

STUDY OF MICROFLORA AND LOCAL FACTORS OF ORAL PROTECTION IN PATIENTS WITH FRACTURES OF THE LOWER JAW

Rakhimov Z. K.

Uzbekistan, Bukhara State Medical Institute
Department of Surgical Dentistry

Relevance. Despite the improvement of methods of treatment of purulent-inflammatory diseases and complications of injuries of the bones of the facial skeleton, the problem of purulent infection in maxillofacial surgery continues to be relevant. An important pathogenetic link in the development of inflammatory complications in mandibular fractures is a violation of local immune protection, regional blood circulation and innervation in the fracture zone, deterioration of oral hygiene and violation of chewing function.

Materials and methods of research:

To achieve this goal, all patients were divided into 2 groups. At the same time, one group of patients received traditional therapy, and the second group received special treatment in addition to the traditional one.

Drugs included in traditional therapy: Furacilin, Chlorhexidine, and Bifidumbacterin. Drugs used as special therapy: Serrata, Sekstophag, Azithromycin Florbiolact.

To assess the effectiveness of the use of therapeutic drugs, the study of quantitative and qualitative indicators of the oral flora in the dynamics of treatment (1-7-14-30 days) was carried out.

Analysis of the state of the oral flora in patients on the 7th day after treatment shows that the dysbiotic changes that took place in the oral cavity on the first day, not only did not improve, but on the contrary, even deeper.

Microbiological studies on the 14th day after traditional treatment show positive changes in the anaerobic flora and cocci. For gram-negative flora, on the contrary, the seeding rate increased. The analysis of microbiological studies of the oral cavity on day 30 showed that the positive changes noted on day 14 are completely preserved. A negative picture was available for the seeding of fungi of the genus *Candida*. Apparently, the medicinal preparations we use do not have antifungicidal properties.

The second group of patients, along with the traditional one, received special treatment. In this group, on day 7, pathogenic strains (*St. aureus*) of staphylococci began to be seeded. The analysis of microbiological studies in the same patients on day 14 indicates that the positive changes noted on day 7 not only remained, but even more improved.

In the same patients, on day 21, the picture of dysbiosis was virtually eliminated in all indicators. These positive changes in patients with fractures of the lower jaw in the oral cavity were also noted in relation to pathogenic strains of staphylococci and fungi of the genus *Candida*. Apparently, these positive developments occurred due to the use of eubiotics of general and local use.

In all the examined patients, the state of local factors of protection of the oral cavity was also studied. After traditional treatment, there is an immunodeficiency in all the studied parameters. At the same time, immunodeficiency was significantly expressed on the 1st and 7th days after treatment. Starting from the 14th day of traditional treatment and especially on the 30th day, there is a significant improvement in the picture. However, it is not necessary to talk about a complete recovery of immunodeficiency indicators.

With special treatment, starting from 14 days, there is a significant improvement in the picture of immunodeficiency. In these same patients, on the 30th day of special treatment, virtually all indicators of local oral protection factors approach the control figures.

Dynamic changes in the state of indicators of local oral protection factors in patients have a direct correlation with changes in dysbiosis in the oral cavity in both methods of treatment. It is established that the density of the microbial population in the oral cavity in healthy people is a fundamental characteristic of the community and largely depends on the topography of the ecological niche. At the same time, the highest value was observed in the gum (4.20 ± 0.3 CFU cm²), the lowest on the mucous membranes of the palate (1.25 ± 0.1 CFU cm²).

Conclusions: 1. In patients with fractures of the lower jaw in the oral cavity, dysbiosis is noted, while the use of traditional therapy in such patients does not allow to completely eliminate dysbiosis even on the 30th day. 2. At the same time, carrying out a special course of treatment, already on day 21, makes it possible to almost completely restore dysbiosis to the control figures. 3. The data obtained have a direct correlation with changes in dysbiosis, immunodeficiency and colonization resistance. These data once again indicate the unity of our body in homeostasis.

References:

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