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## EFFECTIVENESS OF OSTEOTROPIC MATERIALS IN AN EXPERIMENT AND DATA FOR EVALUATION OF QUALITY OF LIFE IN PATIENTS WITH GENERALIZED PERIODONTITIS III SEVERITY LEVEL

*The study was performed as a part of research work “Clinical and laboratory justification for the use modern technologies in diagnosis, prophylaxis and treatment of basic stomatologic diseases” (state registration number 0104U000711).*

**ABSTRACT. Background.** The theoretical basis of osteoplasty, fully supported by clinical observations, is that violations occur in periodontitis of correlation between tooth and the surrounding tissues, including the micro-circulation. However, complex morphological and clinical analysis of effectiveness of the material held EasyGraft was not. **Objective.** The aim was experimental evaluation of tissue alterations in bone implant materials Easy-Graft® and tricalcium phosphate®, as well as determining the life quality after use in the surgical treatment of patients with generalized periodontitis III severity level. **Methods.** The comparative analysis a quantitative morphological estimation of regenerative processes in osteal tissue in model of osteal defect is carried out at implantation of material EasyGraft and amorphous calcium phosphate at this work. It was investigated dynamics of life quality indicators at patients after used materials by specialised questionnaire OHIP-14 (Oral Health Impact Profile) during 1 year. **Results and Conclusion.** We found out that EasyGraft and amorphous calcium phosphate undergo resorbtion and thus optimize bone regeneration. Regeneration is accompanied by decreased specific area of the particles implanted and increased integration index and specific density of trabeculae within the reaction zone. Highest intensity of these processes was observed in the period from 15th fill the 30th day after implantation. EasyGraft is more preferable for implantation than amorphous calcium phosphate. Adapted Ukrainian language and Russian language version of the OHIP-14 questionnaire is valid and accurate tool for assessing the quality of life of patients with chronic generalized periodontitis by which demonstrated the influence of the intensity of inflammatory and destructive changes periodontal severity of the pathological process, the presence of complete occlusion and methods of correction applied to the subjective perception of quality of life. The use of material EasyGraft compared with tricalcium phosphate improves the life quality of patients by 18-22%.

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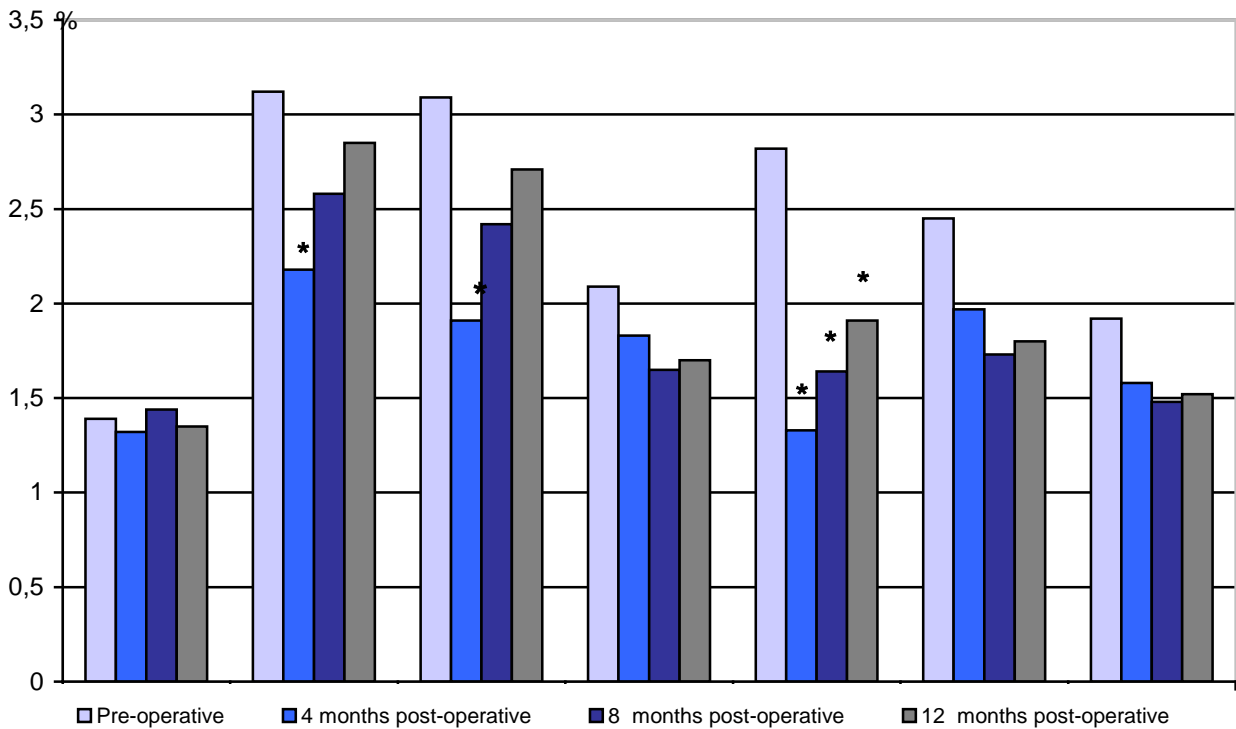


