Use of Dynamic Navigation to Place Rescue Implants with a Duplicated Conversion Prosthesis

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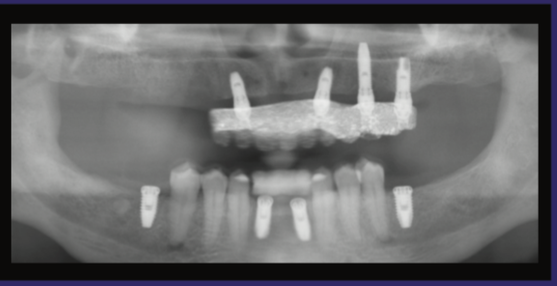
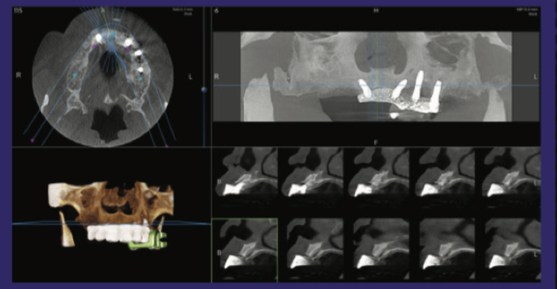
Clinical Scenario

- Patient with a fractured conversion prosthesis and implant loss (x2)
- Additional implant placement needed



Objective

- Describe a technique to streamline implant planning/placement for patients in conversion prostheses with subsequent implant loss



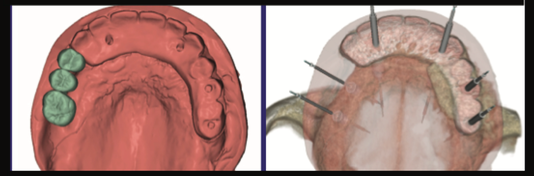
Materials/Methods

- Denture duplicated with 1:5 ratio BaSO4 to acrylic resin
- Updated CBCT overlaid with previous plan for dynamically guided surgery

Fractured Prosthesis | Working Cast

Duplicating Jig | Temporary Cylinders

Duplicated with BaSO4-Acrylic | Try-In

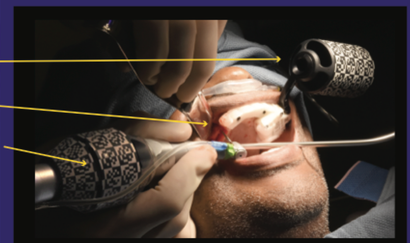


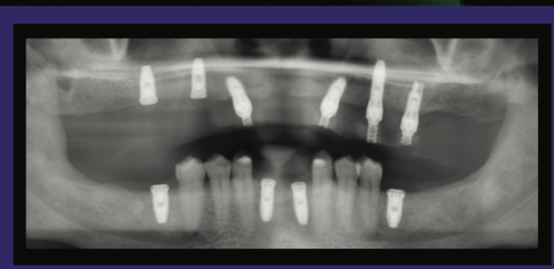
Restorative Plan | Surgical Plan

The views expressed are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, the Department of Defense, or the U.S. Government.

Dynamic Surgery:

- Positional Tracker
- Duplicated conversion prosthesis
- Handpiece with Tracker





Advantages

- Streamline work flow and minimize redundant procedures, using previous prosthetic design
- Fixed/rigid template is dual-purpose radiographic and surgical guide for dynamic navigation
- Allows a dentate work flow for an edentulous patient

Disadvantages

- Additional equipment, materials, and cost
- Requires retrievability of existing prosthesis
- Difficult fabrication of new interim prosthesis

References

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