

# TECHNIQUE CLINIC

## Bite Opening with the Güray Bite Raiser

Orthodontists often need to open the bite in the beginning stages of treatment to avoid traumatic occlusion caused by bracket interferences, crossbites, or other impediments to tooth movement. Many devices have been utilized for this purpose, including anterior or posterior bite splints, bonded lingual biteplanes or Bite Turbos,\* and bonded occlusal composite resin build-ups.<sup>1,2</sup>

All of these devices have some limitations. The bite splints require impressions, laboratory procedures, and additional appointments for insertion and monitoring. Bonded lingual biteplanes are not adjustable and can be difficult to remove. Composite resin build-ups require additional chairtime and may cause undesired occlusal enamel wear if filled resins are used. In addition, the composite may become worn down and ineffective due to bruxism, requiring additional chairtime to restore it to the appropriate height.

In 1999, Güray introduced a new type of bite-opening appliance, the temporary bite raiser.<sup>3</sup> This was made of .040" stainless steel wire that was adapted to the

occlusal surface of the maxillary first molar. At the time of its introduction, the principal drawback of the appliance was the time necessary to fabricate it at chairside. Recently, however, a prefabricated version of Güray's device has been introduced. I have found it effective under most conditions when molar bands with headgear tubes are used.

The Güray Bite Raiser\*\* is designed to be inserted into the headgear tube and then hinged into place over the occlusal surface of the maxillary first molar. It is tied with a stainless steel ligature wire to a lingual attachment on the molar band (Fig. 1). The Bite Raisers are manufactured in two sizes, .8mm and 1mm, which can accommodate most bite-opening requirements (Fig. 2). Although Güray initially recommended placing the device unilaterally, I have found that bilateral placement balances the posterior occlusion more effectively and comfortably for the patient.

The Bite Raiser has several advantages over existing techniques:

- It can be placed or removed easily and quickly without patient discomfort or the need for special instruments.
- The patient's bite relationship can be assessed as often as necessary by removing the ligature



Fig. 1 Güray Bite Raisers attached to maxillary first molars.



Fig. 2 Change in occlusal contact after placement of Bite Raisers.

and hinging the device out of occlusion.

- No laboratory procedures are required.
- Patient acceptance has been comparable to that of other bite-opening appliances.
- The stainless steel appliance is adjustable and designed for use with either occlusally or gingi-

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vally placed headgear tubes. In addition, I have found that it can be equally effective if inserted into a lingual molar sheath and hinged over the occlusal surface (Fig. 3).

The major disadvantage of the Bite Raiser is that it may not allow headgear or auxiliary wires to be placed simultaneously. It also should not be used in cases where anterior biteplanes are required.

### REFERENCES

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2. Brobakken, B.O. and Zachrisson, B.U.: Abrasive wear of bonding adhesives: Studies during treatment and after bracket removal, *Am. J. Orthod.* 79:134, 1981.
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**Fig. 3 Attachment of Bite Raiser into lingual sheath instead of headgear tube (holding auxiliary segmental wire).**



**RICHARD F. CEEN, DDS**  
Professor  
Department of Orthodontics  
Baylor College of Dentistry  
3302 Gaston Ave.  
Dallas, TX 75246  
e-mail: rceen@tambcd.edu