



THE UNIVERSITY
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at CHAPEL HILL

"Utilizing Resin Coping Record Base to Capture Interocclusal Records"

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Purpose

An alternative technique to capturing maxillomandibular records following crown preparations.

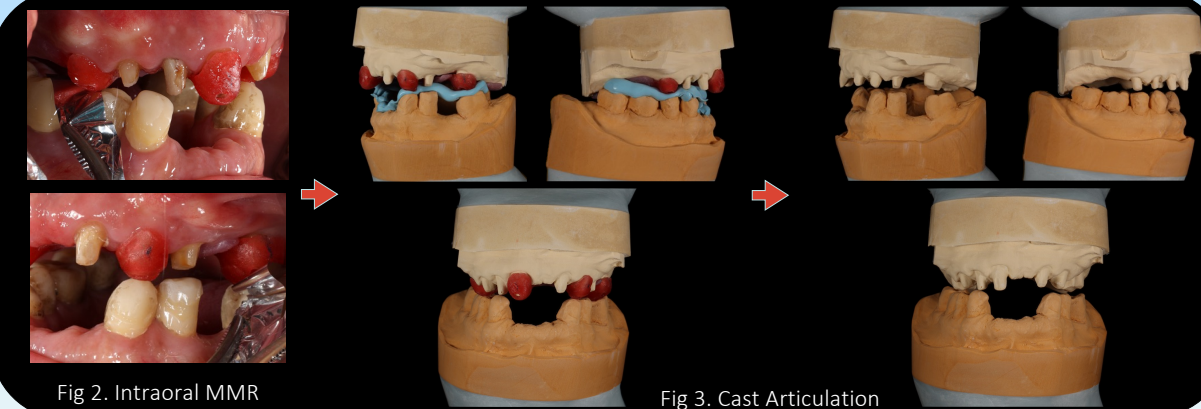
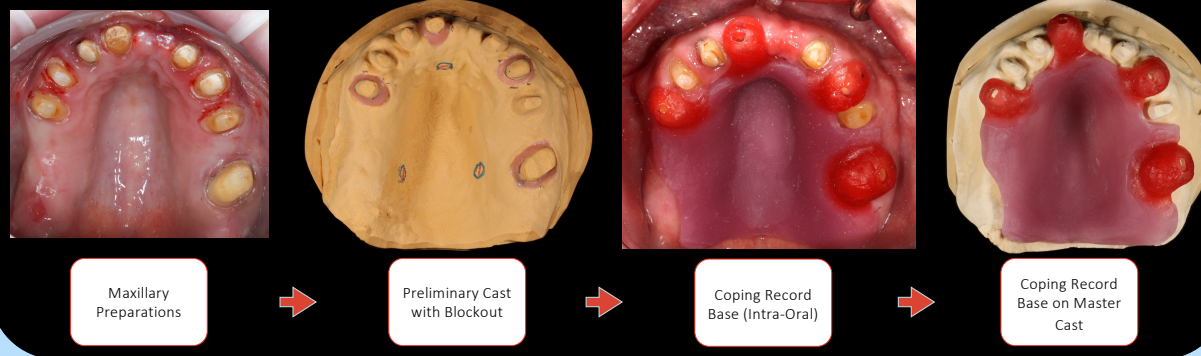
Materials & Methods

Master cast of crown preparations was duplicated with Z-Dupe duplicating silicone. The cast was lubricated and thin baseplate wax spacer applied to preparations. GC Pattern Resin LS was used to create copings directly to master cast. Record base was fabricated using Bosworth Fastray light-cured acrylic. Resin copings were luted to record base.

At maxillomandibular record appointment, resin copings were tried in to confirm passive path of insertion. Margins on resin copings were evaluated to ensure complete seating. GC Pattern Resin cones were used to create record of opposing centric contacts. Opposing provisionals were equilibrated and used to verify the correct vertical dimension of occlusion.

Centric contacts were verified using shimstock (Figure 2). Centric relation was captured and verified intraorally using polyvinyl siloxane. This centric relation record and resin coping record base were used to articulate the casts (Figure 3).

Fig. 1. Clinical Protocol/Workflow



Results

Centric relation interocclusal record was captured reproducibly utilizing stable occlusal stops seated on crown preparations. Transfer of resin coping record base intraorally to articulator was seamless. Cast articulation was accurate.

Discussion

Capturing and verifying centric relation records can present with many challenges. Relying strictly on polyvinyl siloxane to capture interocclusal records can cause inaccuracies and errors. One advantage of the resin coping record base is it provides less resistance to mandibular closure and minimizes deviation along the path of closure. Another advantage is the capability of creating windows on the resin copings to verify complete seating onto the crown preparations.

References

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2. Warren K, Capp N. A review of principles and techniques for making interocclusal records for mounting working casts. Int J Prosthodont. 1990 Jul-Aug;3(4):341-8. PMID: 2088369.