Fig. 1. Life quality indexes of severe generalized periodontitis patients in the age group up to 35 years (according to OHIP-14 questionnaire) after the use of tricalcium phosphate. Blocks 1-7 of questionnaire are described in section “Materials and methods”. Note: (\*) marks reliable difference comparing to the pre-operative levels.

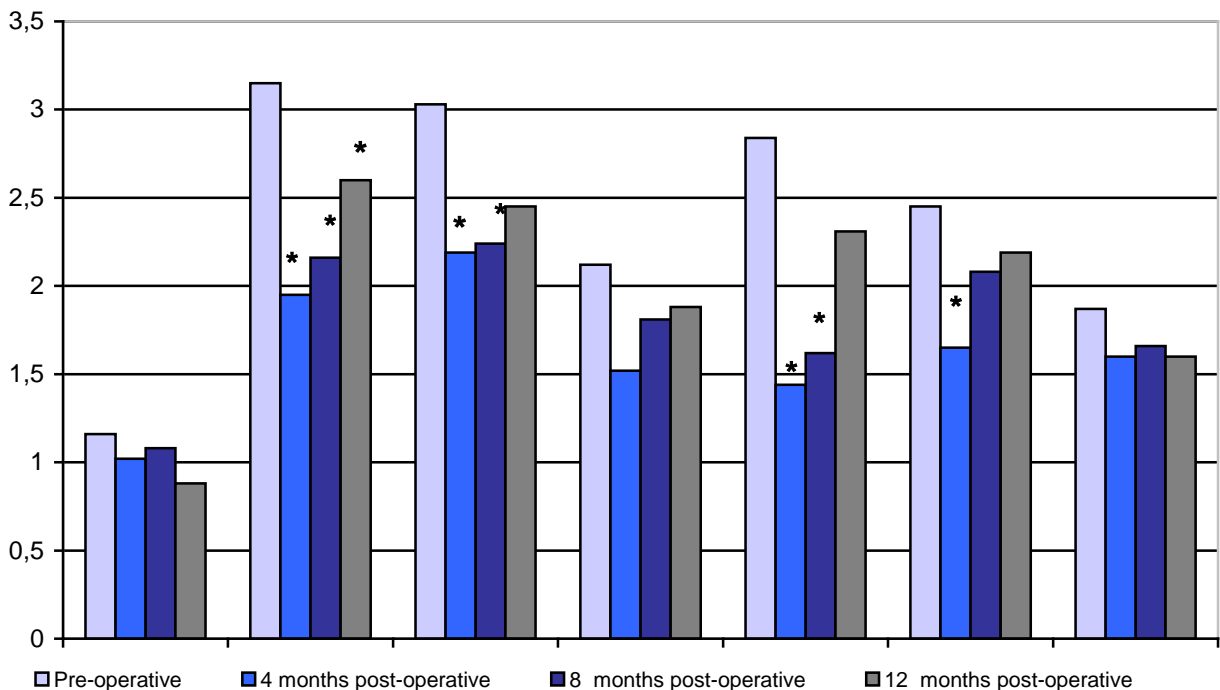


Fig. 2. Life quality indexes of severe generalized periodontitis patients in the age group up to 35 years (according to OHIP-14 questionnaire) after the use of Easy-Graft®. Blocks 1-7 of questionnaire are described in section “Materials and methods”. Note: (\*) marks reliable difference comparing to the pre-operative levels.

