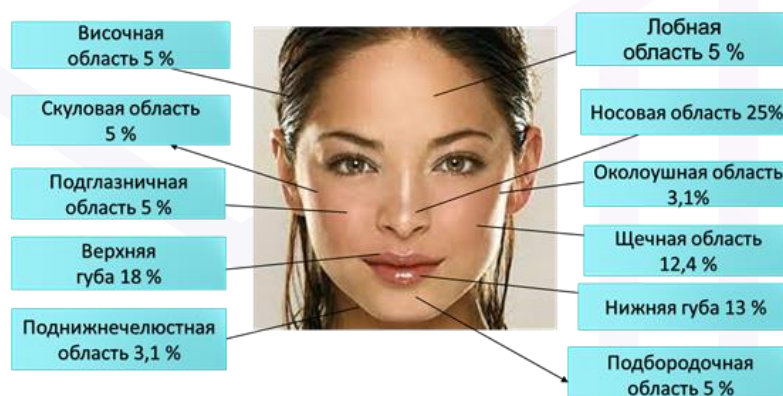


Figure 2. Localization of furuncle and carbuncle.

The work is based on the treatment of 72 patients with boils and carbuncles of the maxillofacial region, which are divided into two groups depending on the treatment of the inflammatory process. The main group 39 patients after the opening of the purulent focus were administered drugs lymphotropically: into the mastoid tissue once a day at the time of dressing. In this case, the antibacterial drug Intralin was used in combination with the phytopreparation Zub-pre. Control group 33 patients were treated by the traditional method. Patients after the opening of the purulent focus, the antibiotic was administered intramuscularly twice a day after the test.



When analyzing the results obtained, we proceeded from general clinical data, biochemical, immunological, bacteriological studies, the percentage of mortality, the percentage of complications and the average length of stay in the hospital.

Research Results and Discussion

The main group included patients who received lymphotropic antibiotic administration in combination with phytotherapy (n-39). The tactics of treating patients with boils and carbuncles of the maxillofacial region in patients is relatively unified. The greatest difficulty is the creation of an optimal complex scheme for managing patients in the postoperative period. Based on our analysis, we found that in patients with boils and carbuncles, the volume of lymphogenous methods may be limited by lymphotropic infusion of an antibacterial drug, which is especially important in terms of subsequent management tactics for this group of patients. In 39 out of 72 patients, the antibiotic intralin was used in combination with the herbal preparation Zub-pre, in the rest of the patients the traditional method of treatment was used. The effectiveness of antibiotic therapy can be assessed after 72 hours from the start of treatment. The main load of the total volume of lymphogenous techniques falls on lymphotropic infusion of drugs. As a rule, the dosage regimen includes the sequential administration of drugs. We consider it necessary to carry out the following treatment regimen: antibacterial drugs were injected into the area 1 cm below the mastoid process subcutaneously on the side of the lesion. Lidase was used as a lymphostimulator. 0.5 ml was used for administration. (16UE) of the drug. After 4-5 minutes, the antibacterial drug Intralin was injected through the same needle. Lymphotropic therapy was performed once a day for 3-5 days. And also during the dressings, the phytopreparation Zub-pre was used, a moistened napkin was applied to the area of the boil or carbuncle.

In the vast majority of patients in this group, the combination of lymphotropic therapy with phytotherapy was highly effective. Patients in this group have a more pronounced laboratory positive dynamics in comparison with patients who did not use lymphotropic therapy. The results of the study showed that in patients of the main group already on the 3rd day after the operation, the general condition improved, there was no pain, there was a slight hyperemia and swelling of the soft tissues in the area of the opened purulent focus.



On the 4th day after the operation, the patients did not have any complaints. The general condition is satisfactory, the skin in the surgical area was of normal color, the wound was in the stage of epithelialization. Regional lymphotropic antibiotic therapy in combination with Zub-pre herbal preparation contributes to the normalization of the course of inflammatory processes, which is clinically manifested by a decrease in edema by 2.5-3 cm.

In patients of the control group on the 3rd day after the operation, the condition is satisfactory, but there was a slight pain, collateral edema and hyperemia of the soft tissues, as well as purulent exudate in the wound. On the 4th day of the study, the clinical picture was the same as on the 3rd day. On the 6th and 7th days in patients of the control group, the skin in the area of surgical intervention was of normal color, the wound was in the stage of epithelialization.

The study of humoral immunity was carried out in 22 patients of the main group with furuncles and carbuncles of the maxillofacial region. At the time of treatment, patients of the main group had elevated IgG (18.8 ± 1.5 g/l) and Ig A (4.8 ± 0.7 g/l) and a sharp decrease in the amount of Ig M ($0.6 \pm 0, 05$ g/l).

