

## **2 Mandibular Anterior Implants To Support A Removable Denture**

**The Contemporary Standard of Care For  
Removable Appliances in Edentulous Jaws**

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# The Contemporary Standard of Care For Removable Appliances in Edentulous Jaws



**Initial Exam: Patient with ill fitting, old dentures that are not retentive**

**Treatment = remake dentures and place 2 implant in the lower jaw to help retain a mandibular denture**



**Initial clinical photo**

**Edentulous mandibular (lower) arch shown here with advanced bone resorption.**

# The Diagnostic Phase



- The new dentures are then converted into scanning appliances which will show up on the CT scan.



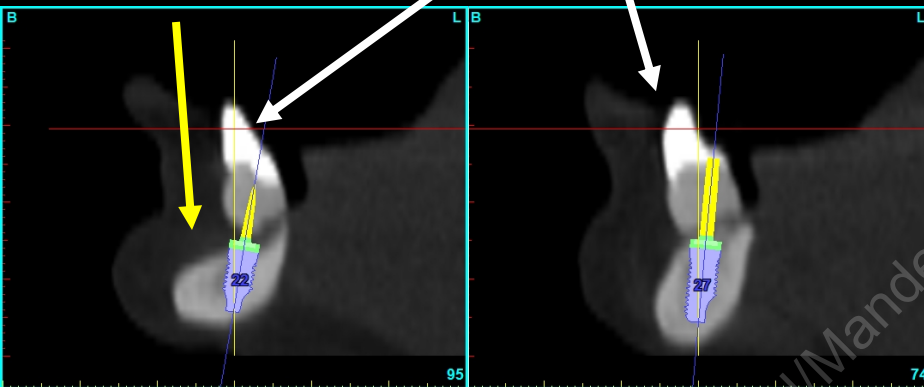
- The patients upper and lower dentures are remade first to establish proper lip support, speech and anatomic orientation of the teeth so that implant planning can occur with the knowing where teeth and the prosthesis should be ideally end up.

This represents prosthetically directed implant planning. Planning with the end in mind before the surgery occurs so a road map can be set as to how that end point gets achieved.

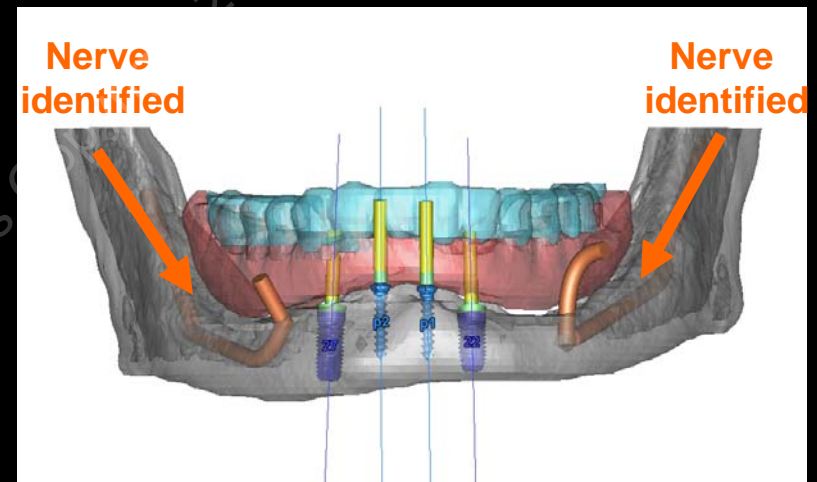
# CT scan analysis for presurgical planning

Patient's native bone

Tooth position planned



## Virtual (3D) CT scan implant planning



- Cross section views of the implant positions. Note the adequate bone width to accommodate the planned dental implant at this position.

- Three dimensional reconstruction demonstrating planned implant positioning for this patient. 2 Implants will be placed. A CT based computer generated surgical guide will be used for precise implant placement.
- Two implants will be used to support a lower denture thereby securing in place during eating, talking and smiling activities. The implants will also help to maintain the remaining bone for this patient LONG-TERM.
- Position of nerves are highlighted in orange for safety in planning surgery.

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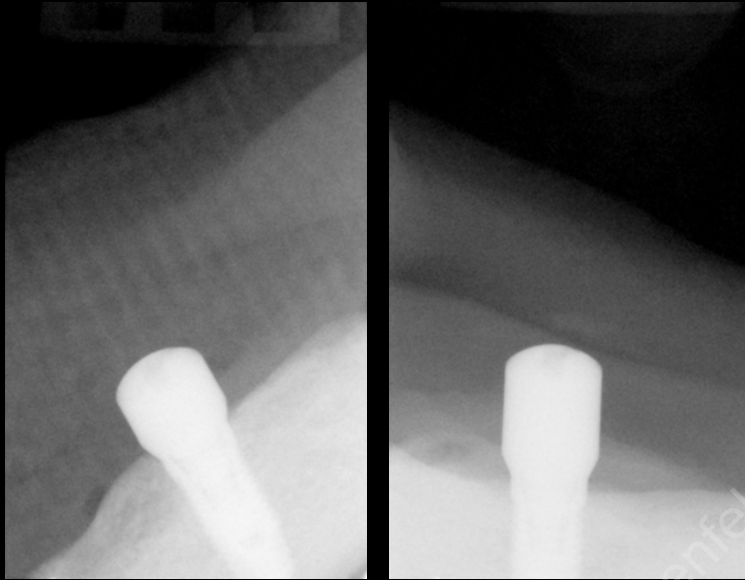
## CT Scan plan and 3D implant planning

CT guided surgery will be utilized to ensure precise implant placement



CT scan technology utilized to create virtual duplicate of the patients jawbone (**red arrows**) and a surgical guide developed (**yellow arrow**) from patients CT scan plan to ensure precise, accurate & safety in implant placement. The larger tubes represent where the implants will be placed while the smaller tubes are for stabilizing the guide.

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**X-rays showing implants placed into lower jawbone**



**Final outcome of the two implants**

**Attachments (gold pieces shown here are called “locator” abutments) which connect to lower denture enabling its security and stability for the patient**

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## New Maxillary Complete Denture & Mandibular Implant Supported Removable Denture



Mandibular denture is removable for the patient, but highly retentive due to the implants

This picture represents the undersurface of the Implant retained denture. There are two retention clips (**yellow arrows**) that attach to the gold implant abutments (“locators”).



Mandibular implant retained removable denture prosthesis with attachments embedded within denture that the implants fit into

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