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Short Communication

The dewdrop retainrer clip – for easy placement of fixed lingual retainers

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ABSTRACT

In Orthodontics, retention period is the most important phase of orthodontic treatment. Malocclusions requiring permanent retention for stability often need fixed lingual bonded retainers for holding the teeth in position. It has several advantages such not being visible and requires no patient cooperation during the retention phase. This article presents a simpler and innovative method of stabilizing the lingual retainer wire during bonding procedure by just holding it with prefabricated Dewdrop retainer holding clip.

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1. Introduction

In Orthodontics, retention period is the most important phase of orthodontic treatment. Success of any orthodontic treatment depends majorly on the stability of the achieved results and prevention of relapse.¹ They have distinct advantages compared to conventional ones that they are not visible from the front, require no patient cooperation, and gives long-term or even permanent retention.²

However, bonding a lingual retainer wire is still challenging today as it requires a long working time and has a risk of contamination from saliva and moisture which can cause bond failure. In the available literature, various authors have fabricated several methods to stabilize the retainer wire in the proper position during direct bonding using fingers,³ dental floss,⁴ orthodontic elastics,⁵ ligature wires etc. Use of dental floss and orthodontic elastics may cause irritation to the interdental papilla, has chances of opening up of spaces causing pain if tight contact is present.

Various types of retainer holding devices such as modified Kesling separators,⁵ and W-shaped lingual retainer wire stabilizer⁶ are also documented. Each of these

has their own advantages and disadvantages.

So the objective of our innovation in this article is to introduce a quick, simpler, and an efficient way to stabilize the fixed lingual retainer during the bonding procedure.

1.1. Fabrication

Following are the sequential steps that must be followed in fabrication:

Figure 1: Armamentarium for fabrication of retainer clip-

1. Bird beak (139 plier)
2. 0.019-inch × 0.025-inch Stainless steel
3. Wire Cutter

1.2. Steps in the fabrication of retainer clip-

1. (a) Take 0.019 × 0.025 inch SS wire to make a U shape of Dewdrop retainer clip as shown below (Figure 2).
- (b) Around 10mm from the U shape, make a bend on both the sides to make the buccal and lingual arms parallel and touching each other. Make the retentive tags on both the arms to prevent the terminal ends from harming the underlying soft

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tissues (Figure 3).

- (c) Now bend the lingual arm to cross over the buccal arm and making the angle between the arms by around 30° for easy and better placement (Figure 4).

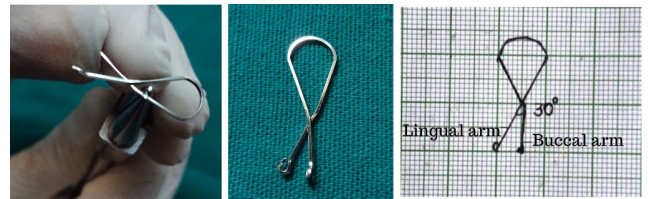


Figure 4: ;

2. Procedure for Placing the Retainer Clip

- Step 1:** Lingual surfaces of the anterior teeth to be bonded are etched and cleaned with water properly. After drying, a bonding agent is applied and cured with curing light.
- Step 2:** The wire is placed and stabilized using the Dewdrop retainer holding clip.
- Step 3:** To hold the retainer wire with a clip, the head of the clip is pressed, which separates the buccal and lingual arms of the clip and is then placed interdentally to stabilize the retainer wire (Figure 5). Three clips should be placed for adequate stabilization of retainer i.e., in between central incisors and in between lateral incisor and canine bilaterally.

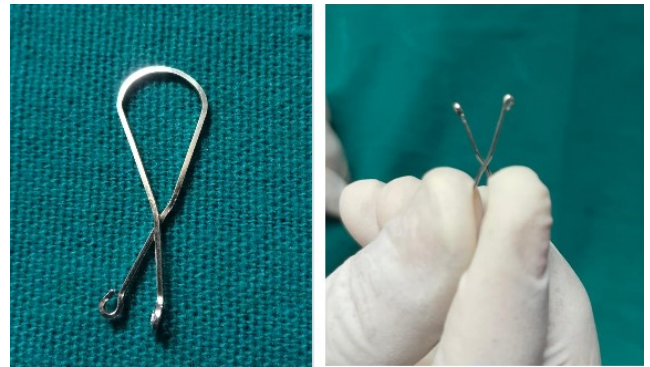


Figure 5:

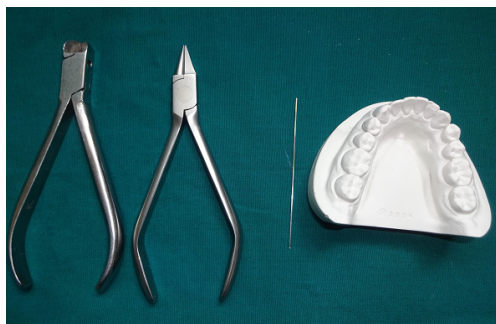


Figure 1:

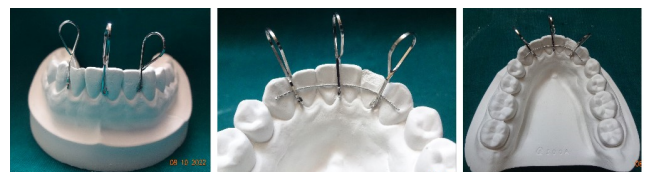


Figure 6: (Retainer Clip placement on model).

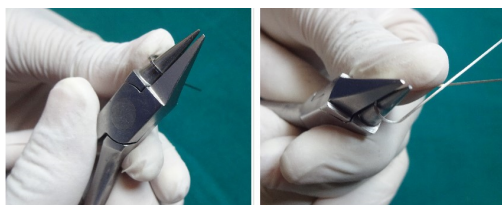


Figure 2:



Figure 7: (Intraoral view of retainer clip in place)

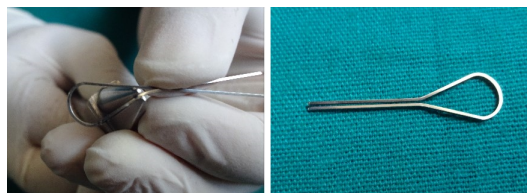


Figure 3:

2.1. Advantages

1. Simple in design and easy to fabricate
2. No extra laboratory work required
3. Can be reused after sterilization and no need to refabricate everytime.
4. Gives minimal discomfort to the patient with no risk of opening up of spaces during usage.
5. Can also be used during bonding of the old dislodged retainers and while bonding of the periodontal splints.

3. Conclusion

Our Dewdrop retainer clip stabilizes the lingual retainer during the bonding procedure and allows placing it in the desired position without dislodgement. It saves the chair side time with no additional assistance required making the lingual retainer bonding easier.

4. Source of Funding

None.

5. Conflict of Interest


None.

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