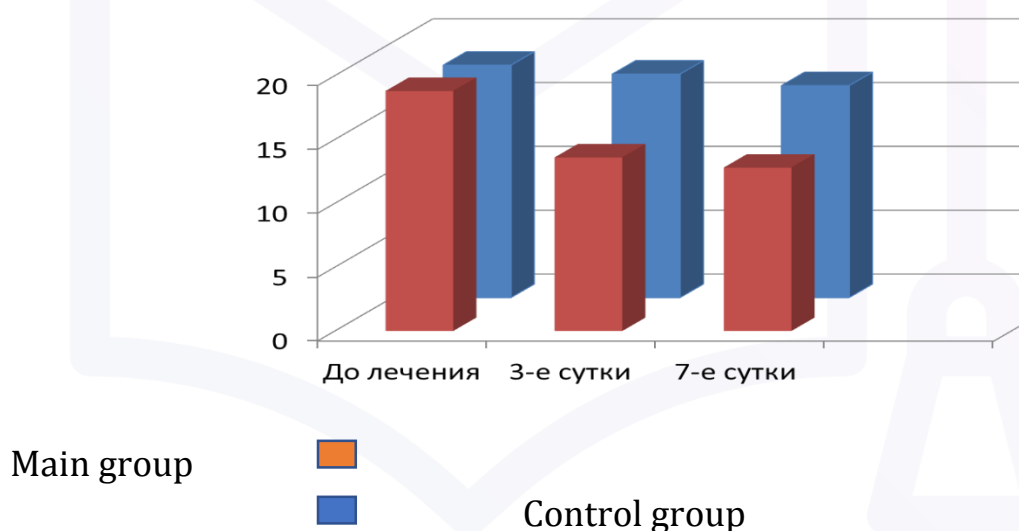


Figure 3. Indicators of Ig G in patients of the main and control groups.

After lymphotropic therapy and phytotherapy, after 3 days there was a decrease in the level of Ig G to the upper limit of the norm (13.6 ± 1.9 g/l), Ig A - To the upper limit of the norm (2.8 ± 0.2 g/l), Ig M - increase to the lower limit of the norm (1.2 ± 0.09 g / l). On the 7th day of treatment, the parameters of

humoral immunity were normal (Ig G=12.8±1.6 g/l, Ig A=2.8±0.3 g/l, Ig M=1.5±0.08 g /l) (Fig. 3,4,5).

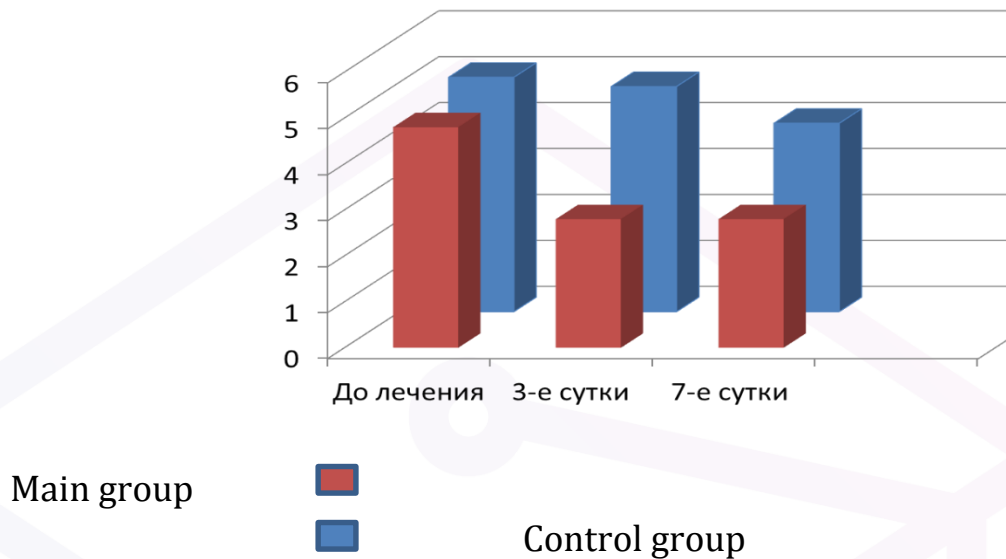


Figure4. Indicators of Ig A in patients of the main and control groups.

