



ANTISEPTICS IN THE COMPLEX TREATMENT OF FURUNCLES IN THE MAXILLOFACIAL REGION IN CHILDREN

Ikramov G. A.

Ochilova Z. R.

Olimjonova G. G.

Associate Professor, Department of Pediatric Maxillofacial Surgery, Tashkent
State Dental Institute.

Master's Student in Dentistry, Tashkent State Dental Institute.

4th-Year Student, Tashkent State Dental Institute.

Relevance

Despite the widespread use of local and general surgical assistance, antibiotics, chemotherapeutic agents, detoxification, corrective therapies, treatments for comorbidities, and modern physiotherapeutic methods, inflammatory diseases of the maxillofacial region (MFR) continue to pose a threat to human health and life. Additionally, changes in the clinical presentation of acute and chronic inflammatory diseases in the MFR, along with an increase in complications such as sepsis, mediastinitis, brain abscesses, facial vein thrombophlebitis, cavernous sinus thrombosis, and bacterial shock, have been observed. These developments are accompanied by changes in microbial virulence, the emergence of antibiotic-resistant and antibiotic-dependent microbial strains, and a decline in immune protection, exacerbated by gastrointestinal dysbiosis during antibacterial treatment of purulent-inflammatory diseases (PID) in the MFR. These factors complicate disease progression and patient management.

The observed patterns in the progression of purulent-inflammatory processes in the MFR and their clinical-laboratory aspects underscore the need to improve existing methods of treatment and diagnosis. This makes the problem of infections in patients with purulent-inflammatory diseases of the MFR and neck highly relevant, necessitating the search for new, effective treatment agents that target various links in the pathogenesis of inflammation and facilitate disease progression prediction.

In addition to diagnostic methods, the development of comprehensive therapy for furuncles and carbuncles in the MFR, incorporating targeted factors addressing



individual pathogenic links of purulent inflammation, as well as the pathological process and the patient's overall condition, remains pertinent. This approach creates more favorable recovery conditions. Therefore, therapeutic agents should be compatible with the human body and have minimal contraindications. Biologically active compounds with multifactorial positive effects on both the pathological process and the patient's overall condition can be considered. In our study, the antiseptic preparations "Naftaderm" and "Supirocin" were used for this purpose.

Purpose of the study:

To substantiate the effectiveness of antiseptics in the complex treatment of furuncles in the maxillofacial region in children.

Objectives of the study:

To conduct a comparative analysis of microbiological studies using the antiseptics "Naftaderm" and "Supirocin" after opening the purulent focus.

Materials and methods of research:

We examined 10 children aged 0 to 7 years undergoing inpatient treatment in the Maxillofacial Surgery Department of the Tashkent State Dental Institute with furuncles of the MFR. Clinical, microbiological (standard bacteriological methods for studying the cultural-biological properties of isolated microorganisms), and statistical data processing methods were used. Necrotic masses from the purulent focus were analyzed with the application of "Naftaderm" and "Supirocin" antiseptics in children with furuncles in the MFR.

The microflora of the purulent focus in children with furuncles in the MFR was studied using "Naftaderm" and "Supirocin" antiseptics.

Results:

In children with furuncles in the MFR, significant qualitative shifts toward pathogenic species in the microflora composition and quantitative changes in the normal stabilizing microflora of the purulent wound were observed after surgery.



The use of "Naftaderm" and "Supirocin" antiseptics for wound irrigation exhibited antagonistic effects on opportunistic and pathogenic microorganisms, including staphylococci, *Proteus*, and enteropathogenic *E. coli*. This contributed to the restoration of the purulent wound's bacteriocenosis, reduced the severity of the inflammatory process, and facilitated wound cleansing, creating optimal conditions for wound healing.

Postoperatively, wounds in children with furuncles in the MFR were cleansed of purulent-necrotic masses (inflamed necrotic tissue), which accelerated the formation of fresh granulations—connective tissue at the wound site—thereby promoting wound healing and improving conditions for wound repair. The application of "Naftaderm" and "Supirocin" in bandages dissolved necrotic tissues and reduced the severity of inflammation, creating optimal conditions for wound healing.

The use of "Naftaderm" and "Supirocin" in the complex treatment of furuncles in the MFR in children and adolescents reduced inpatient treatment duration, provided analgesic effects, and decreased the number of possible complications.

For the first time, the microflora of the purulent focus in patients with furuncles in the MFR was studied with the application of "Naftaderm" and "Supirocin." Significant qualitative shifts toward pathogenic species in the microflora composition and quantitative changes in the stabilizing microflora of the purulent wound were observed postoperatively.

Conclusion:

The use of "Naftaderm" and "Supirocin" antiseptics for wound irrigation in postoperative patients demonstrated antagonistic effects on opportunistic and pathogenic microorganisms, including staphylococci, *Proteus*, and enteropathogenic *E. coli*. It contributed to the restoration of the purulent wound's bacteriocenosis, reduced the severity of the inflammation caused by dysbiosis, and created optimal conditions for wound healing.



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