

## **Case 1 : Fenestration defect treatment using autogenous bone and resorbable collagen membrane**

### **Patient Characteristics**

This case is a 47-year-old male who presented with fenestration defect in the maxillary anterior. The patient was reported of no specific medical and dental history.

In exposing the patient's gingival, a bone loss from buccal fenestration defect was observed (Fig.1). In order to maximize an esthetical outcome and healing, it was required to use a autogenous bone graft and resorbable collagen membrane (T-Gen).

### **Treatment**

Autogenous cortical bone graft was placed on and into the defect, as it can cover the defect completely and secured with two pins buccally (Fig.2 and 3). Then T-Gen is applied to cover the entire site, in order not to reveal the bone graft and defect (Fig.4). A tension-free primary closure was achieved with 6-0 nylon sutures. At 1 week of post operation with suture removal, it was observed of a soft tissue healing without any inflammatory sign.

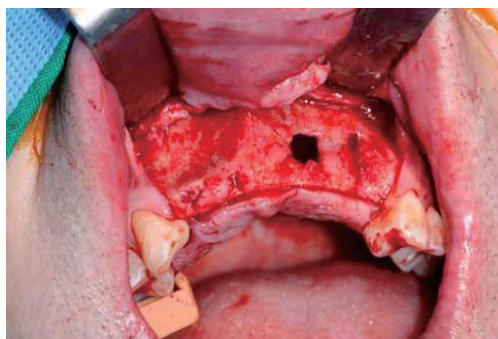
### **Results**

At 4-months of post operation, a complete closure of soft tissue was observed (Fig.5). In exposure of the site, a complete recover of bone loss and an esthetical formation of bones were observed (Fig.6). Implant placement was performed at 4-months of post-operation (Fig. 7).

### **Summary**

A simultaneous application of a resorbable collagen membrane (T-Gen) in fenestration defect provides maximized result in effective and esthetical bone formation, not to mention its excellent adaptation during operation due to its flexibility and tear resistance. Also it can provide a dramatic regeneration of gingival without any immune or sensitivity reactions.

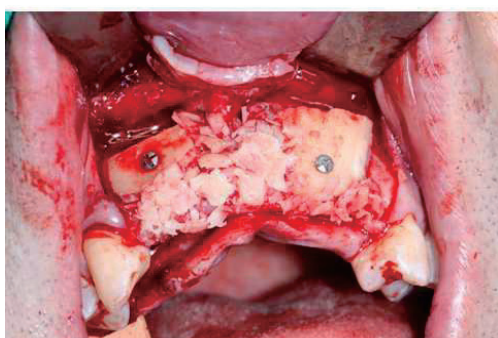
As a primary management for the implant surgery, the resorbable collagen membrane (T-Gen) provides a successful solution to the treatment.



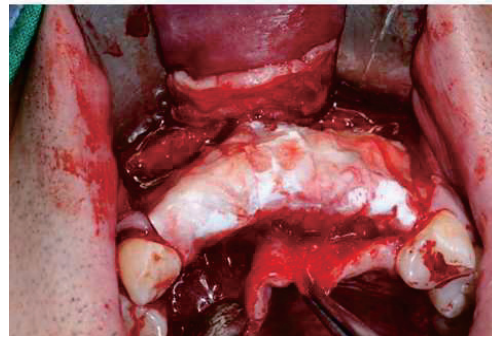
**Fig.1.** Bone loss was exposed by fenestration defect



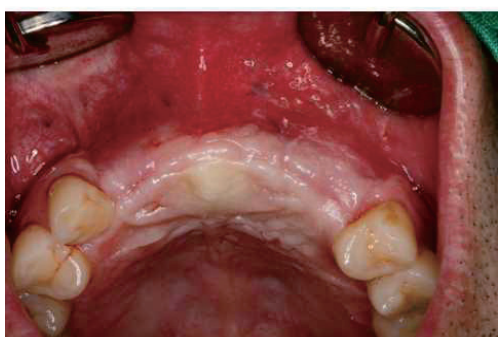
**Fig.2.** After exposing the gingival flap, bony defect was observed.



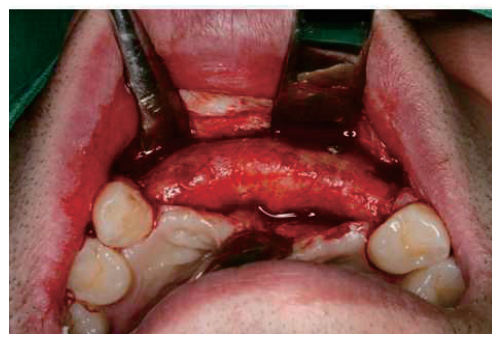
**Fig.3.** The defects were filled with autogenous bone graft.



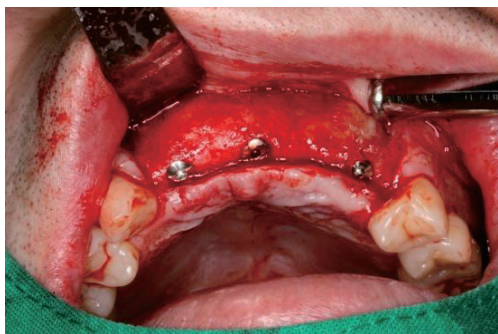
**Fig.4.** Entire site was covered with T-Gen.



**Fig.5.** Uneventful healing was observed at 4 month post-operation.



**Fig.6.** Re-opening after 4 months, good bony healing of defect.



**Fig.7.** Implant placement was performed at 4 month post-operation.