Guided Full Arch Immediate Load Provisionalization: The *Smart* Technique

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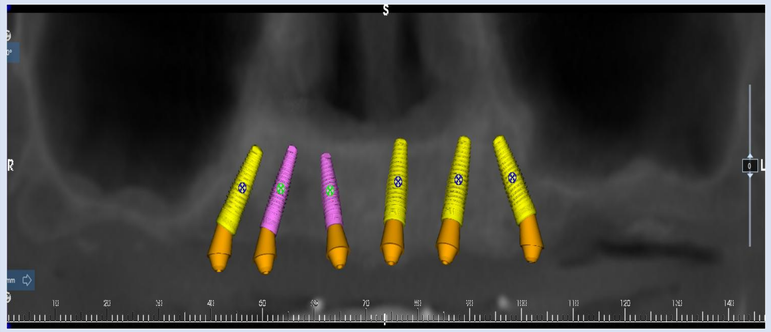
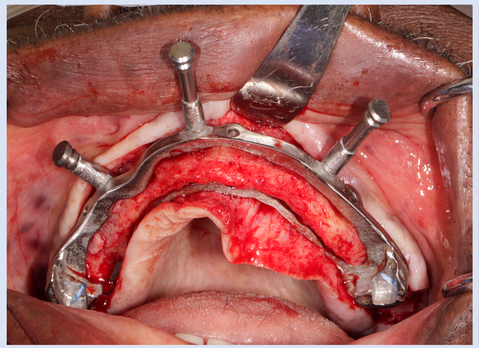
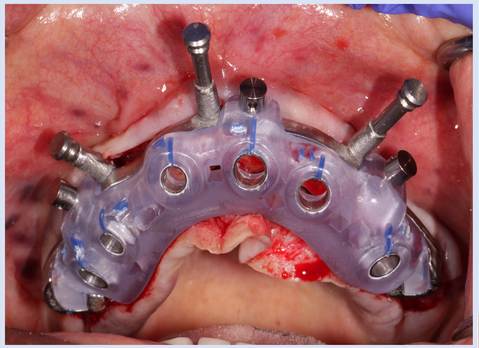
References

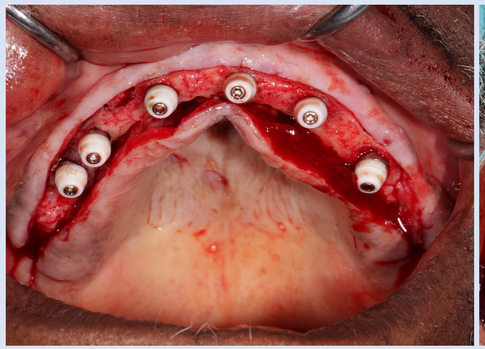
Introduction

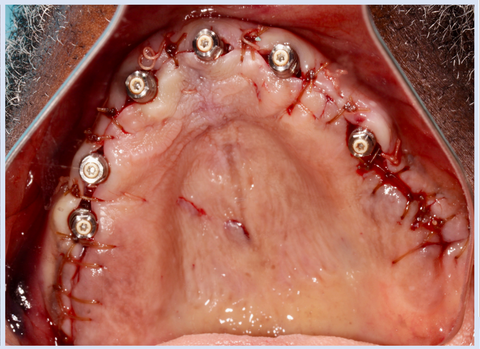
A prosthodontically driven treatment plan is vital to the success of an implant rehabilitation. Guided full arch immediate load workflows include placement of a prefabricated provisional prosthesis within a stackable guide. Although the literature supports this approach for provisionalization, alternative conversion techniques have recently been implemented. The Smart Denture Conversion is a patented system utilized in the presented treatment to reduce patient chair time, increase structural integrity of the prosthesis and decrease occlusal adjustments.

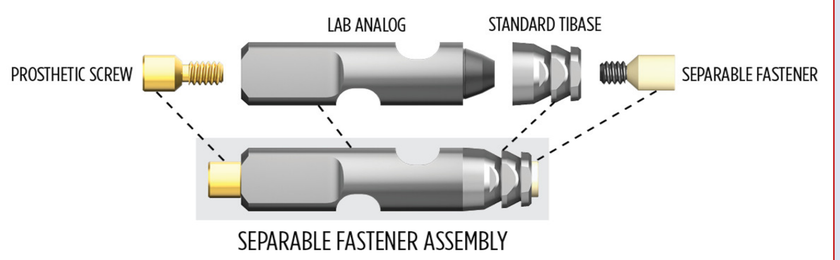












Methods

A 69 year old male presents to MMC with an edentulous maxillary arch. The dual arch scan protocol was used once a maxillary complete denture was fabricated. NDX studio digital planning software was used to plan implant positions and design a stackable surgical guide. Instead of fabricating a provisional that locks into the stackable guide, the smart denture conversion system was implemented. After implant placement, the intaglio of the maxillary denture was adjusted to allow for a passive seat over the separable fasteners. Quickup™ was used to pick up the smart denture conversion Ti bases. During polymerization of the resin, an occlusal record was used to verify the patients centric relation position. Screw access holes were made with the reverse drilling protocol. Post processing of the conversion prosthesis was completed, creating a flat/convex intaglio surface.

Conclusion

The smart denture conversion system is a novel approach for converting a complete denture to a fixed interim, screw-retained implant prosthesis. This system allows the provider to reduce patient chair and anesthesia time. By minimizing the size of the holes necessary to pick up traditional temporary cylinders, the interim prosthesis has better structural integrity compared to the traditional technique. When picking up the smart denture Ti bases, the patient is in occlusion at a pre-recorded centric relation position allowing for minimal post processing occlusal adjustments. The smart denture conversion technique gives the provider more surgical flexibility, while predictably and efficiently delivering a screw retained provisional prosthesis.