

# Successful Bone Augmentation with Simultaneous Early Implant Placement

Dr. David M. Kim  
Boston, MA  
United States

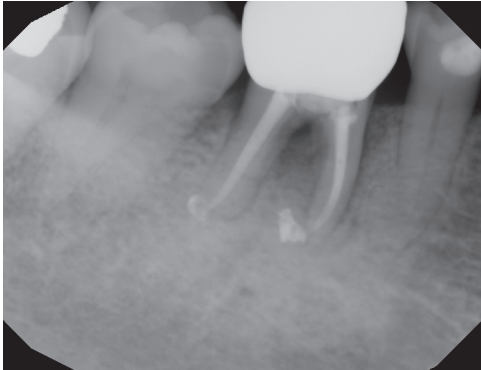


## Patient History

A 78-year-old healthy female patient presented with failing RCT and radiographic evidence of bone loss around the mandibular right first molar.

## Process & Conclusion

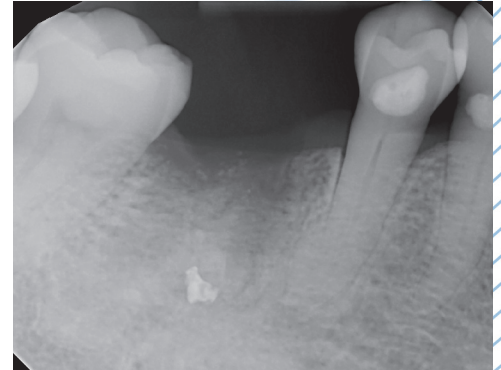
The infected tooth was extracted, and the early implant placement with simultaneous bone augmentation was done 8 weeks later. The second stage at 3 months revealed a remnant of membrane in addition to excellent bone growth above the cover screw.



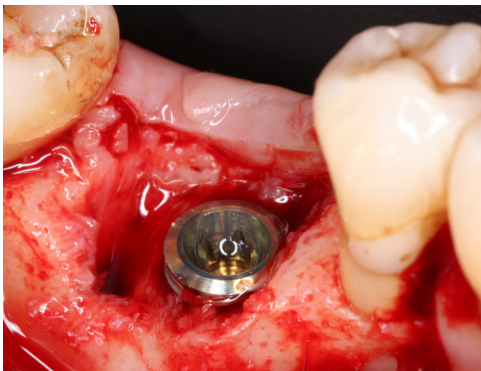
Pre-operative X-ray.



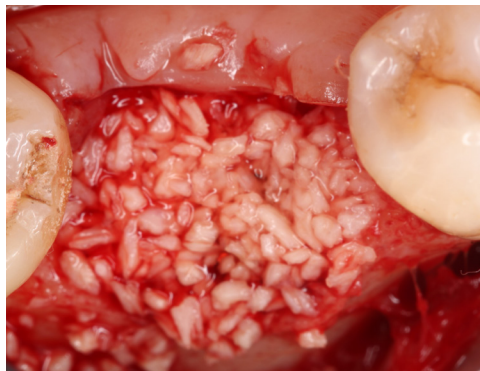
The tooth was extracted, and the extraction socket was allowed to heal for 8 weeks.



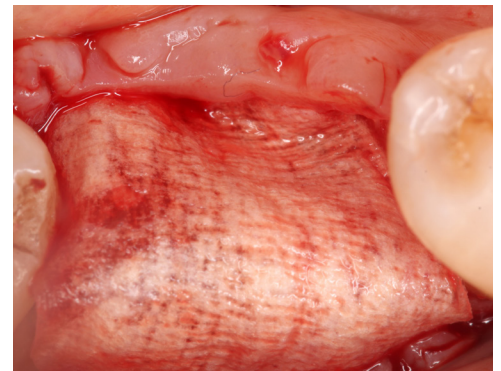
A periapical (PA) radiograph demonstrating inadequate socket healing.



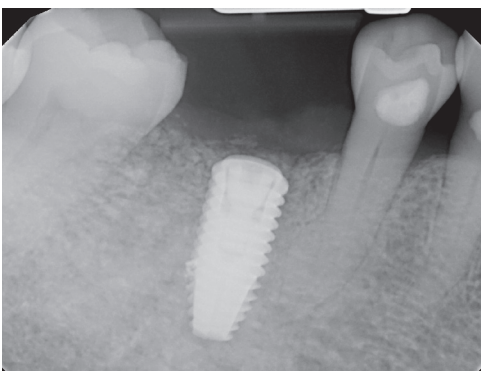
An early implant placement was performed in the socket that had not completely healed.



Bone augmentation was performed around the exposed implant threads with SigmaOss® corticocancellous allograft (0.25-1.0mm).



A cross-linked InterCollagen® Guide collagen barrier membrane was placed over the bone graft.



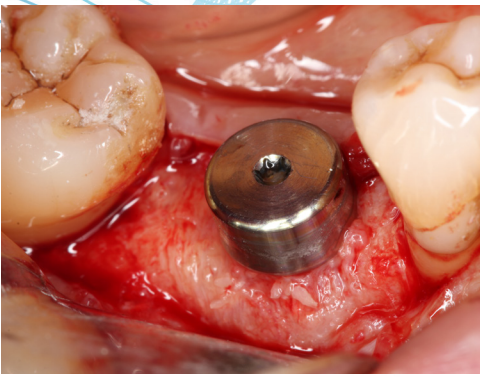
An immediate post-bone grafting PA.



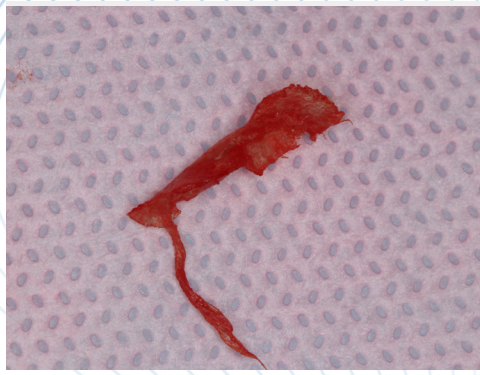
Soft tissue healing 3 months after the bone augmentation.



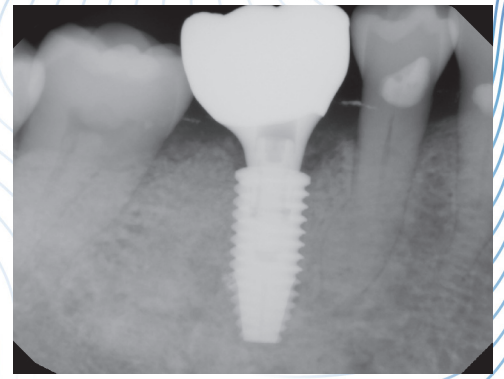
Membrane presence 3 months after the bone augmentation procedure, allowing for protection of the underlying bone graft.



In 3 months, only a small amount of remaining allograft was noticed around the implant, and the bone grafting was successful.



Picture of a remnant InterCollagen® Guide collagen barrier membrane.



A PA demonstrating radiographic evidence of an osseointegrated dental implant.



A clinical picture after the implant restoration, demonstrating good soft tissue support around the implant crown.