

## **4 Maxillary Posterior Implants To Support Fixed Teeth**

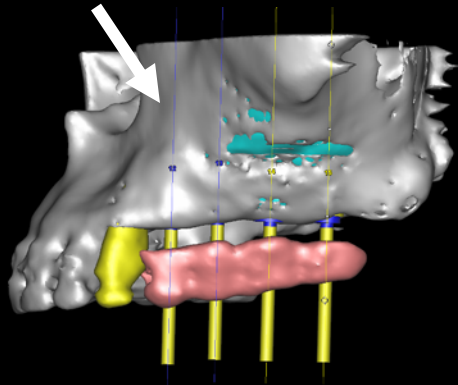
**Replacing upper back teeth with the most  
natural and best long-term strategy**

**Drs. Alan Rosenfeld and George Mandelaris**  
Diplomates, American Board of Periodontology

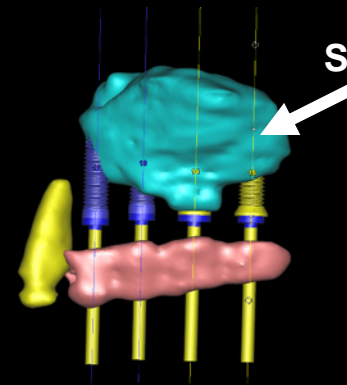


# CT scan analysis for presurgical planning

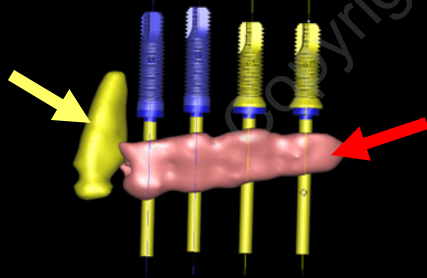
Maxilla (upper jaw bone) + implants planned



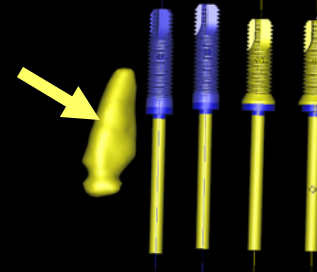
Sinus bone graft



Maxilla (upper jaw bone) and sinus graft removed  
4 implants planned & analyzed against **scanning appliance**  
(planned position for teeth) and adjacent **natural tooth #11**



