

Conservative treatment technique for wound dehiscence after ridge augmentation using titanium mesh

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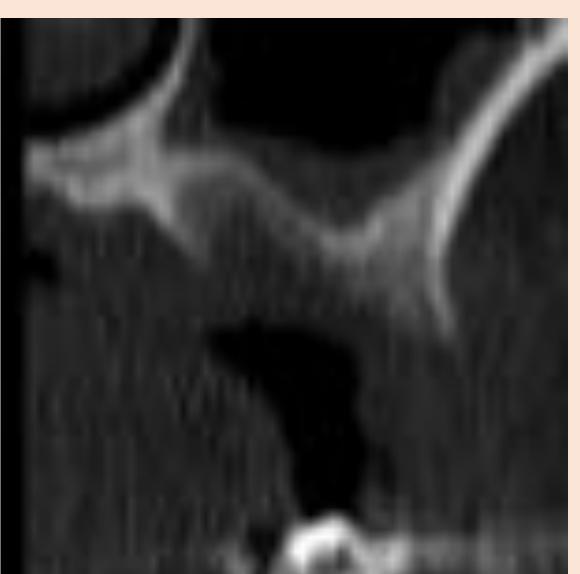
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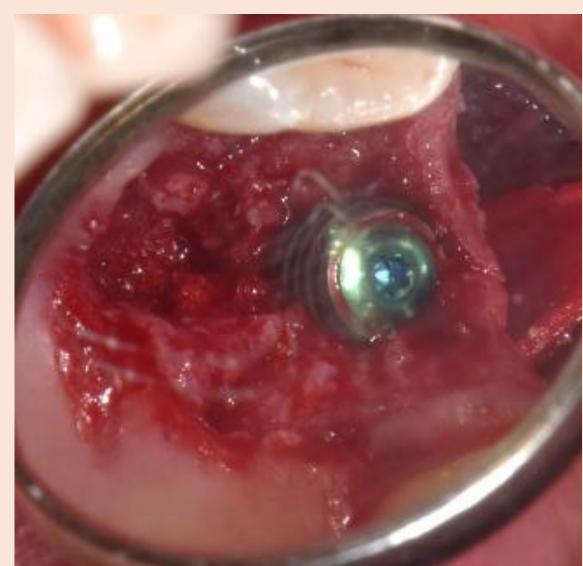
Wound dehiscence after ridge augmentation is the most frequent complication, causing infection, inadequate bone healing, and loss of bone substitutes. However, a conservative treatment is hardly achieved to prevent infection during the secondary healing period due to the resident oral bacteria, wet and humid environment, and soft tissue movement in various directions.

We present an effective conservative method by using the oral wound dressing material (Orascar, Renew medical, Bucheon, Korea) with emgraved omnivec splint.

Technical Report & Case Presentation

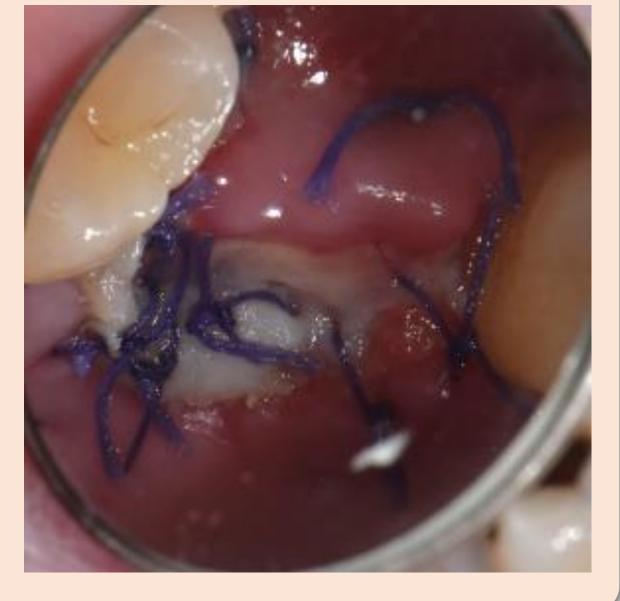
#1. Wound dehiscence was occurred at 5 days after dental implant with autogenous bone and AutoBT









