

# 1 year follow up

## A New Titanium Mesh And Palatal Connective Tissue Pedicle Graft For Peri-implant Bone Regeneration At A No-wall Dehiscent Site

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### Objectives

To evaluate GBR using a new titanium mesh and rotated palatal subepithelial connective tissue graft (RPSTG) in correction bone and soft tissue deficiency around the implant.



Fig 1-2. Pre-operative evaluation

### Materials and Methods

Two dental implants were inserted to replace two maxillary central incisors. To enhance the no-wall type bony dehiscence at the right implant site, a new designed implant-fixed titanium mesh combined with RPSTG was used for bone graft maintenance and coverage. Core beam computed tomography (CBCT) scans were performed to evaluate the facial contour augmentation by GBR.

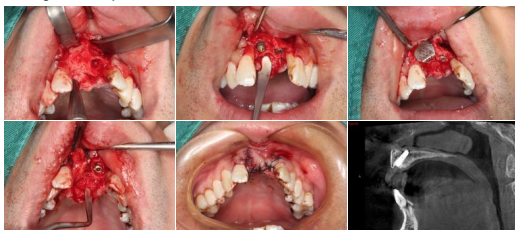


Fig 3-8. Surgical procedures

### Results

At the 1-year follow-up, the results revealed improved keratinized tissue and ridge development around the successful implant-support prosthesis. CBCT demonstrated a rebuilt crestal bone at the buccal aspect.

### Conclusion

The GBR procedure using an implant-fixed titanium mesh combined with PRSTG might represent a potentially desirable treatment option for a no-wall type of peri-implant defect augmentation.

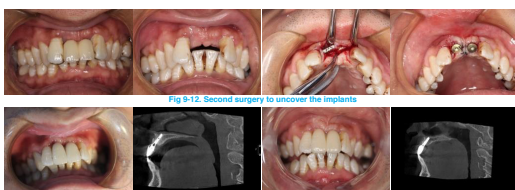


Fig 9-12. Second surgery to uncover the implants

Fig 13-16. Definitive restorations and CBCT check-up at fixture of prosthesis and 1 year later

### References

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2. Buser D, Dula K, Hirt HP, Schenk RK: Lateral ridge augmentation using autografts and barrier membranes: a clinical study with 40 partially edentulous patients. J Oral Maxillofac Surg 54:420-432, 1996.