Clinical Pearl

Hygienic bite blocks

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Abstract

High mandibular plane angle cases with anterior cross-bite and cases with over erupted molars require occlusal bite blocks for its correction. On removal of fixed bite blocks, adhesive remnants inadvertently left over on the tooth structure requires meticulous clean-up and equilibration of occlusal tooth surface morphology. Stainless steel band material, light curable acrylic resin material, lingual sheath, 0.7 mm stainless steel wire, tungsten carbide bur are utilized for fabrication of hygienic bite blocks. After treatment of malocclusion, on removal of hygienic bite blocks the tooth surface is rendered free from any adhesive remnant. Hygienic bite blocks are amenable to oral hygiene care procedures and on its removal, leaves behind no adhesive remnants thereby saving clinician's chair-side time.

Key words: Adhesive bite blocks, fixed occlusal bite blocks, light-curable bite blocks

INTRODUCTION

Treatment of vertical and transverse discrepancies which are of dental in origin is accomplished by the orthodontist using bite blocks. Mandibular plane angle plays a role in deciding whether an anterior or posterior bite block is required to treat dental malocclusions in vertical and transverse dimension.

Bite blocks are categorized into removable and fixed types. Based on the compliance elicited from the patient, one of the above can be chosen. High mandibular plane angle cases with dental crossbite in anterior segment can be treated with posterior bite blocks, likewise, extrusion of molars causing anterior open bite is treated using posterior bite blocks. Fixed bite blocks can be fabricated using colored band adhesive material and restorative glass ionomer cement. Whereas, in cases of heavily restored occlusal surfaces, bonding onto occlusal surface is problematic.[1] Removable bite blocks are fabricated using self-polymerizing resins and heat polymerizing resins. Compliance from the patient is of utmost importance in eliciting good response to treatment. As fixed bite blocks cover the occlusal surfaces, removal of the same without denuding the enamel layer of the occlusal surface is of importance in maintaining the integrity of the tooth as well as removal of the adhesive remnants.

Maintaining the oral hygiene during the treatment procedure requires removal of the bite blocks during the recall visits and also re-adjustment of the height of the bite block is of importance in the management of the anterior cross-bite.

I have hereby devised a new method of fabrication of the fixed bite block appliance which renders itself to oral hygiene care procedures and is easy to remove with no residual adhesive remnants on the occlusal surface. Please refer Figure 1a-f.

Step 1: Obtain working model of the mandibular arch. Select appropriate width of the band material based on

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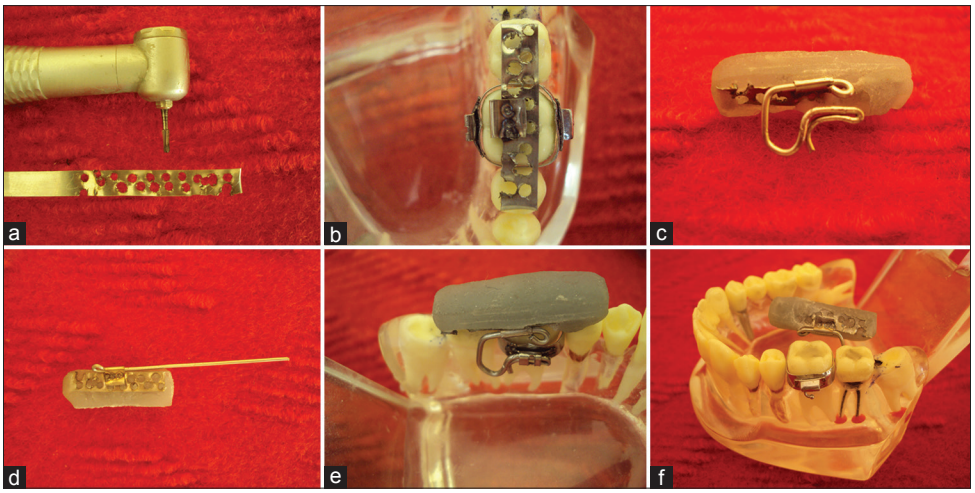

Figure 1: (a) Stainless steel band material with perforations. (b) Sleeve welded onto band material. (c) Sleeve with 0.7 mm stainless steel wire. (d) Bite block fabricated. (e) Bite block secured into lingual sheath. (f) Bite block flipped onto lingual side

the labiolingual width of the occlusal surface of the molar. Using a tungsten carbide bur make perforations on the band material (a).

Step 2: Weld a sleeve prepared from the band material onto the perforated band material piece so as to allow a stub made from 0.7 mm stainless steel wire to pass through it (b).

Step 3: Select appropriate preformed and prewelded molar band for the mandibular molar. Weld a lingual sheath onto the preformed molar band (c).

Step 4: Place the perforated piece of stainless steel band material onto the occlusal surface of the molar and fabricate the desired thickness of the bite block utilizing Individo® Lux light (Individo (R) Lux; VOCO GmbH, Anton-Flettner Street, Cuxhaven 27457, Germany; www.voco.com) curable acrylic resin material (d).

Step 5: Pass 0.7 mm stainless steel wire through the sleeve prepared by the band material and connect it to the lingual sheath on the molar (e).

Secure the bite block to the lingual sheath using ligature wire. The prepared bite block can be flipped onto the lingual side (f), and oral hygiene procedures can be performed. After correction of malocclusions like cross-bites and extruded molars, the bite block can be disengaged from the lingual sheath. This particular hygienic bite block can be concurrently used in combination with fixed appliance mechanotherapy, is easy to fabricate, leaves behind no adhesive remnants and saves clinicians chair-side time.

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Conflicts of interest
There are no conflicts of interest.

REFERENCE

1. McLaughlin RP, Bennet JC, Trevisi HJ. Arch leveling and overbite control. In: Systemised Orthodontic Treatment Mechanics. 1st ed. Edinburgh: Mosby, Harcourt Health Sciences; 2001. p. 129-60.