4 implants planned and related to  
remaining **natural tooth #11**

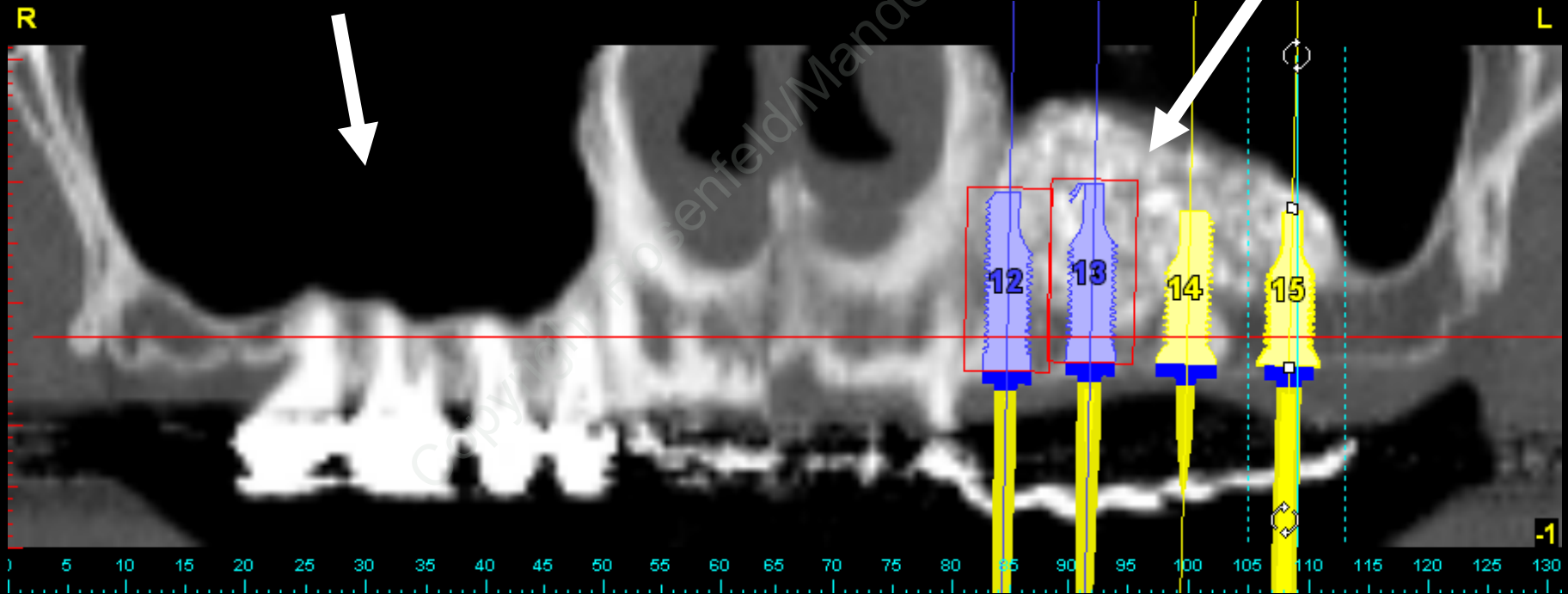


In this case, **sinus bone grafting** was performed to allow sufficient vertical bone height in order to accommodate implant placement (length). These pictures represent the bone sinus bone graft reconstruction environment and the detailed planning Drs. Rosenfeld & Mandelaris engage in before the implant surgery commences in our office for patient safety and predictability in surgical therapy.

# CT scan analysis for presurgical planning

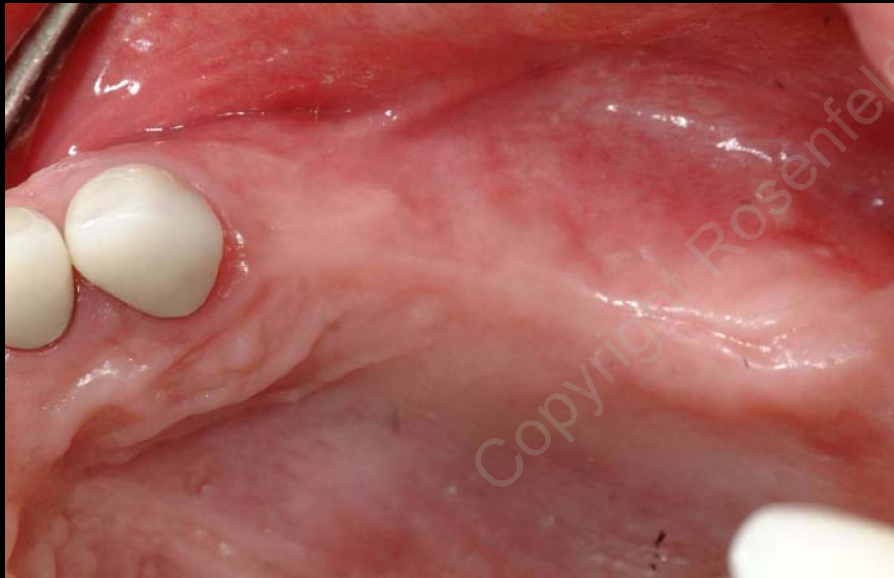
Maxillary right side where natural teeth remain. No sinus graft is present. Note the difference between the left where the bone graft has been placed

