BEYOND RESTORATION
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Denture to Interim Hybrid Using the Ministar

By Doug Benting (/spear-review/author/doug-benting/) on December 24, 2014 | (/bookmarks/bookmark/3

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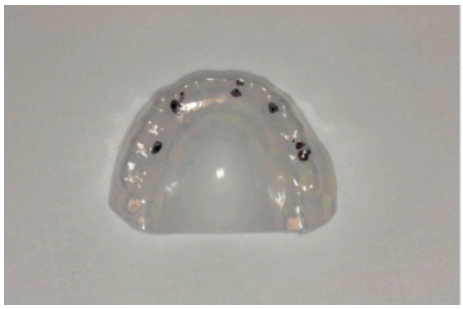
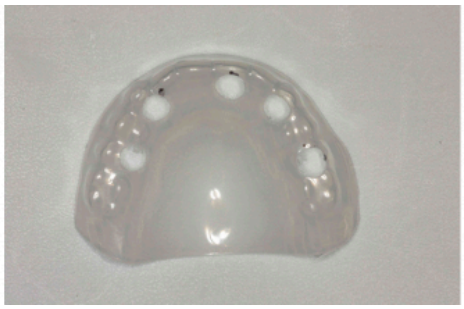
Fixed hybrid prostheses were traditionally designed for mal-adaptive denture patients with significant alveolar bone loss in the mandibular arch. This patient presented with structural concerns with the remaining maxillary dentition with a significant medical history. Practical communication is particularly helpful in the execution of the desired goal in the process of creating an optimal treatment result, particularly when restoring the entire maxillary arch.

Certainly, there are many available techniques for creating surgical guides based on CBCT images. A vacuum formed thermoplastic surgical guideprovides the opportunity to make use of known reference points of the denture with the goal of providing meaningful information for the conversion of the removable prosthesis to an interim hybrid prosthesis. The Ministar S (Great Lakes Orthodontics, Tonawanda, NY) has the ability to apply positive pressure onto the complete denture while simultaneously creating a vacuum beneath the working model to optimize the adaptability of the thermoplastic material.

The Denture to Interim Hybrid Technique Using the Ministar S:





Step 1:

Construct an immediate complete denture that can be used to identify reference points such as the palatal vault for a maxillary prosthesis. The immediate denture with full extensions can be effective as a “Plan B” in the event that the decision is made NOT to proceed with the conversion into a dental implant (https://www.speareducation.com/spear-review/category/implants) supported

Step 2:

Heat the 1.5 mm thick Copyplast material (Great Lakes Orthodontics, Tonawanda, NY), apply air pressure with vacuum, and cooling cycle to press the material over the complete denture. Allow to cool , removed the copyplast material and trim.

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Step 3:

Evaluate the copyplast shell intraorally and mark the positions of the dental implants with a sterile lack felt marker or marking device similar to a Thompson Stick. Cut holes in the area of the copyplast material and reposition onto the immediate complete denture to use as a template to drill holes in the prosthesis in preparation for the titanium temporary abutments.



Step 4:

Evaluate the modified prosthesis intraorally and refine the holes as necessary. Maintain the critical reference points such as the palate of the maxillary denture to maintain a minimal opening for the titanium temporary abutment.

Step 5:

Place a barrier intraorally (rubber dam) and fill the access holes of the titanium temporary abutments with light body VPS or similar material that can be identified and removed easily. Complete backfill with autopolymerizing acrylic resin or bis-acrylic with adhesive using the reference points of the palate and refine the position as necessary.

Step 6:

Complete the backfill of the intaglio surface and polish.

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