Simultaneous Ridge Augmentation with OSSIX® Plus

A Case Study by Alberto Monje, DDS, MS, PhD

At Dentsply Sirona Regenerative Solutions, we strive to provide you with the latest advancements and trends in guided bone regeneration and guided tissue regeneration (GBR/GTR). Learn from clinical case studies tailored for dental professionals like you and elevate your practice .

Background

A patient was referred for treatment of peri-implantitis. Predisposing factors such as inadequate implant positioning (too shallow) and the prosthetic component

Case Description

To achieve newly formed bone at 4 months and to facilitate the placement of adequate implants to ensure long-term successful results, a simultaneous minimally invasive reconstructive approach to defects associated (MIRANDA) with implant removal using OSSIX® Plus was selected. Using OSSIX® Plus in this situation was justified by the fact that primary intention healing was not required, and the mucosal junction did not become distorted towards the buccal, which, in turn, may have been subjected to the lack of buccal keratinized mucosa. At the two-year follow-up, this case demonstrated both hard and soft tissue stability.

About the Clinician, Dr. Alberto Monje, DDS, MS, PhD

Dr. Alberto Monje obtained his certificate and Masters in Periodontology from the University of Michigan, Department of Periodontics and Oral Medicine. He is certified by the American Board of Periodontics.

He was the recipient of the ITI Scholarship for 2016-2017 at the University of Bern mentored by Prof. Daniel Buser.

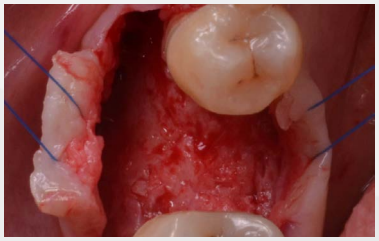
Dr. Monje is a PhD in the field of Alveolar Bone Architecture granted by the University of Granada in Spain. He maintains a private practice exclusively in Periodontics and Implant Dentistry.

He is an adjunct professor at the Department of Periodontics of the Universitat Internacional de Catalunya in Barcelona and at the Department of Periodontics and Oral Medicine at the University of Michigan, Ann Arbor, Michigan, USA

Pre-Op

Baseline case scenario

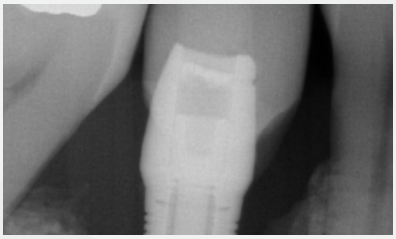
4-month follow up



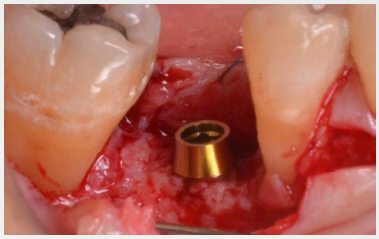
Occlusal view of re-entry at 4-month follow-up

2 years follow up

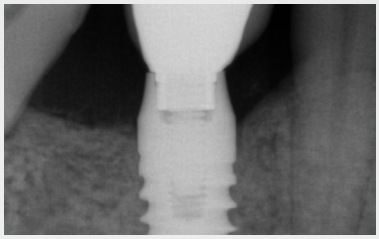
Clinical evaluation at 2-year follow-up



Radiographic assessment revealed moderate peri-implantitis-related bone defect and shallow placement of implant

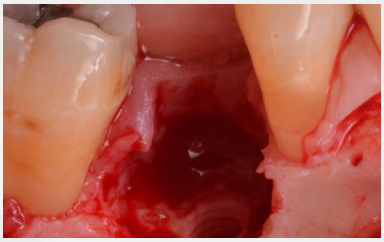


Implant placement in the ideal three dimensional position



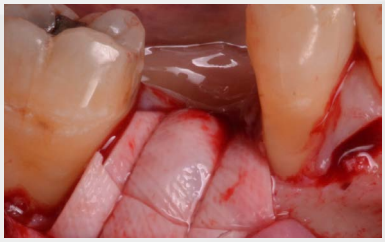
Radiographic evaluation demonstrating marginal bone level stability

Surgery

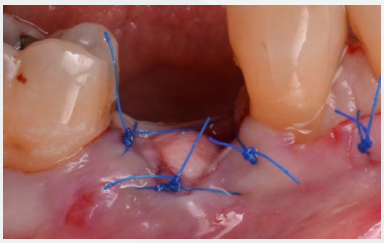


Crater-like defect after implant removal shows partial containment

Autogenous bone and xenogeneic bone filler being mixed for implant site development



OSSIX® Plus stabilized using subperiosteal suturing technique



Secondary intention healing is promoted

OSSIX® Plus Barrier Redefined

OSSIX® Plus is a resilient resorbable collagen barrier membrane that maintains barrier functionality for 4-6 months[1]. It is resistant to degradation when exposed for 3-5 weeks[5] and has excellent handling properties, adapting and conforming to defects, and adhering well to tissue. OSSIX® Plus maintains a high biocompatibility and has been observed to undergo ossification[1-5].

Reference

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2. Tal H, Kozlovsky A, Artzi Z, Nemcovsky CE, Moses O. (2008) Long-term biodegradation of cross-linked and non-cross-linked collagen barriers in human guided bone regeneration. Clin Oral Implants Res. 19(3):295-30.
3. Capri G, Smukler H, Landi L. (2012) A less invasive approach to mandibular horizontal ridge augmentation using autogenous bone: A human histological case series. The Journal of Implants and Advanced Clinical Dentistry 4:27-36.
4. Artzi Z, Weinreb M, Carmeli G, Lev-Dor R, Dard M, Nemcovsky CE. (2008) Histomorphometric assessment of bone formation in sinus augmentation utilizing a combination of autogenous and hydroxyapatite/biphasic tricalcium phosphate graft materials: at 6 and 9 months in humans. Clin. Oral Impl. Res. 19; 686–692.
5. Heather R. Hong et al. (2018) Ridge preservation procedures revisited: A randomized controlled trial to evaluate dimensional changes with two different surgical protocols, Journal of Periodontology, Volume 90, Issue4.

Please read the IFU before use and for additional information on indications, contraindications, warnings, and precautions.
For more information on OSSIX® regenerative products and activities in your region: regenerative.dentsplysirona.com

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