

THE 7th POSTER COMPETITION

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SR-08
Scientific Research

The Root Membrane Technique: 1st Human Histologic and SEM evidence for papilla preservation

Mitsias M.¹, Siormpas K.², Kotsakis G.³, Trikka D.⁴, Gasparatos S.⁴, Theodorou I.⁴

1. DDS, MSc, PhD, Adjunct Assistant Professor, Department of Periodontology & Implant Dentistry, New University College of Dentistry, NY, USA, Private Practice, Athens, Greece,
2. Private Dental Clinic, Larissa, Greece, www.siormpasdoc.gr.
3. Division of Periodontology, School of Dentistry, University of Minnesota, Minneapolis, MN 55455, USA
4. Private practice, Athens, Greece. www.dental-center.eu

Objectives

The "Root Membrane" (RM) has become popular among implantologists for placement of immediate implants in the anterior maxilla. The first human histologic evidence of the technique is presented.

Materials & Methods

An AnyRidge fixture, along with the surrounding hard and soft tissues, was retrieved due to an accident from the anterior maxilla of a 68-year-old patient, who had been treated five years earlier with immediate implant placement and RM technique. The specimen was processed for histologic evaluation.

Results

The buccal bone plate was maintained without any resorption; a healthy periodontal ligament was evidenced. The implant showed osseointegration, with a high percentage of bone-to-implant contact (BIC = 76.2%). With regard to the space between the RM and the implant, the apical and medial thirds were filled with compact, mature bone; the coronal third was colonized by noninfiltrated connective tissue.

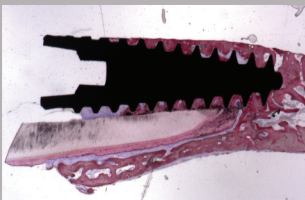


Fig. 1 Complete specimen after preparation

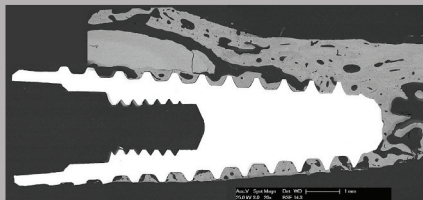


Fig. 2 CEM view of implant 20X

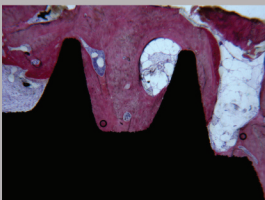


Fig. 3 Apical portion of the implant 40X

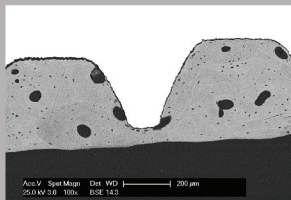


Fig. 4 Osseointegration of implant 100X

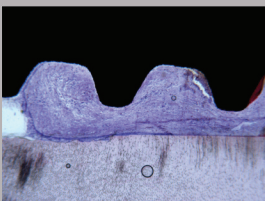


Fig. 5 Non inflammatory Connective tissue 40X

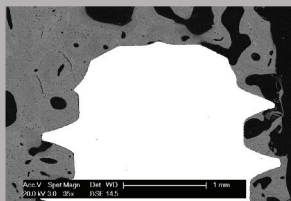


Fig. 6 Apical portion of implant 35X

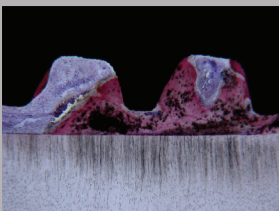


Fig. 7 Cementum migration to Bone 40X

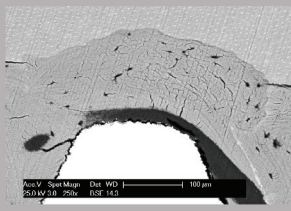


Fig. 8 Apical portion of implant 250X

Conclusions

The RM technique appears to be effective in preventing bone the resorption of the buccal bone plate.

Reference

1. Mitsias ME, Siormpas KD, Kotsakis GA, Ganz SD, Mangano C, Iezz G. The RootMembrane Technique: Human Histologic Evidence after Five Years of Function. Biomed Res Int. 2017;2017:7269467.