Archwire Cinchback Made Easy

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Cinching the archwire distal to the terminal molar tube[1,2] with a universal plier is uncomfortable for both the clinician and the patient, due to the limited access in the posterior region.[3] Also, the plier tends to block the operator's vision. When more than one wire emerges from the buccal tube, it is difficult to hold one wire and cinch the other at the same time.

A new instrument has been designed in our department to make distal archwire cinchback easy and comfortable.

Instrument Fabrication

A spoon-shaped excavator or a double-ended plastic filling instrument is required. We have found that a spoon excavator probe that is no longer suitable for its original use is ideal for this purpose (Fig. 1).

A 16-gauge needle is cut into 4-5mm segments to make two small tubes. Although different gauges of needles can be used for different wire sizes, we have found that a 16-gauge needle works for a variety of sizes. Solderable molar tubes can also be used.

Each tube is held at a right angle to one end of the excavator, but parallel to its long axis, and spot-welded in the center (Fig. 2). These joints are then soldered for reinforcement. The instrument is polished to remove the excess solder.

Clinical Use

The tube at one end of the instrument is slipped over the distal end of the archwire

Fig. 1 Materials needed for fabrication: spoon excavator and 4-5mm segments of 16-gauge needle.

Fig. 2 Needle tubes soldered at right angles to excavator tips.

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emerging from the molar tube, then rotated to cinch the archwire (Fig. 3). In loop mechanics, an active cinchback can be performed simply by pushing the distal arm of the loop to the required activation with an ordinary probe and then bending back the distal end with this instrument.

The advantages of the new instrument are:

- Ease of in-house fabrication.
- Improvement in visibility and access for cinching in the mouth.
- Comfort for both patient and clinician.
- Economy.

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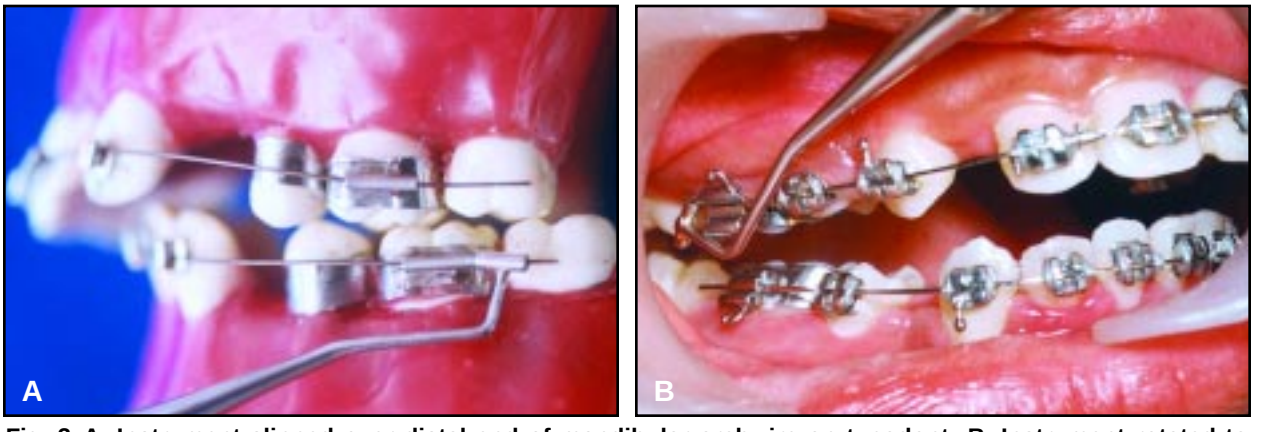

Fig. 3 A. Instrument slipped over distal end of mandibular archwire on typodont. B. Instrument rotated to cinch back maxillary archwire in patient's mouth.