Alternative cingulum rest seat

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Maxillary canines and incisors often lack an adequate cingulum to allow for a conventional cingulum rest preparation (Fig. 1). Cingulum rests on mandibular canines have often not been used because of the perception that there is not adequate thickness of enamel in the rest region. This has recently been refuted in research by Rossi,¹ who found that if the rest seats are prepared on mandibular canines "in the middle third of the crown length, then the average depth of preparation would be well within the confines of the enamel thickness."

This article describes an alternative cingulum rest seat design (Fig. 2) to that of the conventional "inverted V" described for use with teeth having a prominent cingulum.² It is also recommended for use on surveyed crowns.

TECHNIQUE

- 1. A U-shaped cingulum rest seat is prepared (Fig. 3) using a ½ J Blu-White friction grip diamond bur (Teledyne Densco, Denver, Colo.) (Fig. 4).
- 2. The entire preparation is smoothed and sharp angles or lines are rounded using a ½-inch fine sand abrasive disk and right angle mandrel (E. C. Moore Co., Dearborn, Mich.).
- 3. Final polish is accomplished using a Blu-Point (Denticator, Brisbane, Calif.) tapered to fit the rest seat (Fig. 5).

ADVANTAGES

- 1. The shape of the bur used in preparing this rest seat virtually eliminates any possibility of undercutting the preparation and minimizes the creation of sharp angles or lines.
- 2. The rest seat created is deepest near the center of the tooth and therefore helps direct the forces from the removable partial denture along the long axis of the tooth
- 3. Because of its **U** shape, the rest seat conforms to the cementoenamel junction of the tooth and may therefore be placed as far gingivally as possible. This provides for maximum interocclusal clearance and also places the rest



Fig. 1. Average canine with no prominent cingulum.



Fig. 2. Alternative crescent-shaped rest seat.

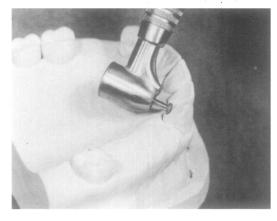


Fig. 3. Initial rest seat preparation.

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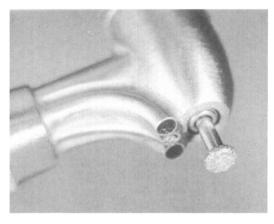


Fig. 4. Blu-White friction grip diamond bur in hand-piece.

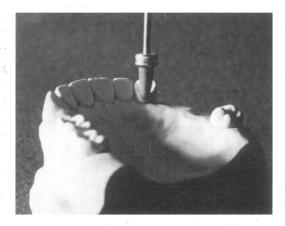


Fig. 5. Final polishing with Blu-Point bur.

as near as possible to the center of rotation of the tooth, thereby reducing torque on the tooth.

4. The rest seat created is large enough to prevent gingival movement of the removable partial denture.



Fig. 6. Comparison between alternative cingulum rest seat and inverted V conventional rest seat.

5. Preparation of this rest seat is simple, easy, fast, and requires a minimum of equipment.

CONCLUSION

A comparison between the conventional inverted V and the alternative cingulum rest seat is seen in Fig. 6. The alternative cingulum rest seat meets all the requirements for good rest seat preparations and has several advantages and benefits over a conventional cingulum rest seat. This rest seat should be considered for all cingulum rests, particularly for teeth with an inadequate cingulum for a conventional rest seat and for patients with minimal interocclusal clearance.

REFERENCES

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