Modified Mandibular Metal Stock Tray-for proper access to Lingual Sulcus on the Mandibular Cast

Abstract

For any prosthesis to be correctly designed and fabricated, accurate patients' models are necessary with a complete area which prosthesis could occupy, is to be well reproduced on the model. A simple modification of mandibular metal stock tray to obtain a model with a sufficient accessibility to mandibular lingual area is discussed in the present technique.

Key Words

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INTRODUCTION

Impression tray can be defined as a receptacle into which suitable impression material is placed to make a negative likeness.^[1,2] A wide variety of trays with different sizes are available. The area which should be included in the impression is usually greater than the prosthesis actually occupies. Lingual flange area of mandibular cast is very often not well exposed while pouring the impression which may shorten the lingual extension of the prosthesis. With simple modification of the trays, a mandibular model which provides a sufficient access to lingual flange can be obtained.^[3]

TECHNIQUE

Attach three small metal strips to mandibular border of lingual flange (above 3mm of tray border) with spot welder. Make an acrylic plate of 3mm-4mm thickness of inverted U-shape exactly fitting the space between two lingual flanges of tray such a way that plate is around 2mm above the tray border. Make three (19guaze) U-shaped with perpendicular bend of 2-4mm length. Attach wire clip to acrylic plate with perpendicular extension of wire clip. Before pouring the impression cut the excess impression material from the lingual side to expose the metal clip without distorting the impression border. Pour the impression of the anatomic area and attach acrylic plate to the tray engaging the metal clips. Complete the second pour with inversion technique, after the stone sets, remove the acrylic plate and cast can be obtained.

DISCUSSION

Dental Cast serve as a Three-Dimensional replica of teeth and associated structures to study, diagnose and carry out the prosthetic procedure. Commonly irreversible hydrocolloid impression materials are used in Removable partial denture and as a preliminary impression material in complete denture prosthesis.^[4] Obtaining the accurate mandibular casts demand systematic attention to the multitude of minor details particularly to make lingual flanges easily accessible, which may otherwise need use of bevelled chisels to clear the area.^[3] This technique explains a simple method of modifying the mandibular perforated metal stock tray to get a cast with a better access to the lingual sulcus area.

CONCLUSION

The need to make an accurate impression is fundamental to the practice of prosthodontics. This necessitates the careful assessment of impression trays, materials and techniques, which provides a cast with a good coverage of proposed denture bearing area. This technique explains a simple modification to achieve the basic goal of Prosthodontics.

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Fig. 3