

MANAGEMENT OF FLABBY MAXILLARY TUBEROSITY USING A TWO-PART TRAY SYSTEM - A CASE REPORT

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ABSTRACT

The displaceable tissues or flabby ridges are a common finding in edentulous patients. Unless managed appropriately, flabby ridges adversely affect the retention, stability and support of complete dentures. Many impression techniques have been proposed to overcome this difficulty. A careful consideration and application of the principles of complete denture construction for such conditions can provide a better form of treatment. This case report describes the management of flabby maxillary tuberosity with a suitable impression technique.

KEYWORDS : flabby tissue, tuberosity, impression, edentulous

INTRODUCTION

A Flabby ridge is a fibrous area of soft tissue which is mobile, that is formed by replacement of the alveolar bone with soft hyperplastic tissues. The success of complete denture depends upon many factors such as condition of tissue surface, impression technique used to record the same and the peripheral seal.¹ In cases of fibrous and flabby tissue, it is difficult to record them and often gives rise to pain and looseness of denture. Origin of flabby tissue depends upon the rate of resorption. It has been reported that this condition varies from 24% in edentulous maxilla and 5% in case of mandible.² The most common area is the anterior region of both the jaws because of the masticatory forces, the mobile flabby tissue will get displaced and lead to loss of the peripheral seal area. The forces which are being produced while recording the impression will lead to the distortion of the flabby surface so; the flabby tissue should be managed properly by a special impression technique to avoid any discrepancy in denture stability.¹

CASE REPORT

This article presents an impression technique for the prosthodontic rehabilitation of patient with bilateral flabby maxillary tuberosity.

Impression technique involves two overlying impression trays used for recording maxillary arches with displaceable maxillary tuberosity on both the sides (fig 1). The aim of this technique is to maintain the contour of the easily displaceable tissue while the rest of the denture bearing area is recorded. A primary cast is constructed using alginate impression material. On the primary cast, a complete special tray is fabricated with double wax spacer being used to create space on the tuberosity region on both sides. The tray so formed is extending to the ridge crest around the arch. Once this has set, a second tray is made encompassing the first tray from the posterior region. The small portion of a pen refill is positioned in the center of the palatal area of first special tray, but proclined anteriorly to allow the second special impression tray to be guided in an oblique upward and backward direction to envelope the first (palatal) tray² (fig 2). The palatal tray (first tray) accurately locates the second part special tray using a stop, thereby allowing for a pre-planned even thickness of impression material.

The tuberosity area from the first tray is trimmed to relieve and the holes are made on the second special tray only in the tuberosity area (fig 3). Border moulding of the first special tray is done and final impression is made in the first tray with light body rubber base. Alongside, impression material is also loaded in the second tray and placed over the first tray and full arch final impression is made. (fig 4).

FIG-1



FIG-2

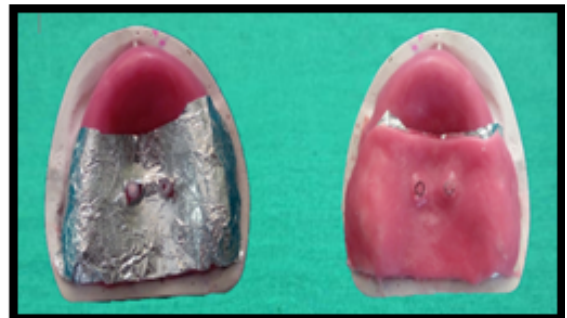
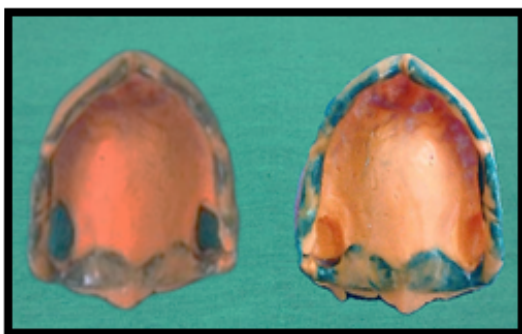


FIG-3



Fig 4



DISCUSSION:

Flabby ridges can be managed by prosthodontic management alone or in combination with surgical treatment depending on the degree of displaceability of tissues. Prosthodontic Management of a patient with a flabby maxillary ridge can be a challenging problem and taking care to consider the influence of both the impression surface and occlusal surface, details are paramount. Standard Mucocompressive impression techniques are unlikely to result in an retentive and stable denture as the denture is constructed on a cast the flabby tissue in a distorted state. The use of selective pressure or minimal pressure impression techniques should help to overcome some of these limitations. The use of holes, windows and wax relieve, reduces the hydraulic pressure and minimises displacement of the bearing tissues.

The suggested method eliminates the excessive displacement of soft tissues at the secondary impression, thus a physiologic and anatomic registration of the attached and the unattached tissue of the denture bearing areas are attained. This article describes the impression technique to minimally displace the flabby tissue and at the same time reproduce maximum details, of which palatal splint technique gives better retention and stability. Choice of treatment modality is made by keeping in mind that the requirement of stability and retention of the prosthesis must be balanced, along with preservation of health of oral tissues for every patient.^{5,6,7}

CONCLUSION:

Impression technique described for management of flabby maxillary tuberosity area is simple. The materials used are readily available and used in contemporary general dental practice. The technique does not require additional clinical visits compared to fabrication of a conventional complete denture. The time required for the specialized impression technique is not excessive.

REFERENCES

1. Bansal R, Kumar M, Garg R, Saini R, Kaushala S. Prosthodontic rehabilitation of patient with flabby ridges with different impression techniques. *Ind J Dent.* 2014;5(2):110-13.
2. Jayaprakash MB, Sahu K, Khan M, Khoriya S, Jadhav S, Kendre B, Lukaram A. Management of Flabby Ridge Cases: A Challenge in Clinical Practice. *Int J Adv Health Sci.* 2014;1(5):32-7.
3. Xie Q, Nähri TO, Nevalainen JM, et al. Oral status and prosthetic factors related to residual ridge resorption in elderly subjects. *Int J Prosthodont.* 1997;55:306-13.
4. Carlsson GE. Clinical morbidity and sequelae of treatment with complete dentures. *J Prosthet Dent.* 1998;79:17-23.
5. Khan Z, Jagers J, Shay J. Impressions of unsupported movable tissues. *J Am Dent Assoc.* 1981;103:590-92.
6. Osborne J. Two impression methods for mobile fibrous ridges. *Br Dent J.* 1964;117:392-4.
7. Devlin H. A method for recording an impression for a patient with a fibrous maxillary alveolar ridge. *Quint Int.* 1985; 6:395-7.