Single tooth implant supporting two maxillary anterior teeth

Implant tooth replacement for the maxillary central incisor
In conjunction with a cantilevered pontic for the lateral incisor

Managing two teeth with one implant when there is space limitations

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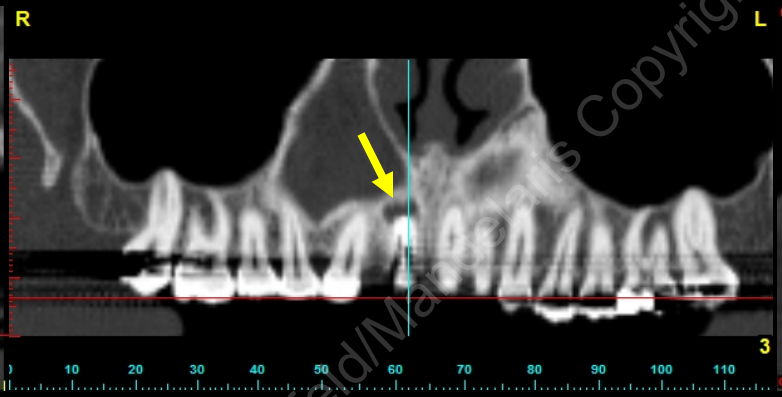
Initial Exam

- Initial examination of tooth #9 revealed a failing root canal with an abscess (red arrow) near the apex of the tooth.
- Tooth #7 was also missing and presented as a cantilevered pontic from the crown on #8

Initial X-ray

CT scan diagnostics



- The above image represents the cross sectional view of tooth #9. The yellow arrow depicts the bone loss resulting from the infection/failed root canal

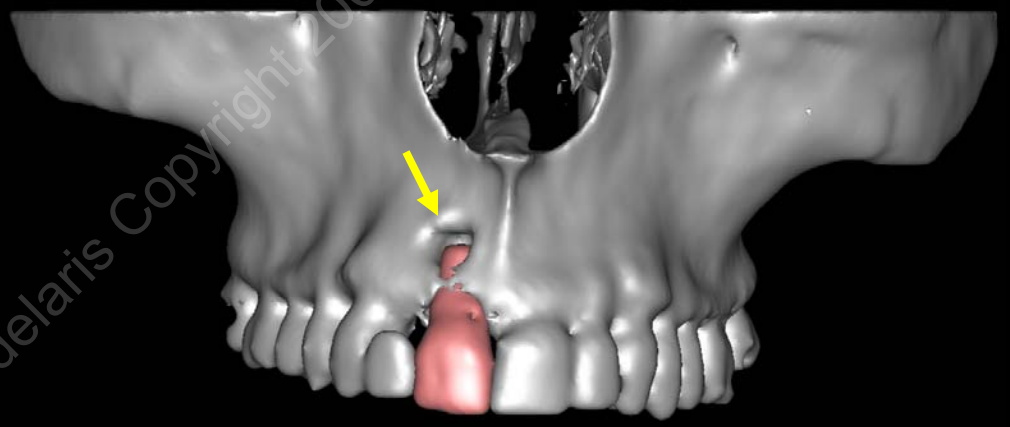
- This above image represents the panoramic image of the maxilla. The yellow arrow depicts the infection at the apex of the tooth resulting from the failed root canal & subsequent infection process.

- This image above is an axial view showing several features. The orange circle represents the nerve. The yellow arrow shows the severe bone loss associated with tooth #9. The red line demonstrates the space limitation between teeth. Because the root of #6 (canine) is tipped towards #7, there is insufficient space to place two implants.

- The compromise will be to place one implant at the #8 position and cantilever the lateral incisor from it.

CT scan diagnostics

- The above image represents the initial examination of the patient at the consultation for tooth #8. (red arrow)



- This is the CT scan 3 dimensional reconstruction of the patient. Note the advanced bone destruction which has occurred (yellow arrow) as a result of the failed root canal. In order to replace tooth #8 with a dental implant, the bone anatomy will need to be not just preserved, but reconstructed.