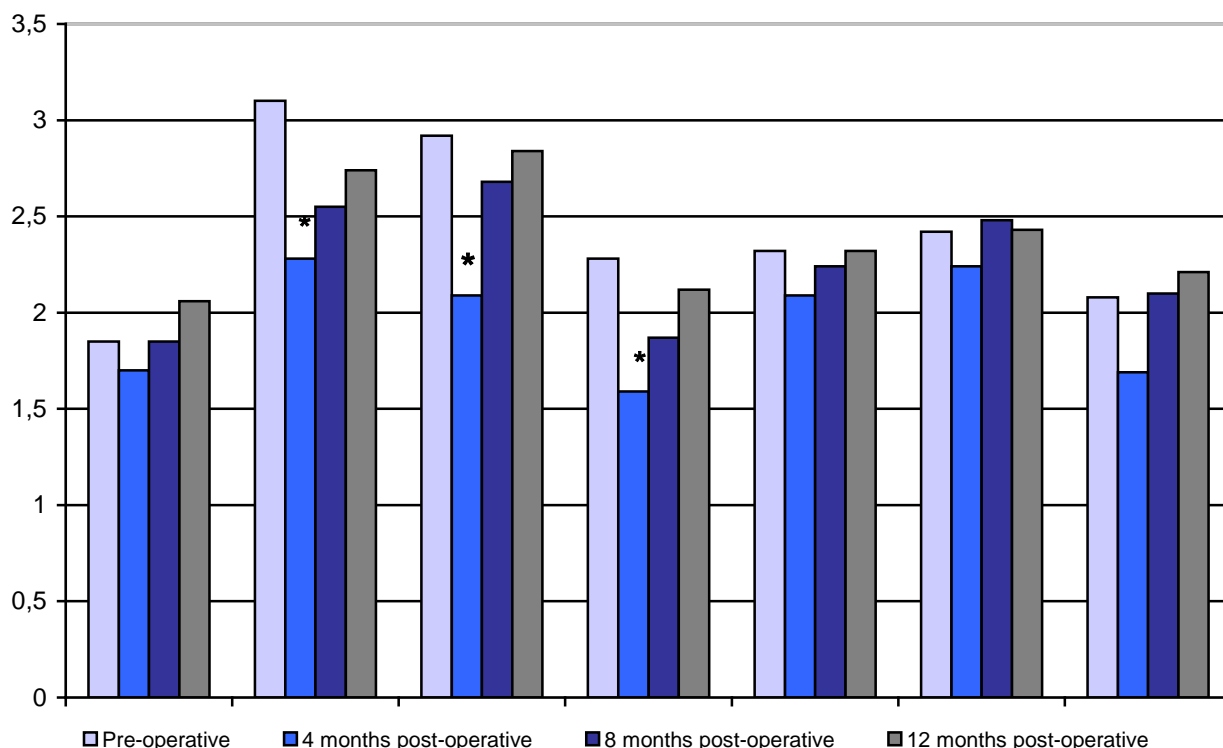


Fig. 3. Life quality indexes of severe generalized periodontitis patients in the age group 35-59 years (according to OHIP-14 questionnaire) after the use of tricalcium phosphate. Blocks 1-7 of questionnaire are described in section "Materials and methods". Note: (\*) marks reliable difference comparing to the pre-operative levels.

