## **Clinical Pearl**

**To cite:** Abhimanyu Rohmetra, Pratik Chandra, Ragni Tandon - R-Retainer Clip for Lingual Bonded Retainers. Journal of Contemporary Orthodontics, April-June 2019;3(2): 54-55.

Received on: 20-02-2019

Accepted on: 21-05-2019

Source of Support: Nil
Conflict of Interest: None

## R-Retainer Clip for Lingual Bonded Retainers

## <sup>1</sup>Abhimanyu Rohmetra, <sup>2</sup>Pratik Chandra, <sup>3</sup>Ragni Tandon

<sup>1</sup>PG Student, <sup>2</sup>Reader, <sup>3</sup>Professor and Head

1,2,3 Department of Orthodontics and Dentofacial orthopaedics, Saraswati Dental College , Lucknow , India

#### **ABSTRACT**

To have stable orthodontic corrections, many malocclusions require the so-called permanent or fixed retention. Bonding of lingual retainer needs stabilization for accuracy and survival of retainer. The present article describes a simple, cost-effective, and quick method using R clip for stabilisation and placement of bonded lingual retainer.

Key words: retainers, bonded lingual retainer

#### INTRODUCTION

Since the introduction of bonded lingual retainer by Zachrisson<sup>1</sup> its use has become commonplace and several methods for delivering fixed lingual retainers have been introduced. However, it is a challenge to bond lingual retainers at the accurate position without any stabilization. A slight change in its position of the retainer increases the likelihood of fracture which may result in retainer failure. Several methods to deliver bonded lingual retainer are documented in the previous literature - dental floss<sup>1</sup>, orthodontic elastics<sup>2</sup>, pearls wire jig<sup>3</sup>, retainer positioner<sup>4</sup>. Dental floss and orthodontic elastics may cause irritation to the interdental papilla and pain if tight contact is present. Pearl wire jig has disadvantage of its retentive tag which interferes with the bonding surface of tooth, whereas retainer positioner<sup>4</sup> has chances of slip from the tooth unless properly placed.

The new "R retainer clip" is very simple to fabricate and stabilizes retainer wire without interfering in its proper adaptation to the lingual surface of the tooth to be bonded.

#### **FABRICATION OF R CLIP**

- 1. A  $0.017 \times 0.025$  inch straight rectangular stainless steel wire is taken.
- A pair of double helical rectangular box frame is fabricated (Figure 1).

## PLACEMENT OF CLIP FOR STABILISATION OF RETAINER

- $1. \quad \text{Adapt } 0.0175\text{" stainless steel flexible spiral wires in the patient} \; .$
- 2. Place the flexible R clip to stabilise the wire on both the canines (Figures 2, Figure 3, Figure 4)
- 3. Etch the lingual tooth surfaces, and bond the retainer on 54

- individual tooth using light-cured flowable composite.
- 4. R clip can be shifted easily on any desired tooth during bonding to stabilise the wire properly.
- 5. Once the bonding is complete remove the R clip from the tooth surface (Figure 5).
- 6. After appropriate sterilization same R clip can be reused.

# ADVANTAGES OF THIS TECHNIQUE INCLUDE:

- 1. Saves considerable time, since R clip can be prepared beforehand and usually takes few minutes for preparation.
- 2. R clip can be used on any tooth irrespective of tooth shape and size as it is flexible enough to adapt at any tooth shape.
- 3. R clip can be reused after chemical sterilization
- 4. Eliminates the need for a transfer tray<sup>4</sup>
- 5. Allows precise placement and stabilization of the retainer wire
- 6. Requires minimal patient cooperation.

#### **REFRENCES**

- 1. Zachrisson BU. Clinical experience with direct-bonded orthodontic retainers. Am J Orthod 1977;71:440-8.
- 2. Meyers CE Jr., Vogel S. Stabilization of retainer wire for direct bonding. J Clin Orthod 1982;16:412.
- 3. Naik RD, Gandedkar NH. Wire jigs for stabilizing lingual retainers. J Clin Orthod 2011;45:274.
- 4. Sahu SK, Jayam BK, Barik AK. Retainer positioner J Indian Orthod Soc 2012;46:53-4.

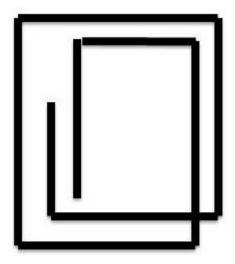


Figure (1): Line diagram of R- Clip



Figure(2): Occlusal view of mandibular arch



 $\textbf{Figure}(5) \textbf{:} \ \textbf{Occlusal view of mandibular arch with lingual bonded}$ retainer



Figure(3): Stabilising R-Clip on canine



Figure(4): Front View of stabilised R-Clip