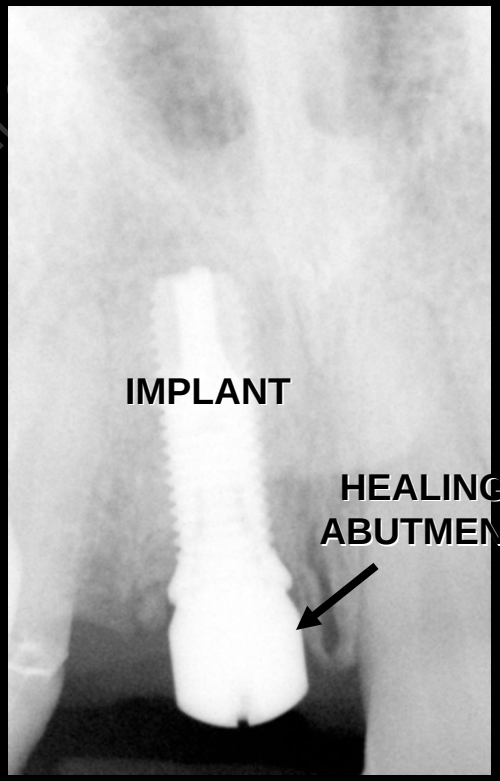
6 months healing from bone reconstruction surgery

Implant surgery

- 6 months following the bone reconstruction surgery, healing has progressed uneventfully and implant placement may now occur. These pictures both highlight the significant gain in horizontal and vertical tissue volume which has occurred from the first surgery. This will help to maximize the opportunity for the restorative dentist to create the most natural appearing teeth.

IMPLANT SURGERY

• A healing abutment (i.e. healing :cap") is placed to the implant and the area is sutured. This is a one stage implant surgery which does not require re-entry to expose the implant after bone integration



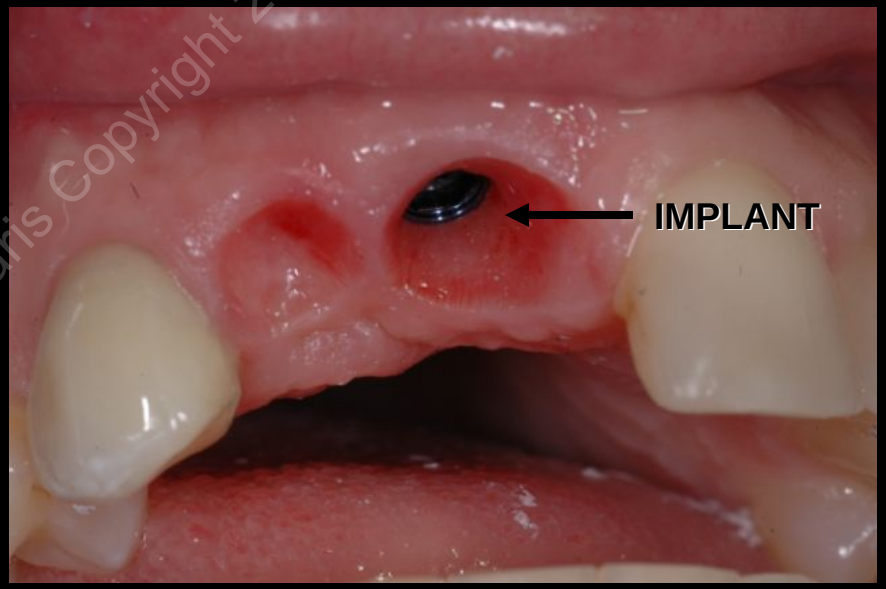
• X-ray after implant placement and healing abutment connection.

Note that although teeth #7 and #8 are missing, the space between the remaining teeth does not allow for more than one implant (without orthodontics).

The Provisionalization Phase

Temporary prosthesis #7-8. A “blueprint” for the final outcome

After the implant has successfully integrated, a temporary prosthesis is made. This allows the restorative dentist to ensure that the patients speech, soft tissue esthetics, bite, and overall desired outcome are met PRIOR to proceeding with the final prosthetics.



This photo shows the provisional prosthesis removed and development of ideal contours. The provisional prosthesis allows the doctors to modify and change contours BEFORE finishing the prosthesis for the patient. The provisional is somewhat of a “blueprint” to the final teeth.

The Final Prosthetic Phase

This photo represents a final abutment in place which is screw retained to the implant. The final porcelain teeth will be cemented to this intermediate connection piece..

Final Prosthetic Outcome.

Tooth #8 (maxillary right central incisor) is the implant supported tooth. #7 is the cantilevered prosthesis created as apart of final prosthesis which is supported by implant at the #8 position.

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BEFORE

AFTER

Single tooth implant supporting two maxillary anterior teeth

BEFORE

AFTER