

Rest Appliance: Retainer Stabilizing Appliance

Abhishek Bansal

Department of Orthodontics, Vaidik Dental
College and Research Center, India

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Corresponding author: Abhishek Bansal

✉ ashi142002@yahoo.co.in

Senior lecturer, Department of
Orthodontics, Vaidik Dental College and
Research Center, Nani Daman, Daman and
Diu 396210, India.

Tel: +91-9844243394

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Introduction

Relapse is a major focus of interest after orthodontic treatment, which has drawn attention of many orthodontists since the beginning of Orthodontic era in Dentistry. Few malocclusions are self-retaining but on the other hand various malocclusions such as severe rotations and extraction cases require fixed retention. Fixed retainers are the bonded retainers attached on the lingual surface of the teeth after de-bonding the labial appliance. Sometimes breakage of retainer is observed which require repair but bonding of new lingual retainer is difficult [1-3]. In the past, different direct and indirect fixed bonded retainer techniques have been evolved where various diameter and alloy of wires were used [1]. The indirect method requires an elaborate laboratory procedure for holding the retainer wire on teeth surface for bonding [4-7]. Till now, many methods using finger, dental floss, orthodontic elastics ligatures, and others have been developed to hold the retainer wire but these methods have certain shortcomings [8-14].

To overcome these problems, a new appliance which we named "REST APPLIANCE" have been developed, the procedure is as follows:

Fabrication of Rest Appliance

Prepare a maxillary and mandibular working model. With 0.7 mm round SS wire, prepare V shaped wire bending with helices away from tissue surface at both ends on working models as shown in **Figure 1**.

Prepare labial wire assembly with 0.9 mm round SS wire and soldering has been done with V shaped wire components as shown in **Figure 2**.

Procedure for bonding

1. After debonding, take an impression of the arches and prepare a working model.
2. The twisted 0.010" ligature wire or multistrand wire is adapted along the lingual surface of the anterior teeth on the working model.
3. Perform pumice polishing of the lingual surface of teeth on which retainer is to be bonded.

4. Adjust and check the position of retainer wire (twisted 0.010" ligature wire or multistrand wire) in mouth, if necessary.
5. Place the REST APPLIANCE to hold retainer wire (**Figure 3**).
6. Retainer wire is then adhered using composite, preferably flow able composite.
7. Light curing for 20 s from both mesial and distal side is done.
8. Cut the ligature wires and disengage the stabilizing appliance (**Figure 4**).
9. Post insertion instructions are delivered to the patient.

Advantages

1. It is useful in the cases that require bonded retainer.
2. Useful in cases of broken retainer.
3. When compared to other methods, this appliance holds the wire well adapted at each contact point.
4. The material and time consumption is less.
5. The appliance can be universally used, and also can be custom fabricated.
6. The appliance is easy to fabricate.
7. As the transfer trays are not required, the visibility of the operator is not obstructed.

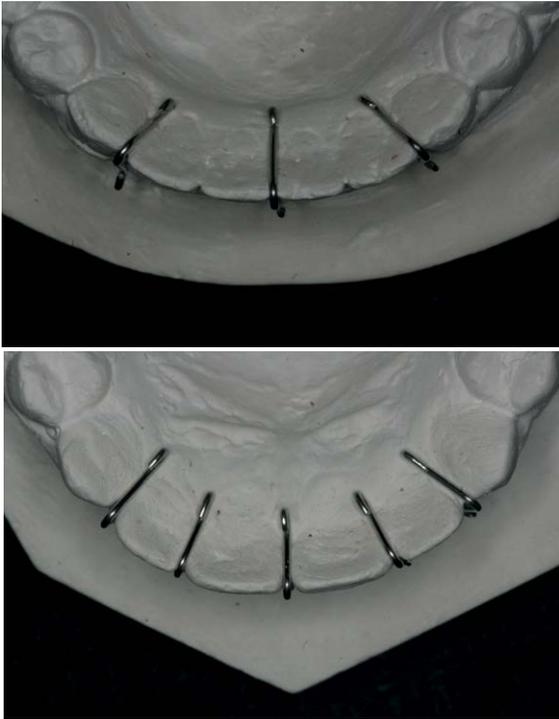


Figure 1 V shaped wire bending with helices away from tissue surface at both ends.

