

Modified Archwire Helix for Placing Forsus Fatigue Resistance Device

Rishin Basheer¹, Rajasigamani², N Kurunji Kumaran³, Terry Thomas Edathotty⁴

¹Senior Lecturer, Department of Orthodontics and Dentofacial Orthopedics, PSM Dental College, Trichur, Kerala, India

²Professor, Department of Orthodontics and Dentofacial Orthopedics, Rajah Muthiah Dental College and Hospital, Cudallore, Tamilnadu, India

³Reader, Department of Orthodontics and Dentofacial Orthopedics, Rajah Muthiah Dental College and Hospital, Cudallore, Tamilnadu, India

⁴Reader, Department of Orthodontics and Dentofacial Orthopedics, Mar Baselios Dental College, Kothamangalam, Trichur, Kerala, India

INTRODUCTION

The usual problem faced by the clinician while using the forsus fatigue resistance device as a fixed functional appliance is the debonding of canine bracket. According to the instruction, the push rod of the forsus fatigue resistance device is placed on the arch wire distal to the canine bracket. Since the restraining force of the mandibular advancement is transmitted to the canine bracket, it eventually ends up in breakage. This article describes a refined arch wire modification to overcome this problem.

PROCEDURE

1. 0.021×0.025" stainless steel lower arch wire was used. Using a white marker, a mark is transferred on to the arch wire distal to the canine bracket bilaterally [Fig. 1].
2. Using Charles tweed pleir a loop was made distal to the marked area. The loop should be made gingival and winded outside the arch form with a diameter of 2mm [Fig. 2 & Fig. 3]
3. By using bird beak pleir an acute first order bend was made on to the distal end of the loop

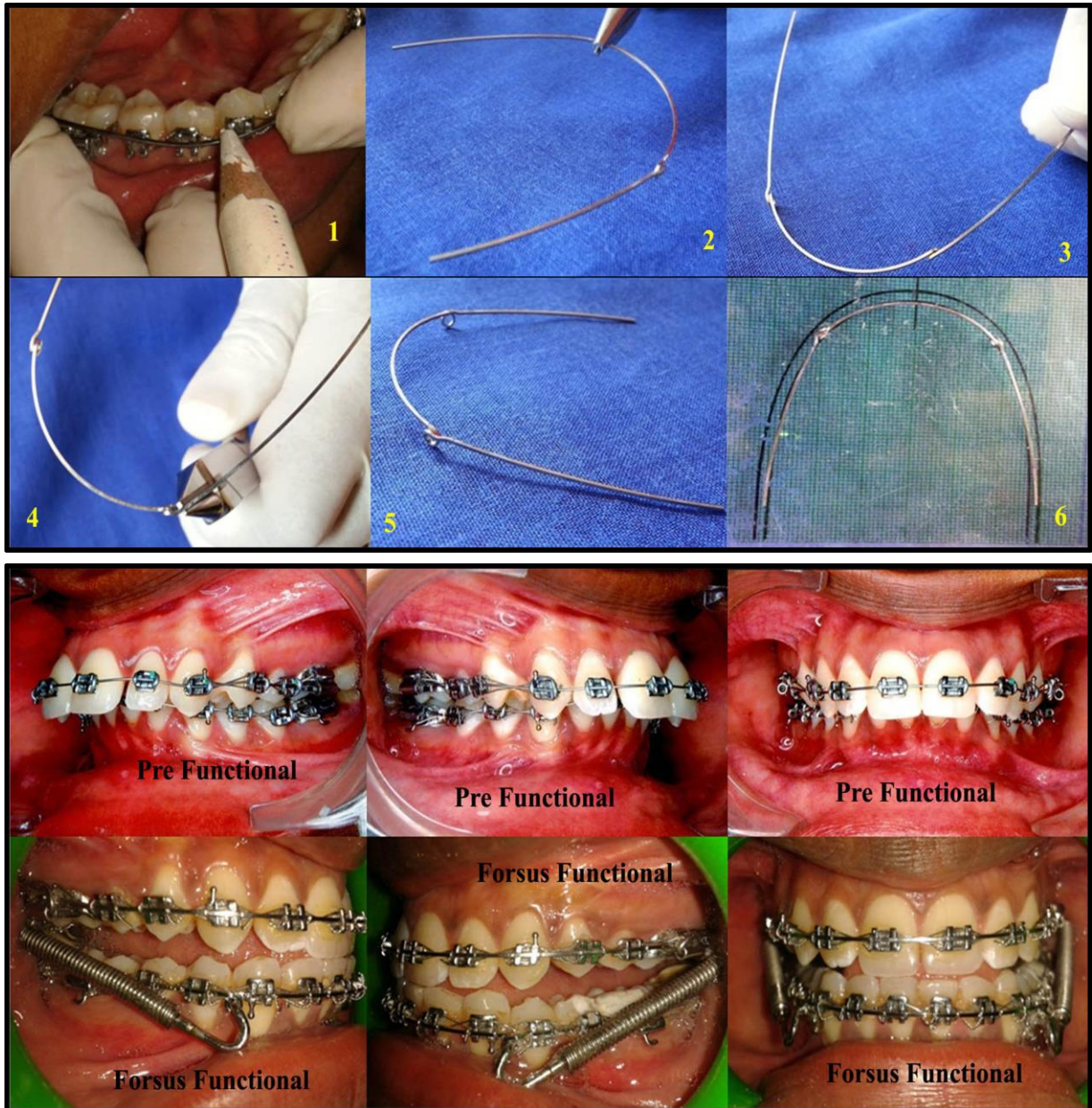
to attain the confined arch form [Fig. 4 & Fig. 5].

4. The arch form and plane of the modified lower arch wire was checked on the arch template [Fig. 6].

The lower arch wire modification with occlusal loop^[1] produced occlusal interferences with maxillary canine hence we refined and preferred gingival loop with compensating first order bend.

REFERENCES

1. Sood S. The forsus fatigue resistance device as a fixed functional appliance. *J Clin orthod.* 2011;45;463-467.
2. Sood S. Muscle response during treatment of Class II division 1 malocclusion with forsus fatigue resistant device, *journal of pediatric dentistry.* 2011.
3. Franchi L, Masucei C. Effectiveness of comprehensive fixed appliance treatment used with forsus fatigue resistant device in class II patients. *The Angle Orthodontics.* 2011.



4. Arici S, H.Akan. Effects Of fixed functional appliance treatment on TMJ. American Journal of Orthodontics and Orthopedics. 2008
5. Vogt W. The Forsus Fatigue Resistant device. J Clin Orthod. 2006;40:368-77.