Enhanced CPD DO C

# Tricks of the Trade

## Making a palatal temporary anchorage device distalizer more comfortable

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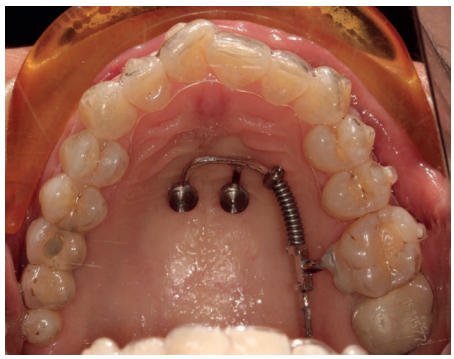

**Figure 1.** The Beneslider.

**Figure 2. (a,b)** Bumper sleeve, 2-mm lengths cut and stretched using a Mitchell's trimmer.

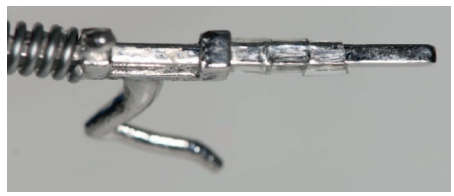

**Figure 3.** The guide rail.

**Figure 4.** A small notch was created near the end of the guide rail.

**Figure 5.** Composite used to create a smooth, rounded tip to the guide rail.

Distal movement of upper molars is challenging for patients with a dental Class II occlusion, an increased overjet or anterior crowding. Most of the conventional non-compliance devices can distalize upper molars, but with a loss of anchorage that results in an increased overjet. Appliances that are retained by palatal temporary anchorage devices, for example the Beneslider (Figure 1),[1] are able to successfully distalize upper molars with no resulting anchorage loss. However, in common with lingual appliances,[2] the palatal distalizer can cause discomfort to the tongue. In particular, the distal end of the guide rail can lacerate the tongue. This technique effectively reduces the likelihood of trauma to the tongue and has been successfully used in two cases.

## Steps

- Cut 2-mm lengths of a bumper sleeve, stretch them using a Mitchell's trimmer (Figure 2) and thread them onto the guide rail (Figure 3);
- Create a small notch near the end of the guide rail using a high-speed handpiece and a diamond bur (Figure 4);
- Use a flowable composite to create a smooth, rounded tip to the guide rail (Figure 5);
- The appliance can now be inserted and secured as usual. As the upper molars distalize, the bumper sleeve can be removed in 2-mm increments using a scalpel, ensuring enough space for the bands to slide along the guide rail between appointments.

### Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest.

Informed Consent: Informed consent was obtained from all individual participants included in the article.

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### References

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2. Slater RD. Speech and discomfort during lingual orthodontic treatment. *J Orthod* 2013; **40 Suppl 1**: S34–S37. https://doi.org/10.1179/1465313313y.0000000059