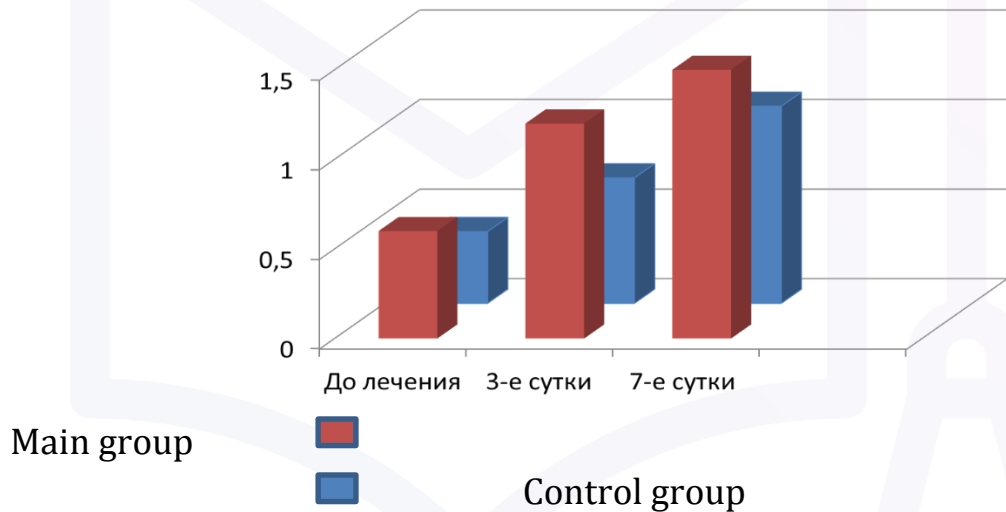


Figure5. Indicators of Ig M in patients of the main and control groups.

The study of humoral immunity was carried out in patients with the traditional method of treatment (n-13). Before treatment, Ig G (18.2±1.4 g/l) and Ig A (5.1±0.5 g/l) were elevated, and the amount of Ig M was sharply reduced (0.4±0.04 g/l). After 3 days, these figures were practically unchanged (17.5±1.9 g/l, 4.9±0.4 g/l, 0.7±0.08 g/l, respectively).



After 7 days, the previously indicated values remained unchanged (16.6 ± 2.0 g/l, 4.1 ± 0.3 g/l, 1.1 ± 0.05 g/l, respectively), which is reflected in Figure 3, 4, 5. The average length of stay in the hospital was reduced by 4.5 bed-days, the number of complications decreased by 2 times. A retrospective analysis based on the study of data from a bacterial study of the contents of a purulent focus showed that the ineffectiveness of antibiotic therapy in patients was due to the use of a drug to which the inoculated pathogenic flora was resistant. In patients of the main group, where lymphotropic therapy was used in combination with phytotherapy, the likelihood of complications decreased by 2 times. Based on the obtained clinical data and summarizing the experience of using lymphotropic therapy, we believe that the therapeutic effect is based on three main mechanisms of action: the creation of the maximum long-term concentrations of drugs in biological fluids and in the focus of inflammation; normalization of the microcirculation system. To create high and long-term concentrations of drugs, it is necessary to stimulate the lymphatic drainage of the maxillofacial region. Analysis of our own clinical data and literature allowed us to identify significant differences between the regional lymphotropic administration of antibiotics and other methods of their administration. Practically, we have not noted cases of allergic reactions to antibiotics when they are introduced into the lymphatic channel. Given the structure of the anastomoses of the intra- and extra-osseous blood supply systems of the maxillofacial region, we used regional lymphotropic therapy.

Conclusion

Thus, in the scheme of complex therapy of patients with boils and carbuncles of the maxillofacial region, it is necessary to include regional lymphotropic therapy with phytotherapy, which increase the concentration of drugs and the duration of their stay in the purulent focus.

Inclusion in the complex treatment of boils and carbuncles of the face, regional lymphotropic therapy in combination with the Zub-pre herbal preparation normalizes immunological blood parameters, leads to faster relief of inflammatory processes and prevention of complications. The drug relieves pain that prevents a person from leading a normal life, allows you to achieve several results at once, anesthetizes, fights infection, and reduces inflammation.



When using Zub-pre, rapid digestibility, sufficient duration of action, minimal toxicity are observed, it is allowed during pregnancy. Relatively inexpensive in terms of price.

To date, Zub-pre is an effective drug in surgical dentistry. However, despite the good analgesic, anti-inflammatory effect, it only affects the consequence of the pathology, and not the cause of the disease. Therefore, it is important to know that timely sanitation of foci of inflammation can save you from many unpleasant consequences and additional costs in the future. The results obtained by us of the use of regional lymphotropic therapy in combination with phytotherapy determine its prospects and competitiveness in the treatment of furuncles and carbuncles of the maxillofacial area due to its clinical efficacy and safety.

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