



*Clinical Technique*

## Double helix locker for poking wire

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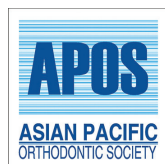
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### ABSTRACT

This article shows a simple way to secure the distal end of flexible wires used in orthodontics.

**Keywords:** Sharp, Locker, Wire

### INTRODUCTION

In orthodontics, bonding is the first step, and the round Ni-Ti wires are the first to be placed. However, in most of the cases after 2 or 3 days of the first appointment, the patient usually complains of poking wires,<sup>[1]</sup> of which the wire coming out of the distal end of the molar tube is very common. We need extra wire at the end of the molar tube in some special cases like Angle's Class II Division 2 or Angle's Class III or situations in which proclination of anterior teeth is needed. Leaving an mm long extra wire, at the end of the molar tube, leads to irritation and ulcers in buccal mucosa of the patient.

Hence, to overcome this problem, we designed a double helix locker, in which the long end of Ni-Ti wire can be locked and the patient would not, then, complain of any irritation.

### DESIGN

To fabricate the double helix locker, we need [Figure 1].

- 1.) 0.010" Ligature wire
- 2.) Periodontal probe
- 3.) Mathieu forceps
- 4.) Ligature wire cutter

First of all, we need to fabricate a helix with ligature wire around a periodontal probe and adjust this helix to the mesial side of a molar tube, then place both the free ends around the single buccal tube and give a figure of eight over the opposite side, and twist both the ends around the tube and use the probe to make one more helix over the distal side [Figure 2a and b]. Now, this locker with a tube can be bonded or welded to a molar band. Weingart pliers or a Cincher can be used to cinch back the wire into the helix [Figure 3]. Alternately, in situations with double/triple tubes, the wire can be secured in the accessory tube.

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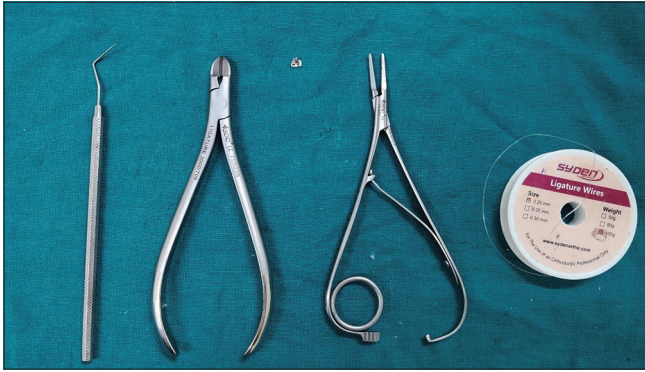


Figure 1: Armamentarium needed.

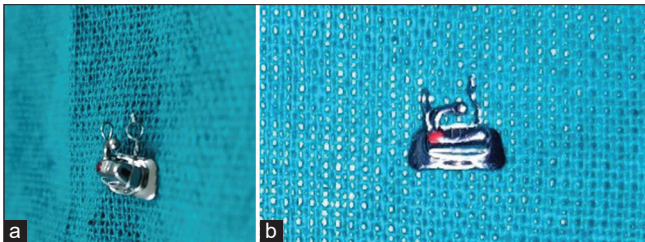


Figure 2: (a) Side view of double helix locker fabricated with ligature wire, (b) top view of double helix locker fabricated with ligature wire.

### ADVANTAGES

1. No need for pre-heating the end of Ni-Ti wire, so the properties of the wire remain unchanged.
2. As the wire is not poking, it will not create any wound/ulcer in the patient's mouth.
3. This can be helpful in the present corona scenario when patients are not able to schedule appointments frequently.

### Limitations

1. It is flexible as it is fabricated with ligature wire.



Figure 3: Double helix locker in mouth.

2. It depends on the good wire bending skill of an orthodontist as fabrication of locker needs precision.

### Declaration of patient consent

Patient consent is not required as the patient's identity is not disclosed or compromised.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

### REFERENCE

1. Chetan S, Chavan P. Easy way for cinching of NiTi wires. J Indian Orthod Soc 2014;48:141-2.

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