

A Technique to Perform Custom Tray for Patient with Large Maxillary Arch Size

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Abstract: The arch size is a factor that it may difficult the preliminary impression. In patient with large maxillary arch size, the use of stock tray does not allow an appropriated impression of the tuberosity area, consequently, it may difficult the fabrication of an adequate custom tray. In the technique described, the custom tray is performed by an impression of the internal area of the complete denture with adequate extension border in order to make a definitive impression of patient with large maxillary arch size.

Keywords: Dental Impression Technique; Denture, Complete

1. INTRODUCTION

One of the most import factors for the success of the complete denture is the precision of the final cast performed by an adequate impression technique¹. Traditionally, a preliminary impression with a stock tray is performed to obtain a preliminary cast. Subsequently, a custom tray is performed, by using of the preliminary cast, to perform the definitive impression².

The arch size is a factor that it may difficult the preliminary impression. In patient with large maxillary arch size, the use of stock tray does not allow an appropriated impression of the tuberosity area, consequently, it may difficult the fabrication of an adequate custom tray.

In the technique described, the custom tray is performed by an impression of the internal area of the complete denture with adequate extension border in order to make a definitive impression of patient with large maxillary arch size.

2. PROCEDURE

1. Use a condensation- type silicone putty with high hardness and good mechanical

properties (Zetalabor, Zhermack Spa) to make the impression of the internal area of the complete denture (Figs. 1 and 2).

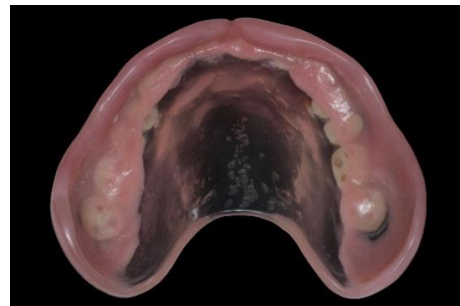


Figure1. Complete denture with adequate extension border.



Figure2. Silicone putty in the internal area of the complete denture.

2. Access the silicone model after the polymerization (Fig 3).

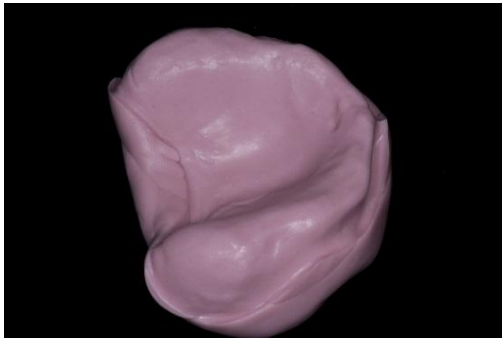


Figure3. Final silicone model.

3. Make the custom tray in this silicon model (Figs 4) according to the technique preestablished (mucostatic impression technique, functional impression technique or semi- functional impression technique)².

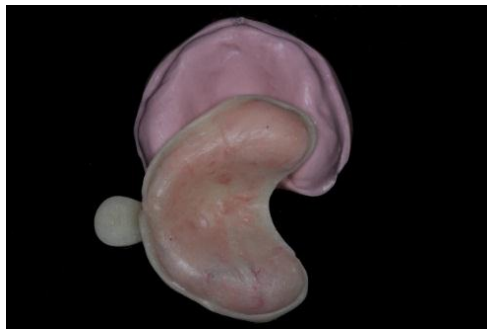


Figure4. Custom tray

4. Make the definitive impression (5).

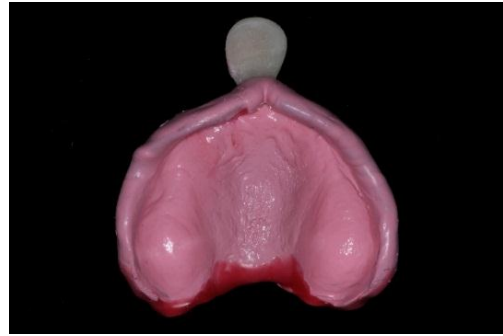


Figure5. Definitive impression

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