SCHOLASTIC:
Journal of Natural and Medical Education
Volume 2 Issue 4, Year 2023 ISSN: 2835-303X
https://univerpubl.com/index.php/scholastic

Comparative Evaluation of the Efficacy of Platelet Autoplasma and Kollapan-L Biocomposite in the Treatment of Small Diameter (≤3 Mm) Oroantral Fistula

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Article Information

Received: February 05, 2022
Accepted: March 06, 2023
Published: April 07, 2023

Keywords: *Platelet-enriched autoplasm, CollapAn-L biocomposite material, small diameter (≤3 mm) oroantral fistula.*

ABSTRACT

Platelet-enriched autoplasm contains various growth factors, cytokines, chemokines, fibrin, and the mechanism of their action causes the normal process of wound healing. CollapAn-L biocomposite material with platelet-enriched autoplasm has an effective effect on the reparative regeneration of tissues in the area of oroantral perforation.

Relevance of the topic. Oroantral fistula **(**Oroontral communication) is the connection of the bony canal with the oral cavity and maxillary sinus, in which the bony canal communicates with the oral cavity and maxillary sinus[3, 4,7,8]. The most common reason for the occurrence of oroantral defects (more than 90%) is the complex removal of teeth of the upper jaw; in less cases - pathology of maxillary sinuses, trauma, loss and disintegration of implants in the distal jaw. According to literature data of many authors, the frequency of occurrence of oroantral defects as a result of the development of periodontopathies and endoperiodontal lesions is less than 1% [1,2,5, 6], but the small number of percentages does not mean that this pathology can be ignored, because in practice, periodontological patients are often underdiagnosed [12, 14,15]. Despite the use of new methods of diagnosis and treatment in dental care for the population, the number of patients with this pathology is constantly increasing [9,10,11,13].

In patients with inflammatory diseases of the maxillary sinuses, odontogenic forms occur in 12.0-75.0%, and as many authors note, 41.2-91.0% of them are perforated forms[16,17,18, 24], Oroantral defects, as a rule, are formed in patients during the rehabilitation of the oral cavity during the removal of the chewing teeth of the upper jaw (very rarely, clicks) due to various forms of chronic periodontitis [21, 22, 23]. Damage to the bone tissue that develops as a result of chronic damage in periodontitis, anatomical features of the structure of the maxillary sinuses, the proximity of the tooth roots, as well as technical errors during tooth extraction contribute to the appearance of defects in the bottom of the maxillary sinuses [18, 19].

Today, the further development of the medical field in our country, the adaptation of the medical

system to the requirements of world standards, and the improvement of the effectiveness of the comprehensive treatment of patients with perforation of the maxillary sinus as a result of various injuries among the population determines the relevance of this research.

The purpose of the topic: to compare the effectiveness of complex treatment of patients with perforation of the maxillary sinus using platelet autoplasma and collapan-l with lincomycin.

Material and methods: Both primary group I A patients (n=12) and control group II A patients (n=8) with small-diameter (≤3 mm) oroantral fistulas were assessed as having a satisfactory general condition 1-3 days after surgery and were consistent with the size of the operation. . In the postoperative period, the frequent complaint of patients in both groups was mild pain in the wound area. In the first 2 days, 11 (91.7%) of the patients in the first group complained of moderate pain, which mostly disappeared in 3 days. In the remaining 1 patient (7%), the pain stopped completely on the fourth postoperative day. In the second control group, 6 (75%) patients complained of moderate pain, which lasted for 2 days and stopped completely in 3 days. In the remaining 1 patient (12.5%), the pain stopped completely on the fourth day after the operation, and in another 1 patient (12.5%) it completely disappeared by the 5-6th day (table 3.3.1.)

Table 3.3.1. Comparative analysis of the duration of pain after small-diameter (≤3 mm) oroantral fistula surgery

	1 group (n=12)	2 group (n=8)
2 day	11 (91,7%)	6 (75%)
3 day	1 (7%)	1 (12,5%)
4-5 day	-	1 (12,5%)
Total	12 (100%)	8 (100%)

In patients of the first and second group, local examination showed redness and slight swelling in the tissues around the perforation for an average of 3 days. In the patients of the main group, the redness of the soft tissues around the perforation was not evident and completely disappeared by the 2nd day of the operative intervention. However, in 2 (16.7%) patients, this redness completely disappeared by day 3. In 4 (50%) patients in the control group, the redness completely disappeared by the 2nd day after the operation, in 2 (25%) patients, the redness disappeared by the 3rd day, and in the remaining 2 (25%) patients, the redness completely disappeared by the 4th day (table 3.3.2).

Table 3.3.2. Comparative analysis of the duration of flushing after small-diameter (≤3 mm) oroantral fistula surgery

	1 group (n=12)	2 group (n=8)
1 day	10 (83,3%)	4 (50%)
2 day	2 (16,7%)	2 (25%)
3 day	-	2 (25%)
Total	12 (100%)	8 (100%)

Similarly, the non-obvious swelling observed in the area of surgical intervention completely disappeared by the next 2 days in the patients of the main group. However, in 1 (7%) patient, this swelling completely disappeared by day 3. In 5 (62.5%) patients in the control group, the tumor completely disappeared on the 2nd day after the operation, in 2 (25%) patients on the 3rd day, and in the remaining 1 (12.5%) patient on the 4th day (table 3.3.3).

Table 3.3.3. Comparative analysis of the duration of edema after small-diameter (≤3 mm) oroantral fistula surgery

	1 group (n=12)	2 group (n=8)
1 day	11 (91,7%)	5 (62,5%)
2 day	1 (7%)	2 (25%)
3 day	-	1 (12,5%)
Total	12 (100%)	8 (100%)

All the parameters studied in the patients of group 2 were significantly lower than the data of the first group. The developed technique of eliminating oroantral perforation allows to simultaneously close the oroantral defect and restore the height of the alveolar growth of the upper jaw, thus creating favorable conditions for dental implantation.

Conclusion. A comparative analysis of the treatment of patients with oroantral perforations in the main and control groups showed the high efficiency of the combined use of biocomposite (KollapAn-L) and TBP, which allows to eliminate the perforation, restore the height of the alveolar barrier, which ultimately creates favorable conditions for dental implantation. creates.

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