Sinus bone graft – left maxilla

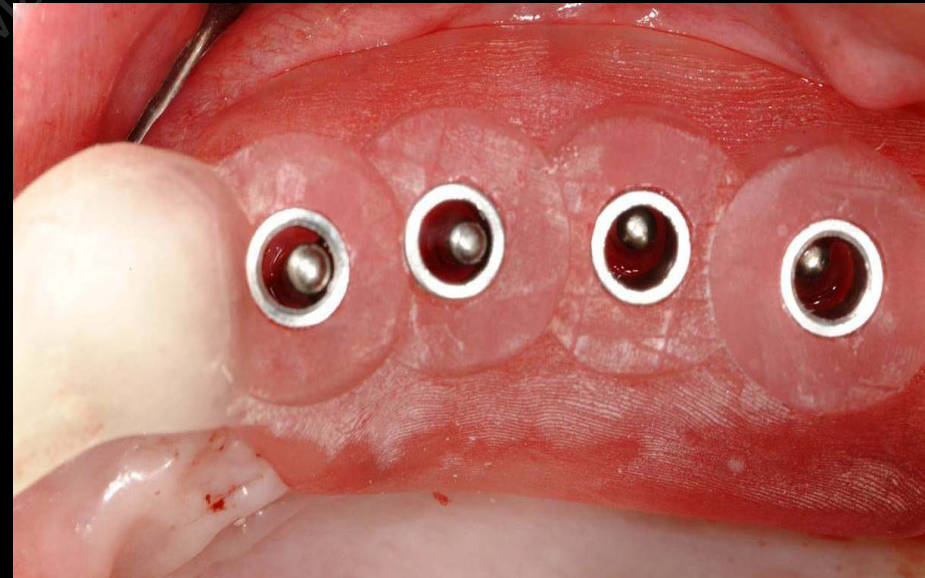


Implant surgery diagnostics, planning for the replacement of 4 teeth in the maxillary left posterior.

# Minimally invasive implant placement using CT guided technology.



**Initial exam. Partial edentulism #12-15  
Status 9 months post sinus bone graft**

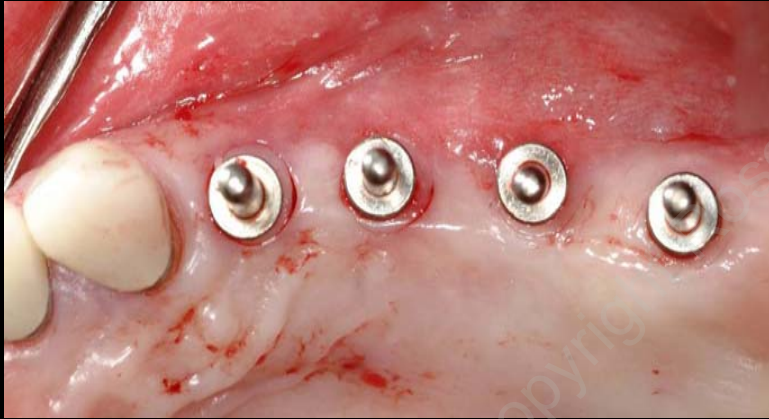


**A tooth-mucosal supported computer generated CT surgical guide has been positioned and osteotomy sites have been prepared through the guide ensuring precise and accurate implant preparation.**

**This is a minimally invasive and highly accurate modality of implant surgery.**



# Minimally invasive implant placement using CT guided technology.



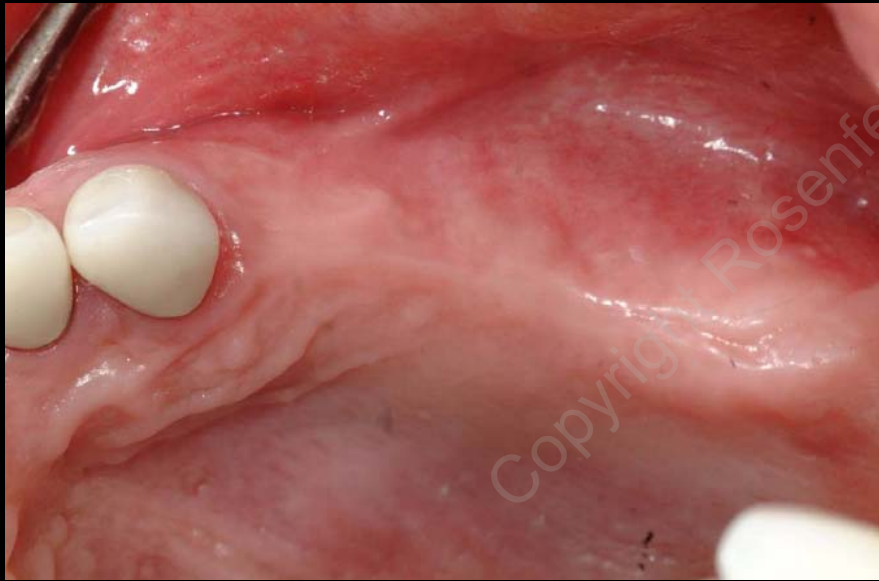
Guide pins are positioned in the implant preparation sites to check for proper angulation. Note that using this technology has not only increased precision and accuracy for the surgical outcome, it affords the patient the opportunity to have surgery without having the gum opened. There is no need for stitches and there will be no bruising or swelling afterwards



Implants placed without opening gum tissue. Minimally invasive CT guided implant surgery.



