Modified Tweezer (m-Tweezer): A Convenient Way for Ligation of Open Coil Spring

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ABSTRACT

Open coil springs in orthodontic tooth movement are frequently used to create space between teeth. During placement, the spring exerts continuous force toward both the ends and in clinics sometimes becomes difficult and it is also time consuming procedure. To overcome this problem, we modified the tweezer design and made modified tweezer (m-tweezer) for greater convenience and safety during the ligation of open coil spring intraorally.

Keywords: Modified tweezer, Open coil spring, Economical.


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INTRODUCTION

Open coil springs in orthodontic tooth movement are frequently used to create space between teeth. When compressed during placement, the spring exerts continuous force toward both the ends as it returns to original length. Intraoral ligation of open coil spring in clinics sometimes becomes difficult due to its springiness making ligation of open coil spring not only time consuming but also it may injured the patient also. To overcome this problem, we modified the tweezer design and made modified tweezer (m-tweezer) for greater convenience and safety during the ligation of open coil spring intraorally.

FABRICATION

Take a conventional tweezer and cutting disk (Fig. 1A), place the cutting disk at 90° to the tweezer and cut it 6 mm away from the tip (Fig. 1B).

Fig. 1A: Tweezer and cutting disk
Fig. 1B: Cutting end of tweezer (broad than tip of tweezer so slot can be easily formed)
Fig. 1C: Slot at the both end of tweezer (m-tweezer)
After that make a slot of 2 mm (depth) at the end of tweezers (Fig. 1C). The m-tweezer can be used conveniently to compress an open coil spring (Figs 1D and E).

**CLINICAL APPLICATION**

During ligation, engage one end of archwire in bracket slot, compress the open coil spring with m-tweezer and engage the archwire easily in slot (Figs 2A and B). It can be used in both round as well as rectangular wire.

**Advantages**

1. It saves precious clinical time.

2. Easy to fabricate, no special armamentarium required for fabrication.

3. It prevents frequent disengagement of coil spring during ligation.

4. It prevents injury to patient.

5. Economical.

**REFERENCES**
