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Indications for the Use of Local Protective Factors in Patients Treated for Phlegmoma of the Maxillofacial Region

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Annotation: The article is devoted to the clinical effectiveness of complex treatment of phlegmon of the facial region in patients with liver pathology. Prevention and treatment of infectious diseases in the field of surgery is one of the most important tasks facing modern dentistry. According to literature data, more than 54% of surgical complications of odontogenic infection are associated with concomitant pathology - cardiovascular and respiratory diseases, diabetes mellitus, kidney and liver diseases.

Keywords: complex treatment, maxillofacial surgery, immunology, phlegmon.

Introduction: In recent years, the incidence of viral hepatitis B in inpatient and outpatient settings has increased dramatically. To date, the problem of surgical infection is important and urgent. Annually purulent-septic diseases affect millions of people and are the leading cause of death from infectious diseases in all developed countries of the world. At the same time, there is a steady increase in the number of patients with facial abscesses and phlegmons. Many questions of etiology, pathogenesis, prevention and treatment of purulent-septic diseases remain unsolved, which explains the constant interest and attention of researchers to this problem . It is known that acute inflammatory processes in the region of the face and jaw more often develop as a result of a decrease in the immune reactivity of the organism, and the course of the disease and the probability of complications are often determined by the primary indicators of immunity.

The aim of the study is to develop a programme of complex treatment of acute progressive inflammatory diseases of maxillofacial region in patients with viral hepatitis B. 56 cases of maxillofacial abscess in patients with viral hepatitis type B were analysed. Aerobic, anaerobic odontogenic and periodontal infections are the causative agents of purulent-inflammatory processes in the facial region, which prevail in the development of immunity decrease and endogenous intoxication syndrome, as well as accumulation of lipid peroxidation products.

Relevance. In addition to the degree of pathogenicity of the microorganism, the level of resistance of the organism is of great importance in the development of mucosal dysbacteriosis, which is determined by the functional state of special and non-specific defense mechanisms against infection. One of the resisting (resistance) factors of the human body in pathological conditions is the degree of certain indicators of non-specific protection. The weakening of local immunity in the oral cavity also affects the appearance of inflammatory diseases and the course of the inflammatory process in it. According to modern concepts, in the chain of pathogenetic mechanisms of diseases of the oral mucosa, an immune connection plays a special role, which ensures the self-maintenance and development of the inflammatory process.

In chronic hepatitis and cirrhosis, systemic osteoporosis occurs, including the alveolar process, in the mechanism of osteoporosis, a deficiency of endogenous vitamin D, as well as a violation of

protein and carbohydrate metabolism, is important. It is important to study the quantitative composition of immunoglobulin A (sIgA) in oral fluid, which is mainly considered a humoral immune factor, when determining local immune indicators in the oral cavity. In addition, the main role in protection against various foreign influences in the oral cavity is played by the enzyme lysosimus, which destroys bacteria and viruses. A decrease in the activity of the enzyme lysosym leads to an excessive increase in pathogenic microflora. Therefore, in order to assess the correlation of local immunity and specific protection factors of the oral cavity, the amount of sIgA and the specific protection factor is carried out by determining the activity of the enzyme lysosym .

Research objective: to study the local immune status in the abscess and phlegmon of the maxillary area.

Research materials and methods. Based on the tasks set before us, on the basis of a program developed by us, the local immune status of acute progressive inflammatory diseases of the facial jaw area in patients with V disease of chronic viral hepatitis was studied. Research was conducted from 2018 to 2022. The experiments were carried out in 127 patients who were diagnosed with abscesses and phlegmon in the area of the face-jaw, while patients selected for examination were allocated to the main and control groups. 25 were diagnosed with abscesses and formed from those suffering from Type V of viral hepatitis, the control group included 81 patients with facial-jaw abscess and phlegmon and patients who did not have hepatitis v. 67 of the patients were male and 39 were female. All patients were treated at the Department of facial jaw surgery of the Samarkand City Medical Association, and they were brought to the clinic on an emergency basis. Microbiological, immunological and biochemical analyzes were carried out in all patients, as well as mathematical analysis. In addition to clinical evaluation, all patients were measured in general condition, body temperature, blood pressure, heart rate, presence of symptoms of dyspepsia, as well as a general analysis of blood and urine.Ogrigan patients with facial-jaw abscess and phlegmon were selected patients who suffered from Type V of viral hepatitis between the ages of 16 and 50 and above. These pathologies are caused mainly by the cause of chronic periodontitis disease. In half of the patients, inflammation of the lower jaw was observed. The appearance of inflammation in 32 patients was caused by premolar teeth, in 36 patients by lower wisdom teeth, in 24 patients – by lower pile teeth, in 14 cases by lower second, in 20 situations by upper side teeth. All patients were hospitalized in kuniaq under local anesthetic, the causative teeth were removed. Patients were prescribed antibiotics, desensitization agents, analgesics, hepatoprotectors, physiotherapeutic procedures from the 1st day after surgery.

