

Clinical Pearl

To cite: Amit kumar Khera, Pranav Bhasin, Prashant sharma, Kumar Amit

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Simplyfing Class II Div 2 Alignment

¹Amit kumar Khera, ²Pranav Bhasin, ³Prashant sharma, ⁴Kumar Amit

¹Associate Professor, ^{2,3}Junior Resident, ⁴Lecturer
^{1,2,3,4} Department of Orthodontics Subharti Dental College, Meerut.

ABSTRACT

Class II div 2 malocclusions have Labially tipped maxillary lateral incisors and retroclined maxillary central incisors, so placing a straight NiTi wire often aligns these teeth out of the arch. Even though NiTi wires influence the average appointment time and help make life easier for orthodontists, they have a reputation of aligning teeth at the expense of reciprocal forces exerted on adjacent teeth, which are mostly unwanted. A simple method to align these teeth in their correct axial inclinations is explained in the following clinical innovation technique.

INTRODUCTION

Labially tipped maxillary lateral incisors and retroclined maxillary central incisors are the characteristic feature of Angle's class II div 2 malocclusion^{1,2}. The correction of such a malocclusion is often accomplished by placing a NiTi wire to achieve leveling and alignment. However, this often leads to excessive proclination of the maxillary central incisors, upto the level of maxillary lateral incisors, which is undesirable, and contributes in prolonging the treatment time. A high chance of round tripping with such mechanics often leaves orthodontists frustrated. Segmental mechanics is the simple solution to counteract these side effects.

CLINICAL TIP

Retroclined maxillary Central incisors required different biomechanics as compare to labially tipped maxillary lateral incisors. Retroclined maxillary Central incisors needed advancement, intrusion and Torquing and Labially tipped maxillary lateral incisors required only lingual tipping movement. On the basis of this biomechanical concept, we develop a innovative and simplified technique for alignment in Angle's class II div 2 malocclusion.

In this technique advancement, intrusion and torquing of Retroclined Central incisors easily achieved by Protraction utility or intrusion arch and lingual tipping of labially tipped maxillary lateral incisors easily achieved by pulling force from palatal side.

This mechanics is only useful in those Class II div-2 cases where there is sufficient clearance for maxillary lateral incisors to move in palatal direction. If there is minor overlapping between central and lateral incisors, proximal stripping should be performed first to create clearance.



Fig-1: Mechanics for alignment by elastic module and intrusion arch in patient.



Fig-2: Mechanics for alignment by elastic and intrusion arch in patient

STEPS

1. An anterior bite plane is often part of the treatment plan for a patient with a class II div 2 malocclusion. For lingual tipping of labially tipped maxillary lateral incisors, we have embedded 2 lingual buttons (one on each side) in fixed anterior bite plane just palatal to labially tipped maxillary lateral incisors.
2. An E-thread /elastic/ elastic module can be used to pull the labially tipped maxillary lateral incisors palatally by

connecting the lingual button and the lateral incisor bracket. (Fig 1, 2). Re-activation of force done every month.

3. Simultaneously, Retroclined central incisors were advanced, intruded and torqued by intrusion arch .

CONCLUSION

The axial inclination of labially tipped maxillary lateral incisors and retroclined maxillary central incisors in Angle's class II div 2 malocclusion can be successfully corrected by this simplified method.

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