Editorial:

A modified way of the posterior palatal seal transfer in the fabrication of the complete denture.

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Introduction

In maxillary complete denture fabrication for the retention purpose, the posterior palatal seal plays an important role along with other factors¹. The purpose of the posterior palatal seal on a maxillary complete denture is to create a seal along the posterior border of the denture at the junction of the hard and soft palate (immovable and movable tissues) to enhance retention of the maxillary denture;² provide the dentist or laboratory technician a distinct landmark for finishing the posterior border of the denture; and (3) compensate for the volumetric shrinkage of the acrylic resin in this area during processing². Posterior palatal seal appeared as an cupid shaped between the anterior and posterior vibrating line extending from each of maxillary tuberosity medially³. A posterior palatal seal can be fortified by an impression technique that dwellings pressure on selected areas across the posterior palatal border of the impression which can be achieved by carving the working model cast ⁴, ⁵, ⁶, ⁷. But several factors can alter the impression of posterior palatal seal area such as gag reflex, in proper selection of impression material, faulty impression procedure, operator skill and etc. for production of dental prosthesis to achieve the ideal restoration is depending on the operator’s ability in the assortment of good treatment strategy ⁸. Posterior palate seal transfer needs the skills and easy technique to accomplish the perfect retentive denture. An impression that does not record accurate replica of the surface anatomy should be rejected and a new impression should be taken. This causes the waste chair side time for the dentist and patient⁹. This clinical tip is the alternate way to record the posterior palate seal without dependent on the accuracy of impression material.

This clinical tip will provide an easy and quick transfer of the posterior palatal seal from denture bearing tissue surface to the working cast.

Methods

Transfer of the posterior palatal seal from tissue surface to working cast:

Tools

- T-shaped ball burnish
- Indelible pencil
- Dental cast
- Self cure acrylic tray

By using t shaped ball burnish the hamular notch area to the both right and left side of the maxillary tuberosity need to palpate and locate, then continue the palpation along the line through the end of

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hard palate from right side to the left side (Figure 1 a,b,c,d). Following palpation, mark the end of hard palate (junction between hard and soft palate) with the indelible pencil which is sloping down to medial aspect behind up to fovea palatine area from the both side of hamular notch (Figure 2 a, b). Which will have given a bow shaped contexture at the palate is considered as an anterior vibrating line (Figure 2c). Following that the patient will be asked to say “ah”, that will produce a vibrating area which is considered being a posterior vibrating line. This posterior vibrating line should be marked by pressure indelible pencil (Figure 2c). An acrylic base plate need to fabricate on master cast (Figure 3a). Insert the acrylic base plate and compress the plate (Figure 3b), in indelible pencil marked areas that will transfer the lines in the tissue surface of the plate (Figure 3c). Following the transfer of the line in to the base plate, cut the base plate following anterior vibrating line. Then the plate need to sit back in to the master cast and use a pencil to draw through the cutting end border of the base plate, ultimately that will print the lines in the master cast. Finally, a cupid bow shaped line will be visible by the marking as a posterior palatal seal area in the master cast.

**Advantages**

1. This is very quick and easy method for the accurate transfer of the posterior seal area from the oral cavity to master dental cast.
2. Very practical for the new beginners to understand this area transfer instead of blind carving on the master cast.
3. The technique is quite reliable which follows the anatomical land marks following palpation, marking the line with indelible pencil and transfer the line to the master cast.

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**Figure and legends**

Figure 1. Palpation with T shaped ball burnish. (a) Right homular notch, (b) Left homular notch, (c) Mesial right fobea palatine, (d) Mesial right fobea palatine.

Figure 2. Marking with pressure indelible pencil. (a) Anterior vibrating line, (b) Posterior vibrating line, (c) covered the 2 lines by drawing.

Figure 3. Transferring line in to base plate. (a) Acrylic base plate construction, (b) Base plate in the mouth, (c) Transferred line showing in the plate.

Figure 4. Transferring line in to master cast. (a) cutting of acrylic base plate following line (b) try in plate in the mouth to recheck, (c) Transferred line showing in master cast.
References