

Tricks of the trade

A modified tweezer for stable open coil spring placement

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An open coil spring is placed between the two brackets slots adjacent to a blocked-out tooth. The major challenge faced during placement of this open coil spring is the disengagement of the wire from the slot before steel ligation of the brackets. This Trick of the Trade describes its easier placement with a modified tweezer.

Open coil spring placement has always been a tedious chairside task for an orthodontist. Traditionally, it is placed to obtain enough space so as to get the blocked-out tooth into occlusion. The open coil spring is compressed between the two adjacent bracket slots and steel ligation is carried out. The major challenge faced during placement of this open coil spring is the disengagement of the wire from the bracket slot before steel ligation. Occasionally, failure to engage the wire leads to debonding of the bracket. Various techniques have previously been tried to secure the open coil spring into the archwire, but they have their own disadvantages of customized fabrications.^{1,2} This novel Trick of the Trade describes an easier way to ensure efficient placement of the spring using a modified tweezer.

Fabrication

To modify a simple cotton-holding tweezer, grind the sharp ends using a carborundum disc mounted on a handpiece (Figure 1) until the desired length is flattened. A vertical groove with a depth of 2 mm is then made in one arm of the tweezer (Figure 2).

Use

The longer beak of the tweezer is held on the mesial side of the bracket to stabilize



Figure 1. Carborundum disc on handpiece.

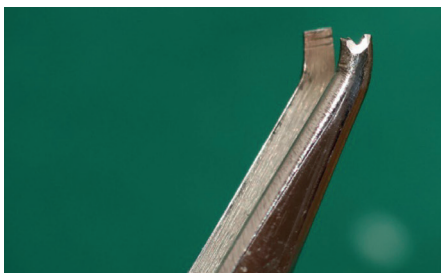


Figure 2. Modified tweezer.

the archwire (Figure 3), while the side with the vertical groove incorporated is used to compress the open coil spring (Figure 4) by sliding it over the main archwire between the two brackets, until the archwire is steel ligated (Figure 5).

Advantages

The major advantages of the modified tweezer are:

- Simple fabrication;
- Ease of placement;
- Efficiency of open coil spring placement;
- Economical and ergonomic;
- Reduces chairside time;
- Reduces chairside assistance.



Figure 3. The longer beak of the tweezer is held on the mesial side of the bracket to stabilize the archwire.

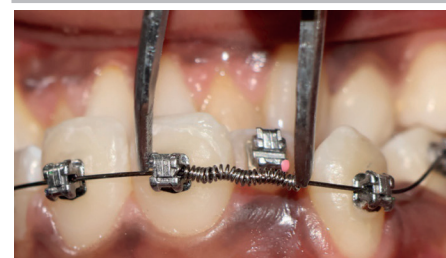


Figure 4. Frontal view.

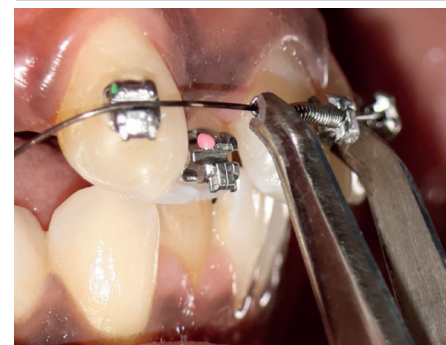


Figure 5. Lateral view.

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest.

Informed Consent: Informed consent was obtained from all individual participants included in the article.

References

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