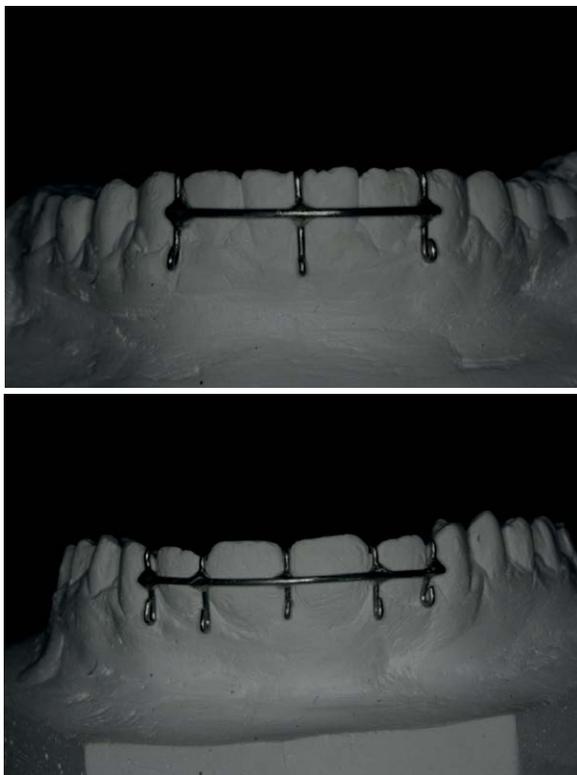


Figure 2 V shaped wire components.

8. All teeth can be etched and bonded with adhesive simultaneously.

9. This appliance can also be used in other departments like periodontics for splinting of periodontally compromised teeth.



Figure 3 Rest appliance to hold retainer wire.



Figure 4 Cut the ligature wires and disengage the stabilizing appliance.

References

- 1 Bearn DR (1995) Bonded orthodontic retainers: A review. *Am J Orthod Dentofac Orthop* 108: 207-213.
- 2 Kaplan H (1988) The logic of modern retention procedures. *Am J Orthod Dentofac Orthop* 93: 325-340.
- 3 Zachrisson BU (1986) Excellence in finishing. *J Clin Orthod* 20: 460-482.
- 4 Chen RS (1978) Prefabricated bonded mandibular retainer. *J Clin Orthod* 12: 788-789.
- 5 Hobson RS, Eastaugh DP (1993) Silicone putty splint for rapid placement of direct-bonded retainers. *J Clin Orthod* 27: 536-537.
- 6 Ferguson JW (1987) Multistrand wire retainers: An indirect technique. *Br J Orthod* 15: 51-54.
- 7 Corti AF (1991) An indirect-bonded lingual retainer. *J Clin Orthod* 25: 631-632.
- 8 Rubenstein BM (1976) A direct bond maxillary retainer. *J Clin Orthod* 10: 43.
- 9 Carter RN (1978) Simplified direct-bonded retainer. *J Clin Orthod* 12: 221.
- 10 Zachrisson BU (1977) Clinical experience with direct-bonded orthodontic retainers. *Am J Orthod* 71: 440-448.
- 11 Zachrisson BU (1982) The bonded lingual retainer and multiple spacing of anterior teeth. *J Clin Orthod* 17: 838-844.
- 12 Eade P (1980) A modified direct bond lingual retainer technique. *Br J Orthod* 7: 125-126.
- 13 Meyers CE, Vogel S (1982) Stabilization of retainer wire for direct bonding. *J Clin Orthod* 16: 412.
- 14 Vibhute PJ (2009) Two new methods for direct bonding 'lingual retainers'. *J Indian Soc Pedod Prevent Dent* 27: 111-115.