EASY WAY TO ACRYLIZE ORTHODONTIC APPLIANCE WITH EXPANSION SCREW

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Abstract

Posterior crossbite is associated with narrow maxillary arch. Orthodontic correction of posterior crossbite is done by arch expansion .Routinely arch expansion is done by removable orthodontic appliance with expansion screw. But acrylization of removable appliance with expansion screw is troublesome. In this article we have considered a new and easy way to acrylize the orthodontic appliance with expansion screw.

Key words: Posterior crossbite, arch expansion, expansion screw, acrylization.

Introduction

A narrow maxilla is a common problem in orthodontics. Approximately 80% of orthodontic patients need some type of arch expansion. The incidence of posterior cross-bite is high and is present in more than 50% of the orthodontic cases, with the upper molars being affected in more than 80% of the cases, and the lower molars affected in more than 19% of those cases. ¹

Most commony removable orthodontic appliance with expansion screw is used to expand the constricted arch in day to day practise. But acrylization of expansion screw is not an easy task because while acrylization there are chances of acrylic flow into the screw and midline.

After acrylization it's difficult to trim the appliance from the midline to make both the halves separate. While trimming there are more chances of expansion screw damage in the midline. Also trimming with a disc-bur generates heat, thus making the appliance more prone to distortion.

To overcome the above problems we have planned a new and easy way to acrylize the orthodontic appliance with expansion screw.

- 1. Take one strip of modeling wax.(Fig.1)
- 2. Stabilize the expansion screw with modeling wax strip in the midline. (Fig.2)
- 3. Acrylize the appliance with cold cure acrylic. Wax strip will help to assess the appliance thickness; moreover it will prevent the acrylic flow in the midline and expansion screw. (Fig.3)
- 4. Remove the wax strip and do the finishing & polishing. (Fig.4)

This method does not require trimming of acrylic from the midline, thus avoiding any kind of damage to either the appliance or the expansion screw.



Figure. 1: Maxillary cast, expansion screw and modeling wax strip

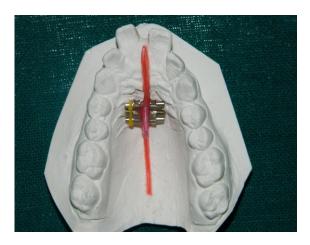


Figure. 2: Expansion screw stabilize with modeling wax



Figure 3: Acrylization of expansion screw



Figure. 4: Appliance after finishing and polishing

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