Smile Corridor Aesthetics and Canine Impaction

Dr. Bhushan Jawale, Dr. Sheetal Potnis, Dr. Apoorva Kaluskar, Dr. Amit Chaudhari

Sinhgad Dental College and Hospital, Sr. No 44/1 Off Sinhgad Rd, Vadgaon Bk, Pune 41104

Abstract: The buccal corridor is more commonly referred by orthodontists as negative space present between the lateral aspects of maxillary posterior teeth and the corner of the mouth during smiling which appears as a black or dark space. The mouth and teeth are considered fundamental in facial aesthetics. The attractiveness of smiles has been evaluated in modern orthodontics and the three main aspects of smile aesthetics which have recently received great attention are the amount of gingival display, the presence of the smile arc and the buccal corridor spaces. Frush and Fisher defined the buccal corridor as the spaces between the facial surfaces of the posterior teeth and the corners of the lips when the patient is smiling. They considered that the presence of the buccal corridor was important to attempt to fabricate a more natural-looking denture. At present, however, because more people are living longer and preserving their natural teeth, the perception of pleasing smile aesthetics might be changing. In fact, when general masses were shown full-face color photographs with five alterations in the buccal corridors, they preferred faces with minimal buccal corridor spaces. They specifically preferred broader smiles to narrower smiles. Aesthetic improvement is a primary reason for which people seek orthodontic treatment. The maxillary canines are considered to have a great importance for both function and aesthetics. This article describes change in buccal corridor space after the orthodontic treatment of a 25 years old female with Class I molar relation and buccally placed maxillary canines.

Keywords: Buccal Corridor, Facial Aesthetics, Canine Impaction

1. Introduction

The buccal corridor is more commonly referred by orthodontists as negative space present between the lateral aspects of maxillary posterior teeth and the corner of the mouth during smiling which appears as a black or dark space.

The mouth and teeth are considered fundamental in facial esthetics.^{1,2} The attractiveness of smiles has been evaluated in modern orthodontics and the three main aspects of smile aesthetics which have recently received great attention are the amount of gingival display, the presence of the smile arc and the buccal corridor spaces.

Frush and Fisher³ defined the buccal corridor as the spaces between the facial surfaces of the posterior teeth and the corners of the lips when the patient is smiling. They considered that the presence of the buccal corridor was important to attempt to fabricate a more natural-looking denture. At present, however, because more people are living longer and preserving their natural teeth, the perception of pleasing smile aesthetics might be changing. In fact, when general masses were shown full-face color photographs with five alterations in the buccal corridors, they preferred faces with minimal buccal corridor spaces⁴. They specifically preferred broader smiles to narrower smiles.

Aesthetic improvement is a primary reason for which people seek orthodontic treatment. The maxillary canines are considered to have a great importance for both function and aesthetics.

This article describes change in buccal corridor space after the orthodontic treatment of a 25 years old female with Class I molar relation and buccally placed maxillary canines.

2. Methods



Figure 1



Figure 2

3. Diagnosis & Treatment Planning

25 years old female presented with Angle's Class I molar relation with buccally placed maxillary canines due to

Volume 7 Issue 1, January 2018 <u>www.ijsr.net</u>

Licensed Under Creative Commons Attribution CC BY

over-retained primary canines. On smiling she had 2 mm of gingival display with 2mm of buccal corridor space. Her treatment planning included extractions of primary canines followed by Fixed Orthodontic Treatment. Use of MBT⁵ prescription with 0.022" slot, followed by initial leveling and alignment. Canines were taken into alignment with the help of piggy back technique.

4. Results



Figure 3



Figure 4



Figure 5

After orthodontic treatment, the smile arc improved drastically. Change inbuccal corridor space could be appreciated. With the canine alignment gingival display was minimized and smile micro esthetics was improved.

Orthodontic Pers

The amount of gin

5. Conclusion

The amount of gingival display, the presence of the smile arc and buccal corridor spaces affect the esthetics and orthodontic treatment has potential to manipulate it.

References

- [1] Shaw WC, Rees G, Charles CR. The influence of dentofacial appearance on the social attractiveness of young adults. Am J Orthod. 1985;87:21–26.
- [2] Peck S, Peck L. Selected aspects of the art and science of facial esthetics. SeminOrthod. 1995;1:5–26.
- [3] Frush JP, Fisher RD. The dynesthetic interpretation of the dentogenic concept. J Prosthet Dent.1958;8:558– 581.
- [4] Moore T, Southard KA, Casko JS, Qian F, Southard TE. Buccal corridors and smile esthetics. Am J OrthodDentofacialOrthop. 2005;127:208–213.
- [5] A Clinical Review of the MBT[™] Orthodontic Treatment Program Richard P. McLaughlin, D.D.S., John C. Bennett, D.D.S., and Hugo Trevisi, D.D.S. Orthodontic Perspectives, Vol. IV No. 2, 1997.

Volume 7 Issue 1, January 2018 <u>www.ijsr.net</u> Licensed Under Creative Commons Attribution CC BY