A New Method to retain the Posterior Bite Blocks for Anterior Crossbite Correction

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ABSTRACT

Anterior dental crossbite is a common problem in which maxillary anterior teeth are locked behind the mandibular anteriors. Orthodontic treatment of anterior teeth crossbite need unlocking of upper anterior teeth. Several methods are used to raise the bite for anterior teeth crossbite correction. Posterior acrylic bite blocks are commonly used to raise the bite. Here, in this article, a new method is described to retain the posterior bite block for anterior crossbite correction.

Keywords: Anterior dental crossbite, Orthodontic treatment, Posterior acrylic bite blocks.

INTRODUCTION

Traditionally, acrylic bite blocks on the occlusal surface of teeth are used to raise the bite for correction of anterior crossbite. Later on, these were cemented with glass ionomer cement (GIC). Most of the time patient reports before the prescribed appointment with loose biteblocks and debonded brackets, thus delaying the treatment. Another method used most frequently in the clinics is using GIC blocks on molars, which get chipped off causing a failure to achieve desired results.

TECHNIQUE

A new technique of fabricating an acrylic bite block with stainless steel tubes (16-gauge needle, Fig. 1) incorporated into the blocks is presented. The following is a simple method of fabrication of bite blocks:
1. Make an impression of the mandibular arch and prepare the working cast. Apply separating medium on it. Sprinkle self-cure acrylic powder and liquid on it and make a bite block (half of the desired thickness).

2. Now place the measured length (Fig. 2) of the hollow stainless steel tubes over the bite block.
   - Above the contact area of second premolar and first molar.
   - Above the contact area of first and second molars.

3. Continue the acrylization of the bite block to desired thickness taking care that acrylic does not flow inside the tube.

4. Remove the bite blocks from the working cast. After finishing and polishing the appliance cement it with GIC (Fig. 3).

5. Now pass the twisted ligature wires (double thickness of 0.010” stainless steel ligature wire or brass wire) through the hollow tubes. Pass the lingual ends of ligature wires below the contact areas and tie it with the buccal ends of the ligature wires (Figs 4 to 7).

**CONCLUSION**

This technique has been found to be reliable and convenient, especially since it avoids the loosening of the bite block before patient’s visit and keeps the bite open as desired. Moreover, the bite block can be given unilaterally without any chance of swallowing it, because it is tied with the help of ligature/brass wire. Patient compliance with the appliance is also found to be excellent.

**REFERENCES**