Research results: patients with Odontogenic phlegmona local immune system status. It is known that a violation of the immunological state can affect the course and prognosis of chronic diseases of the oral mucosa. The severity and duration of inflammatory diseases in patients with odontogenic phlegmona depend on many factors, including local immune status. Local immunity in the regulatory state ensures optimal levels of the enzyme lysosym, which affects the antibacterial activity of the oral secretion, and immunoglobulins such as sIgA, IGA, IgG, IgM. The causative agent of viral hepatitis v disease causes changes in the oral cavity also due to its action, on a par with damage to liver cells. Especially in patients with chronic disease, the course of major diseases is more complicated due to the lack of an immune system. At the same time as microbiological examinations in the investigating groups, we also conducted immunological examinations. Before the operation and in the dynamics of treatment, we determined the level of lysozyme from local immune factors, the phagocytic activity of neutrophils and the amount of secretory sIgA immunoglobulin. A decrease in the activity of humoral and local immunity indicators in the saliva was observed in 93 patients (94.8%) of 98 patients treated with phlegmon of the face-jaw area, and in only 5 patients (5.1%) the indicators were found to be in moderation. A study of humoral and local immune status in patients with facial-jaw phlegmon, in which different clinical forms and treatment dynamics differed, showed a number of features. In 25 Patients (Group 1) with no hepatitis v disease in Anamnesis, deviations in the immunological state of the saliva were observed in-(21) 84.0% of patients examined with this form. These

deviations were observed in 31 of 32 patients (96.8%) when tested with patients who have hepatitis V as a companion disease in Group 2 of the disease, but are not taking hepatoprotector drugs. In Group 3, 41 patients treated with facial-jaw phlegmon, who had companion disease hepatitis V and took the drug Ursosan in addition to traditional treatment, were observed in a little more than half - 63.4% (26). In 25 patients treated with phlegmon of the maxillary area who did not have hepatitis v disease in their Anamnesis, it was also shown that the non-specific protective function of the saliva decreased significantly, which was manifested in an average decrease in its lysozyme activity by 1.9 times - 20.1 ± 2.3% compared to the norm (38.5 ± 2.4%). Violation of this protective joint leads to a decrease in microbial cell lysis. Damage to the oral mucosa is slightly lower than the norm (38.5 ± 2.4%) in 41 patients (27.3 ± 2.5%) treated with facial-jaw phlegmon, who had companion disease hepatitis V and took the drug Ursosan in addition to traditional treatment, but this difference is not statistically significant, R>0.05. The lowest of the above rates was reported to have been observed (18.5±2.2%) in 32 patients with hepatitis V as a companion disease in Group 2 of the disease, but not taking hepatoprotector drugs. The main role in local immunity belongs to the secretory IG a (IgA), which covers the mucous membranes that come into contact with the external environment. IgA, whose synthesis is carried out as a cooperative process of interaction between two different cellular systems, that is, local plasmatic cells synthesize IGA subunits, epithelial cells - the secretory component. From this, the deficiency of S-IgA leads to a violation of the function of not only plasmatic cells, but also epithelial cells. The protective property of S-IgA is due to the property of agglutination of microbes, neutralization of toxins, adgesia of bacteria on the surface of the mucous membrane and blocking the entry of bacteria into the mucous membrane.

Thus, in the treatment of patients with odontogenic phlegmon, in addition to the positive clinical dynamics during the period of the disease, when the drug Ursosan, which has antioxidant and immunmodulatory effects, was introduced into therapy in addition, it was manifested by a decrease in the severity of dysbiotic States and a normalization of immunological processes. The results obtained justify the need to combine traditional complex treatment of patients with odontogenic phlegmona with additional therapy, which will accelerate regeneration, preventing the local process from aggravating.

Thus, the phagocytic potential of neutrophils in the oral cavity is largely determined by the state of local protective secretory mechanisms.

An increase in the activity of local immunological reactions against the background of additional correction of the drug ursosan indicates that this drug has an immunomodulatory, and detoxifying effect, and also has a stimulating property of reparative regeneration processes.

Conclusion: it can be said that the local immune system factors that we have investigated: the phagocytic activity of neutrophils, the amount of the enzyme lysosym and the level of secretory immunoglobulin A. the use of liver protectors for traditional treatment in patients with odontogenic phlegmona and with companion disease retains positive dynamics. The indicators of the local immune system also certainly have their influenc on the qualitative and quantitative indicators of microorganisms in the wound. Thus, from the microbiological and immunological examinations carried out, it can be summarized as follows: patients with chronic hepatitis v disease have dysbiotic changes in the oral cavity. The weakening of the general resistance of macroorganism negatively affects the state of local protective factors in the oral cavity and leads to a violation of the resistance of the mucous membrane colonization. This in turn causes the syndrome of quantitative growth of microorganisms. However, in this case, the ground is laid for the origin of various purulent inflammations due to endogenous translocation as a result of injuries observed on the mucous membrane of the oral cavity.Taking into account the above, the course of the disease is alleviated by positive (positive) effects on Microbiological and immunological indicators in the oral cavity, when hepatoprotectors are complexly applied to traditional treatment measures in patients with companion hepatitis V disease with odontogenic phlegmona.

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