

COMPARATIVE APPRAISAL OF OSTEOPLASTIC RESOLVED MEMBRANES FOR PREVENTION OF THE ALVEOLAR PART LOWER JAWS ATROPHY

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Introduction

One of the urgent problems in oral and maxillofacial surgery is prevention of alveolar bone atrophy [1,2]. This problem determines: the significant spread of tumours and tumour-like bone diseases, alveolar ridge decreases after typical and atypical tooth extraction operations [3,4]. The aim of the trials – to study comparatively osteoplastic bioresorbable membranes "Collapan" and "Collost" used for the prevention of the mandible alveolar part atrophy.

Materials and Methods

42 individuals (men, 45 to 70 years) were involved in trial. The first group included 20 individuals in whom we used "Collapan" in surgical treatment. This was a comparison group. Group 2 included 22 patients in whom we used the "Collost" membrane. The individuals were undergone oral surgery of atypical tooth extraction, cystectomy with apex root resection made by standard operative protocols with standard anti-inflammatory therapy. Clinical efficacy was assessed on the number of complications in the postoperative period. The level of the alveolar bone atrophy was assessed at the long-term follow-up (after 1 year) on the parameters of the mandibular bone tissue determined on the radiological data (cone-beam computed tomography).

Results and Discussion

In the postoperative period in group 1 there were revealed 6 (14%) facts of infectious-inflammatory nature complications - alveolitis. 2 (5%), in group 2 - 2 (5%) complications: 1 (2.5%) – alveolitis, 1 (2.5%) – forced tooth extraction.

The results of clinical radiographic evaluation of the bone wounds healing in the comparison groups after 1 year allowed us to come to the conclusion that using of barrier membranes in oral surgery in general, optimizes the pace of reparation and regeneration due to osteoinductive and osteoconductive properties of these materials and contributes to the prevention of alveolar atrophy. "Collost" demonstrated more pronounced effectiveness according obtained data in comparison with the membrane "Collapan".

Conclusions

The osteoplastic bioresorbable membrane "Collost" is mostly appropriate for the prevention of the lower jaw alveolar part atrophy.

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