# Minimally invasive implant placement using CT guided technology.



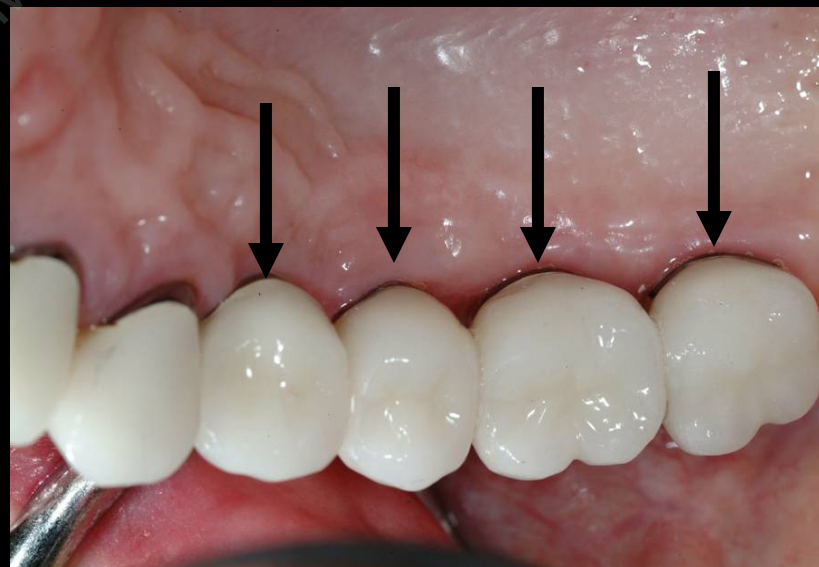
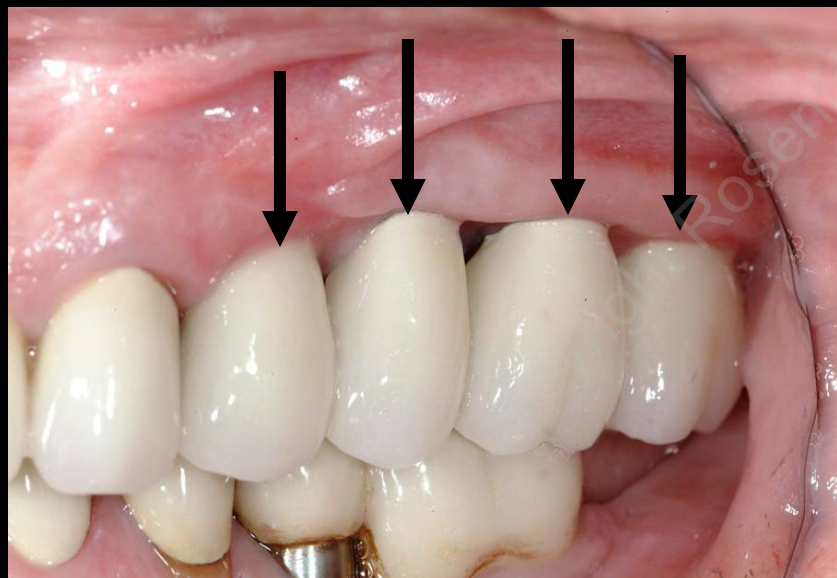
**Initial**



**Post surgery. Healing abutments are in place. The patient will be ready for teeth with their dentist in approximately 3-4 months.**

