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Use of William's Probe as a Bracket Placement Tool in Orthodontics: A Novel Approach.

Dr. Priti Shukla[1], Dr. Varsha Sharma[2], Dr. Rachit Thukral[3]

[1]Associate Professor, Department of Orthodontics, AIIMS, Raebareli
[2]Assistant Professor, Department of Paediatric Dentistry, ASMC, Basti
[3]Private Practitioner, Department of Orthodontics

1. Introduction

The treatment outcome in orthodontics is decided at the very beginning at the step when bracket placement is done. Ronald Roth said, "At the heart of excellent treatment result lies a well-placed appliance".[1]Hence accuracy in this step is of utmost importance for which multiple instruments have been designed.[2-3] Although these instruments are specified for this purpose, they cause an increase in clinical inventory. A William's® periodontal probe is a basic instrument available in all dental clinics which can be effectively used for bracket placement.[4] The ideal bracket placement in direct bonding technique needs to be done at the long axis of the tooth along with a particular height from the incisal or occlusal edge.[5] Mostly gauges are helpful in vertical orientation of the bracket (cervico-incisally) but it's horizontal placement or the placement along the long axis is also important.[4] The William's® probe is calibrated at a height of 1mm, 2mm, 3mm, 5mm, 7mm, 8mm,9mm and10mm with round end for measuring the pocket depth.

There are multiple advantages of using this probe as a guide. It can be used for measuring the height at which the bracket needs to be placed on the tooth surface as well as for determining the orientation of bracket along the long axis of the tooth (Figure1). Even though some practitioners can use a straight probe for determining the long axis, however it does not help in bracket height estimation. Inventory control and ease of sterilization of the bracket placement tool can also be achieved in every case by using the William's® periodontal probe.

After etching the tooth and application of bonding agent the following steps need to be followed for proper bracket positioning:
Step 1: Placement of bracket with adhesive of clinician's choice on the tooth surface.
Step 2: Orientation of the long axis by placing the William's® periodontal probe parallel to the long axis of the tooth on the bracket.
Step 3: Orientation of the height of the bracket by placing the William's® periodontal probe at the desired height by matching the marking of William's® periodontal probe to the slot of the bracket from the incisal or occlusal edge.

This clinical pearl provides a novel approach to its use. In the era of innovative dentistry, dental procedures are made more comfortable for the patients and ergonomic for the clinicians. By this approach William's® periodontal probe efficiently reduces the burden of inventory on clinics with same accuracy comparable to specific instruments. Certainly, the reproducibility of the instrument is at par due to its pre calibrated edge. William's® periodontal probe can be used as a bracket placement tool as it can measure both the vertical height of the bracket as well as its position in relation to the long axis of crown. Also, its availability with every dentist decreases the problem of inventory increase, financial burden and sterilization. For that reason, William's® periodontal probe can be effectively used as bracket placement tool due to its reproducibility, reliability and easy availability.

Figure 1: For orientation in both vertical and horizontal plane.

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