

ONLINE ISSN : 1881-1361 PRINT ISSN : 0287-4547

Dental Materials Journal

Vol. 28 (2009), No. 4 p.396-400

[PDF (3005K)] [References]

The bone-healing effect of a xenograft in a rat calvarial defect model

Hakan DEVELIOGLU¹⁾, Serpil UNVER SARAYDIN²⁾ and Unal KARTAL²⁾

Department of Periodontology, Faculty of Dentistry, Cumhuriyet University
Department of Histology and Embryology, Faculty of Medicine, Cumhuriyet University

(Received February 3, 2008) (Accepted December 10, 2008)

Abstract:

Bone grafts have been widely used to fill osseous defects in medicine, dentistry, and periodontology. The purpose of this study was to investigate the effects of a xenograft (Unilab Surgibone[®]) on experimentally created parietal bone defects in rats. To this end, 14 rats were employed in the present study and in each of them, 5-mm-diameter defects were created on the parietal bone. The right defect sites were filled with the xenograft material, while the left sites were used as control. After 30 days, the rats were sacrificed and tissue samples were retrieved from the defect sites of the cranium. Dense collagenous tissue was observed in the control area, whereas the xenograft particles were surrounded by a fibrous tissue layer at the implantation site. Based on the findings obtained, it could be concluded that the investigated xenograft seemed biocompatible and could be proposed as a potential material for filling osseous defects.

Key words:

Xenograft, Bone regeneration, Rat

[PDF (3005K)] [References]

To cite this article:

Hakan DEVELIOGLU, Serpil UNVER SARAYDIN and Unal KARTAL. The bone-healing effect of a xenograft in a rat calvarial defect model . Dent. Mater. J. 2009; 28: 396-400 .

doi:10.4012/dmj.28.396

JOI JST.JSTAGE/dmj/28.396

Copyright (c) 2009 The Japanese Society for Dental Materials and Devices



Japan Science and Technology Information Aggregator, Electronic JSTAGE