Short Communication

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ATRAUMATIC ORTHODONTIC BANDING PROCEDURE-INDIRECT BANDING TECHNIQUE

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ABSTRACT:

In orthodontics, banding of molars is a common procedure during treatment. Banding usually requires increased chairside time and causes fatigue to the orthodontist. Direct banding causes laceration of gingiva, extensive damage to the interdental col, which leads to bleeding, pain and discomfort to the patient. In the present article we are introducing an innovative technique showing a simple and novel laboratory procedure for indirect banding.

Keywords: Biological width, Indirect Banding.

INTRODUCTION:

Banding is the most frequently done procedure during fixed orthodontic treatment. Band construction by any direct method, including the use of preformed bands and contoured band strips has always been a time consuming and fatiguing procedure [3].The level of anticipated pain before orthodontic treatment is higher than the real pain experienced after orthodontic procedures [1].

This simple laboratory procedure for banding, could improve chair side time, precision in banding, decrease fatigue, preventing injury to interdental col, thereby improving treatment efficiency. Here we are presenting a novel technique to band molars where orthodontist himself can do this simple technique.

Description of technique: (Figure:1-5)

Band construction by this procedure includes FOUR major steps,

i] Impression taking: This procedure was carried out by taking the single impression with irreversible hydrocolloid [alginate]. From this impression accurate working models are made with plaster of Paris.

ii] Model slicing: After drying the model, teeth adjacent to the intended tooth to be banded is sliced for about 0.5 to 1.0mm using diamond cutting disk [Figure-1]. The slicing should be done on adjacent teeth with disk positioned parallel to the long axis of the teeth intended to be banded. Care should be taken while Slicing not to extend more than 2mm beyond the gingival margin in order to maintain the normal biological width. As average biologic width consists of the epithelial attachment (0.97 mm) plus connective tissue attachment (1.07 mm) amounting to 2.04 mm. Any violation in biologic width may alter defence mechanisms leading to inflammatory response and accelerating bone loss.[2]

iii] Band fabrication: Band contouring and adaptation should be done accurately along with creating space for

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accommodation of interdental col at gingival part of band in a concave fashion [Figure-2]. Buccal tubes are welded at appropriate position on bands. Separators are placed on first appointment itself after taking first impression so that space will be available for trial in of bands in next appointment, thereby decreasing the number of appointments.

iv] Try in: Try in should be done prior to the fabrication of Transpalatal arch (TPA) [Figure-3, 4].Cementation of TPA with accurate band adaptation is depicted in [Figure-5].

Indications for this technique:

1. All fixed orthodontic treatment procedures,
2. Uncooperative patients undergoing fixed orthodontic treatment,
3. Patients with mental disabilities,
4. Patients with limited mouth opening.

Advantages:

1] Easy, cost effective and simple,

2] Better band adaptation when compared to direct banding,

3] Banding of second molars for better accessibility,

4] Minimal trauma to gingiva compared to direct banding,

5] Decreases patient discomfort and fatigue,

6] Reduced chair side time and appointments.

Disadvantages:

1] Technique sensitive,

2] Banding of adjacent teeth during the same appointment is not possible.

CONCLUSION:

This novel technique provides easy, efficient way of banding by improving access and precision and is beneficial to patient and orthodontist.

REFERENCES:

1. Ngan P, Kess B, Wilson S.Perception of discomfort by patients undergoing orthodontic treatment. Am J Orthod Dento facial Orthop. 1989 Jul; 96(1):47-53.
2. Garguilo AW, Wentz FM, Orban B. Dimensions and relations of the dentogingival junction in humans. J Periodontol. 1961; 32:261–7.
3. John T.Lindguist, Indirect band technic, Angle orthodontist Vol.29, no.2.April, 1959.

FIGURES:

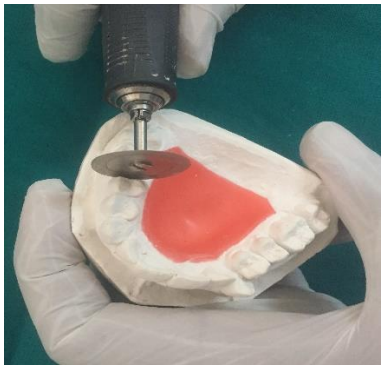

Figure 1:Modle slicing

Figure 2:Band fabrication

Figure 3:Try-in

Figure 4: Try-in

Figure 5: Transpalatal arch (TPA) cementation