



IMPROVING LOCAL TREATMENT OF ODONTOGENIC PHLEGMON IN CHILDREN

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Relevance:

Acute odontogenic purulent-inflammatory diseases in the facial-jaw region are often associated with focal infections, as well as the widespread presence of infectious-inflammatory foci in the mucous membranes of the skin and oral cavity. The most common form of septic inflammation is odontogenic purulent-inflammatory diseases. The frequency of complications due to infectious-inflammatory processes increases significantly when jaw fractures occur.

Pathogenic microflora plays a central role in the etiology of facial-jaw inflammatory diseases, often originating from the mucous membranes in the oral cavity, carious lesions, and periodontal pockets. Therefore, much research is focused on isolating and studying such flora. Recent research has demonstrated the etiological significance of microorganisms such as **Staphylococcus aureus** and **Streptococcus spp.** in purulent-inflammatory diseases of the facial-jaw region. There is also a substantial database regarding the role of conditionally pathogenic flora in the development of acute odontogenic purulent-inflammatory diseases in the facial-jaw region.

When discussing the treatment of acute purulent-inflammatory diseases in the facial-jaw region, the issue of managing endogenous intoxication is currently under active discussion. In modern conditions, due to pharmacological overload, weakened immune defense caused by environmental factors, decreased sensitivity of microflora to antibiotics, and allergic reactions in the body, the effectiveness of common treatment methods is emphasized as being low.

At present, the principles of surgical and drug treatment have been developed, and significant progress has been made in treating phlegmon of the jaw region. However, their effectiveness still does not yield sufficiently positive results. In



addition to surgical treatment, the pathogenetic therapy of purulent-inflammatory diseases requires the following therapeutic measures: combating infection, enhancing immunity, detoxification, and general strengthening therapy. Antibacterial therapy plays a key role in the drug treatment of acute odontogenic purulent-inflammatory diseases. However, despite the wide range of modern antibiotics, the number of complications that pose a threat to the patient's life has not decreased. The number of acute purulent-inflammatory diseases in the facial-jaw region is increasing, atypical forms of the disease are emerging, and severe toxic manifestations of purulent-inflammatory processes are observed.

Purpose of the study:

To improve the effectiveness of treatment for odontogenic phlegmon in children by using the Polisorb sorbent.

Objectives of the study:

To compare the effectiveness of traditional treatment methods with the local use of Enterostab and Polisorb sorbents in children with odontogenic phlegmon.

Materials and Methods of research:

The study was conducted with 40 children who were receiving inpatient treatment at the Tashkent State Dental Institute's Department of Pediatric Facial-Jaw Surgery with a diagnosis of odontogenic phlegmon in the facial-jaw region. After the purulent focus was opened, studies were conducted using clinical, microbiological, and statistical methods. Enterostab and Polisorb were applied to children with odontogenic phlegmon. The microflora of the purulent focus in children with odontogenic phlegmon was studied using Enterostab and Polisorb.

Results:

The microflora of the purulent focus in children with odontogenic phlegmon in the facial-jaw region was analyzed using Enterostab and Polisorb sorbents. After surgery, in children with odontogenic phlegmon in the facial-jaw region, significant changes in the qualitative composition of the microflora were observed,



as well as quantitative changes in the normal stabilizing microflora of the purulent wound. The use of the Polisorb sorbent in the form of local application and wound irrigation after surgery had an indirect effect on opportunistic and pathogenic microorganisms, including staphylococci, proteus, and enteropathogenic *E. coli*. This helped restore the bacteriocenosis of the purulent wound and reduce the severity of the inflammatory process due to the cleansing of the wound, thereby creating favorable conditions for wound healing.

After surgery, the wounds in children with odontogenic phlegmon in the facial-jaw region were cleared of purulent-necrotic masses (inflamed necrotic dead tissue), which accelerated the formation of new granulations and connective tissue on the wound surface, improving the healing process and conditions for wound treatment. The use of the Polisorb sorbent led to the breakdown of necrotic tissue after surgery, thinning of sticky secretions, exudates, and blood clots, including purulent wounds, which resulted in a decrease in the severity of the inflammatory process, thereby creating optimal conditions for wound healing.

The Polisorb preparation, when used locally in children and adolescents with odontogenic phlegmon in the facial-jaw region, is aimed at reducing the length of inpatient treatment, providing analgesic effects, and decreasing the number of potential complications.

Conclusion:

In conclusion, the inclusion of Polisorb and Enterostab sorbents in local therapy for the treatment of odontogenic phlegmon in children shows bactericidal and anti-inflammatory effects on pathogenic microorganisms, including both gram-positive and gram-negative bacteria, thereby increasing the effectiveness of treatment.

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