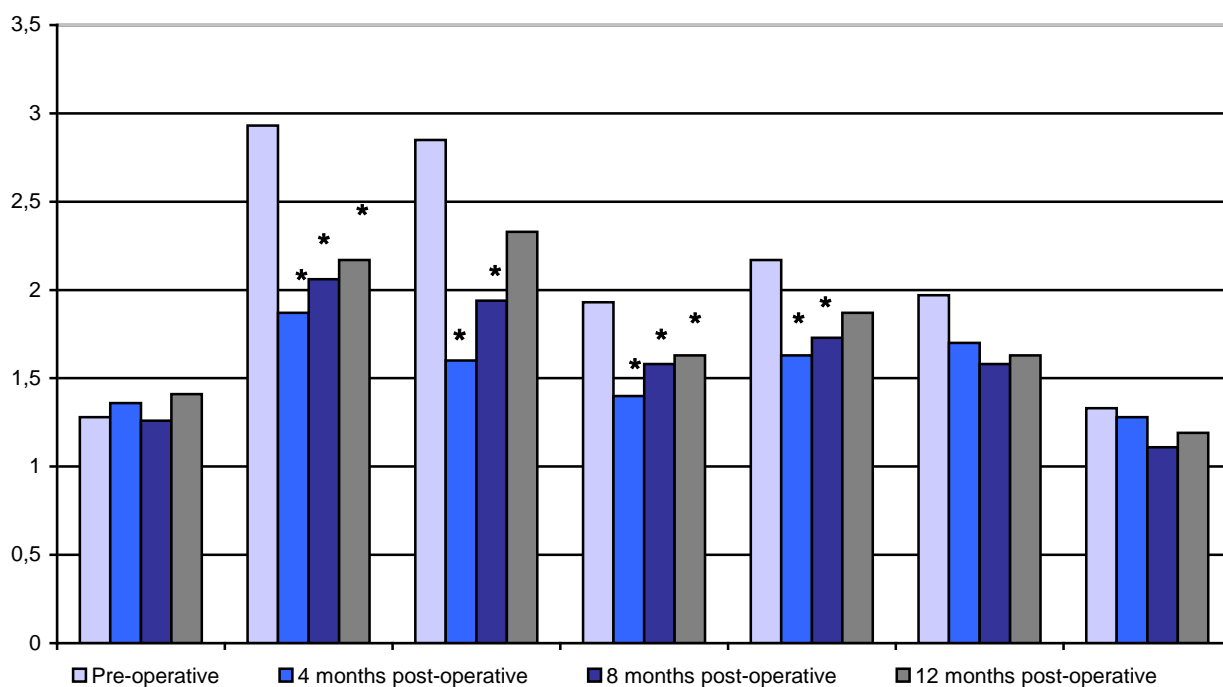


Fig. 4. Life quality indexes of severe generalized periodontitis patients in the age group 35-59 years (according to OHIP-14 questionnaire) after the use of Easy-Graft®. Blocks 1-7 of questionnaire are described in section "Materials and methods". Note: (\*) marks reliable difference comparing to the pre-operative levels.