# Minimally invasive implant placement using CT guided technology.

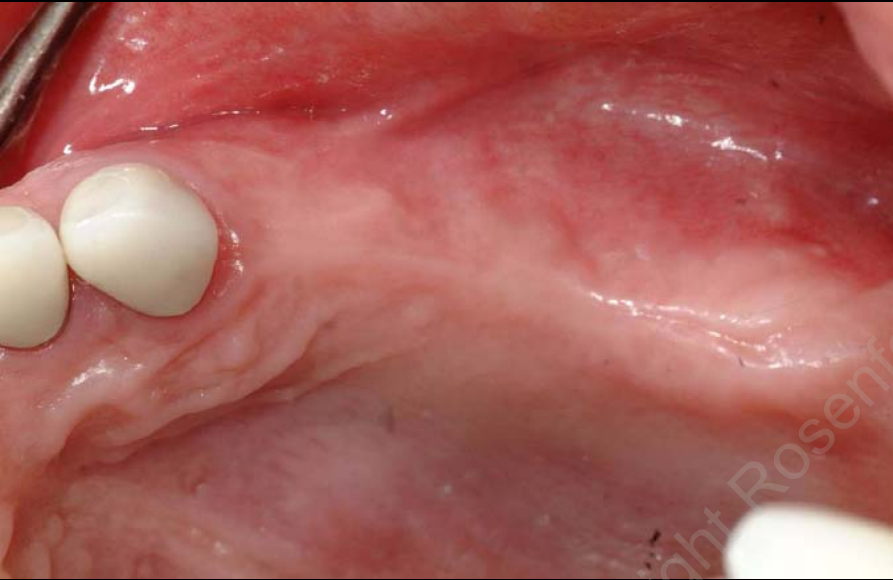
## Final Outcome



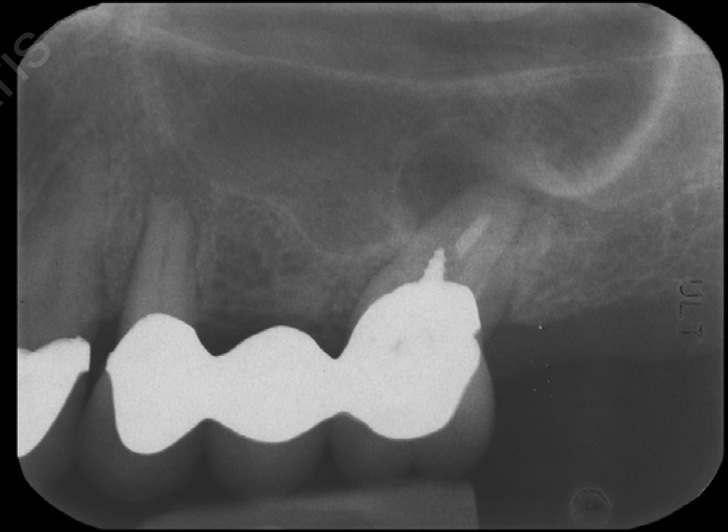
These two photos represent the final prosthetic outcome. 4 dental implants have been placed at tooth positions #12, 13, 14, and 15 (black arrows) and implant supported crowns have been cemented to the abutments.



# Fixed Dental Implant Prosthesis Final Outcome Assessment. The Contemporary Standard of Care For Missing Teeth



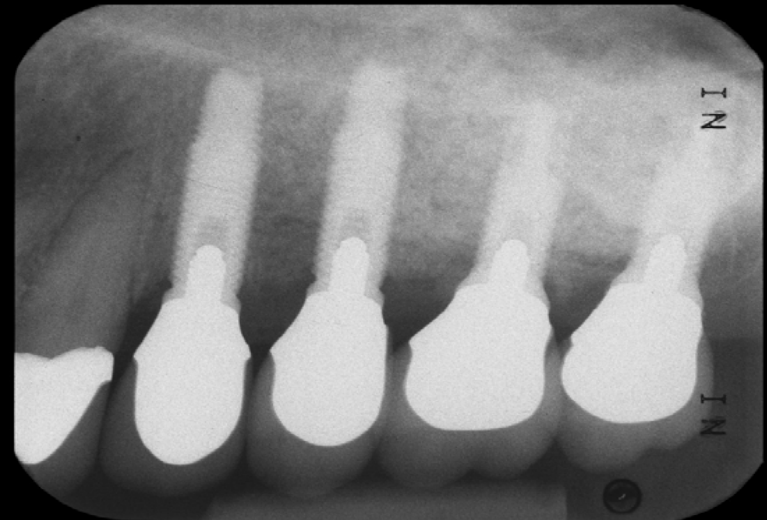
**B  
E  
F  
O  
R  
E**



3-19-02



**A  
F  
T  
E  
R**



12-16-03