JOURNAL OF BIOLOGICAL REGULATORS & HOMEOSTATIC AGENTS Vol. 30, no. 2 (S1), 61-68 (2016)

GUIDED BONE REGENERATION IN DISTAL MANDIBULAR ATROPHY BY MEANS OF A PREFORMED TITANIUM FOIL: A CASE SERIES

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The aim of this case series was to evaluate the clinical outcome of preformed titanium foil (PTF) to perform guided bone regeneration (GBR) in posterior mandibular atrophies. Thirteen patients (4 male; 9 female; mean age 58.85±10.16 years), with class II division C atrophy, according to Misch, were selected to perform GBR by means of PTF, using a moldable allograft paste as graft material. The devices, made of a 0.2mm thick pure titanium foil, were pre-shaped using stereolithographic models obtained from CT-scan of the patients' recipient sites. In the second stage, performed at 6.35±2.15 months, 23 cylindrical two-piece implants were placed and the devices removed. At four months, the implants were exposed and submitted to progressive prosthetic load for a span of 4 months. The cases were finalized by means of metal-ceramic cementable restorations. The post finalization follow-up was at 12 months. Survival rate (i.e. SVR) was 100% since no fixtures were lost. At the one-year follow up, the clinical appearance of the soft tissues was optimal and no pathological signs on probing were recorded. The success rate (i.e. SCR) was 82.6% and the average peri-implant bone reabsorption was 0.99±0.59 mm. The results suggest good potentialities of this method for bone volume augmentation in distal mandibular atrophies, allowing to maximize the outcome and simplifying the surgical phase.

0393-974X (2016)

DISCLOSURE: ALL AUTHORS REPORT NO CONFLICTS OF INTEREST RELEVANT TO THIS ARTICLE.