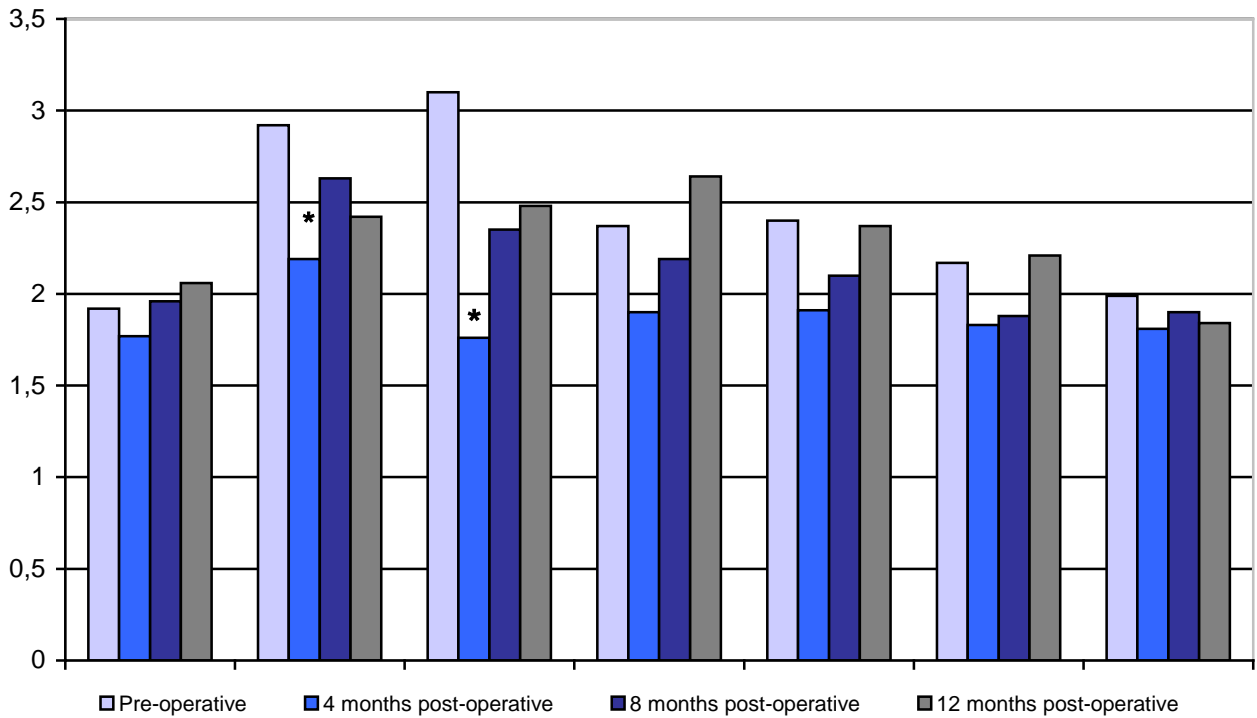


Fig. 5. Life quality indexes of severe generalized periodontitis patients in the age group 60-74 years (according to OHIP-14 questionnaire) after the use of tricalcium phosphate. Blocks 1-7 of questionnaire are described in section “Materials and methods”. Note: (\*) marks reliable difference comparing to the pre-operative levels.

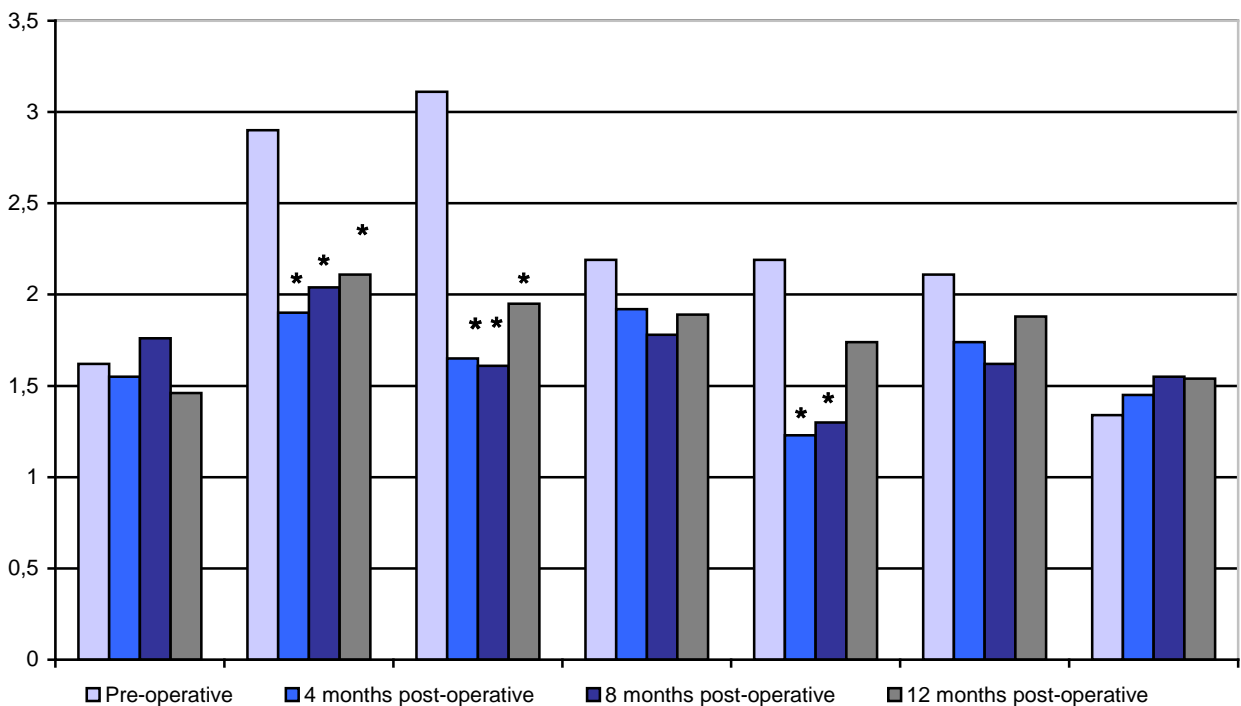


Fig. 6. Life quality indexes of severe generalized periodontitis patients in the age group 60-74 years (according to OHIP-14 questionnaire) after the use of Easy-Graft®. Blocks 1-7 of questionnaire are described in section “Materials and methods”. Note: (\*) marks reliable difference comparing to the pre-operative levels.

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