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Bundle Bone Preservation with Root-T-Belt: A Case Study”*

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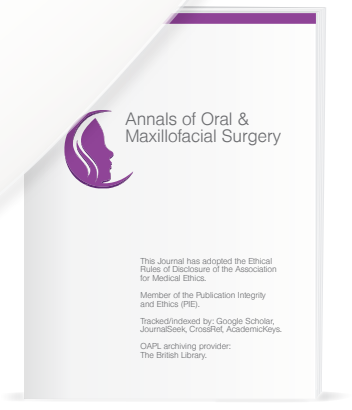

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Fig. 1 & 2. Final restoration. Castable abutment and zirconia cemented crown. Occlusal view

Fig. 3. Final restoration. Castable abutment and zirconia cemented crown. Vestibular view

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SUMMARY.

Abstract

This paper reports the results of a prospective case study on a new surgical technique, known as Root-T-Belt and aimed at preserving peri-implant bone crest in humans.

Methodology and Materials

Seven patients with an average age of 50 (70 ± 35) were selected. Ten implants were inserted (SEVEN®, MIS Technologies, Israel), using the Root-T-Belt surgical technique. The implants were loaded in 90 days. Marginal bone loss 6 months after x-ray analysis: mesial area, 0.8; distal area, 0.7.

The Root-T-Belt method is a modification of the technique created by Dr. Markus Hurtzeler, which appeared in the Journal of Periodontology 2000. In Dr. Hurtzeler´s "Shield Technique," a portion of the palatal root is extracted via a mesial-distal tooth sectioning, preserving the vestibular root remainder, so as to prevent bundle bone resorption. The former technique is also a derivation of Drs Fabrice Cherel and Daniel Etienne´s method, recently published in the Journal of Periodontology. Their sectioning is, however, vestibular-lingual, thus preserving the proximal remainder of the root to protect the papilla.

Conclusion

The findings of this case study indicate that the surgical technique known as Root-T-Belt, which aims at preserving all 360° of dental structure, makes the preservation of peri-implant gingival and bone structure considerably more predictable at six months from commencement.