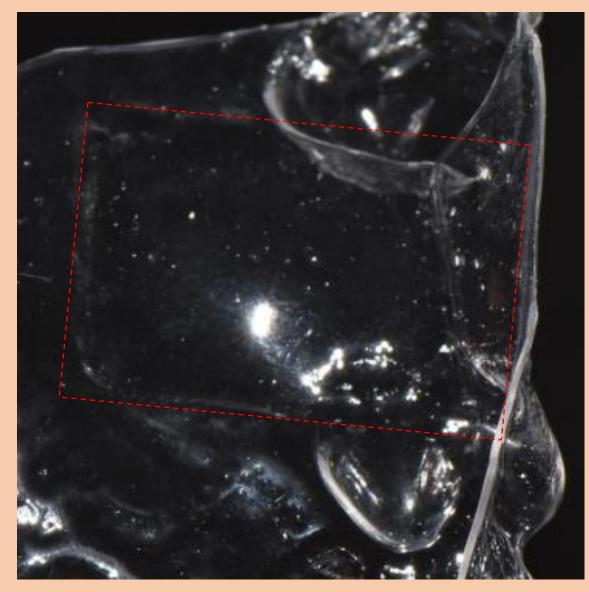


#2. Omnivec splint (ø 0.5mm) was fabricated from the impression with Orascar application





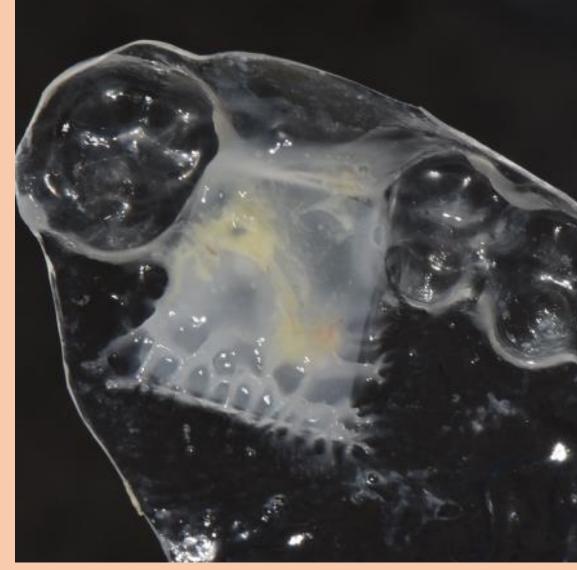




Omnivac Splint (ø 0.5mm) with emgraved Orascar



Splint application with Orascar After 1 days, well retained



Orascar on the splint

#3. Secondary healing without complications such as infection and subsequent dental implantation



After 2 weeks, Secondary healing without infection, and stop dressing



After 3 months, Remodeling of soft tissue



After 5 months, Secondary surgery



After 6 months, with Functional loading Proper palatal bone healing



After 12 months, Proper bone remodeling

Discussion & Conclusion

Orascar (Renew medical, Bucheon, Korea) is a Non-eugenol Intraoral Wound Dressing, generating adhesive strength when reacting to water or saliva. The adhesive surface is composed of Tocopheral acetate, Carbomer 940 and Hydroxyethyl cellulose, and the protective surface is coated with Ethylcellulose and Castor Oil. Although Orascar can formed the adhesive surface, it hardly endure the dynamic masticatory muscle movement and difficult to apply the patient himself.

With omnivec splint, the patient can easily apply Orascar on the exact position by himself, preventing dislodgement. This availability lead to manage proper oral hygiene and to reduce outpatient frequency. With this conservative technique, this patient can achieve implant prosthetic treatment without additional intervention or complications.

Since we used osteoinductive bone substitutes such as autogenous bone and AutoBT, it is questionable to effect with other bone substitutes including xenogenic and alloplastic bone grafts. Further study is necessary to evaluate bone healing outcome compared with that of primary healing without wound dehiscence.