CLINICAL EVALUATION

A New Technique to prevent Slippage of Crimpable Hooks

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ABSTRACT

In orthodontics we encounter various problems in day to day practice. One of the common problem we come across is slipping of the crimpable retraction hooks during retraction phase. This can be corrected by various methods like making suitable bends in the arch wire or welding the hook to arch wire. All such procedures not only take precious chariside time, but also distort the properties of the arch wire. To overcome these problems, we employed a new technique wherein a light cure adhesive composite is placed between the crimpable hook space. The hook is then crimped to the arch wire with help of crimpable plier and adhesive composite is cured. Clinical application of this technique has shown positive results.

Keywords: Adhesive composite, Archwire, Crimpable hook.

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INTRODUCTION

In orthodontics, we encounter various problems in day-today practice. One of the common problems we come across is slipping of the crimpable retraction hooks during retraction phase.^{1,2} This can be corrected by various methods like making suitable bends in the archwire or welding the hook to archwire. All such procedures not only take precious chairside time, but also distort the properties of the archwire. To overcome these problems, we employed a new technique wherein a lightcure adhesive composite is placed between the crimpable hook space (Figs 1 and 2). The hook is then crimped to the archwire (Fig. 3) with the help of crimpable hook plier (No. 108-172 TP Orthodontics, Inc.) and adhesive composite is cured^{3,4} (Fig. 4).



Fig. 1: Crimpable hook



Fig. 2: Adhesive composite is placed in crimpable hook space



Fig. 3: Hook is crimped to the archwire



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Fig. 4: Curing with lightcure

The plier consists of two parts: Handle and beak. Handle is carved in such a shape that it provides the firm grip to the palm of the clinician (Fig. 5). The beak is designed in such a way that the slotted tip holds the hook tight while crimping.

The adhesive composite between the archwire and crimpable hook space acts as an abrasive material that can prevent slippage. This whole clinical procedure will not take more than 5 minutes of chairside timings. This simple innovative clinical step is proved to be efficient in avoiding slippage of crimpable hook.



Fig. 5: Crimpable hook plier

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