



## A SIMPLIFIED IMPRESSION TECHNIQUE FOR PROSTHODONTICS REHABILITATION OF MAXILLARY FIBROUS TISSUE –A CASE REPORT

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### ABSTRACT

Flabby maxillary ridge is the most commonly encountered clinical condition during routine dental practice. The presence of these displaceable denture-bearing tissues often poses difficulty during fabrication of complete dentures resulting in compromised support, retention and stability. Many impression techniques and materials have been proposed in various literatures to help overcome this difficulty. These techniques vary in philosophies but are often quite time-consuming to perform, and rely on materials not commonly in use in contemporary dental practice. The purpose of this paper is to describe an impression technique for flabby ridges, using conventional impression material.

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## INTRODUCTION

The Glossary Of Prosthodontic Term (4) defines flabby ridge as "excessive movable tissue."<sup>(1)</sup> A 'fibrous' or 'flabby' ridge is an area of mobile soft tissue affecting the maxillary or mandibular alveolar ridges. It develops when hyperplastic soft tissue replaces the alveolar bone and is a common finding, particularly in the upper anterior region of long-term denture wearers.<sup>(2)</sup> Masticatory forces can displace this mobile denture-bearing tissue, leading to altered denture positioning and loss of peripheral seal.<sup>(3)</sup> Hence an impression technique which will compress the non flabby tissue to obtain optimal support and at the same time, will not displace the flabby tissue, is required. A multitude of impression techniques are suggested in the past to help record a suitable impression of flabby denture bearing area.<sup>(4)</sup> When the edentulous maxillae is opposed by natural mandibular teeth in anterior region, these teeth cause trauma to

maxillary anterior ridge as all occlusal forces are directed to this area, resulting in severe bone loss and fibrous hyperplastic tissue formation. E Kelly described this condition as "combination syndrome".<sup>(5)</sup>

**Edentulous maxilla opposed by natural mandibular anterior teeth are as follows:**

- ) Bone loss in anterior part of the maxillary ridge,
- ) overgrowth of the tuberosities,
- ) papillary hyperplasia in the hard palate,
- ) extrusion of the lower anterior teeth, and
- ) the loss of bone under the partial denture bases

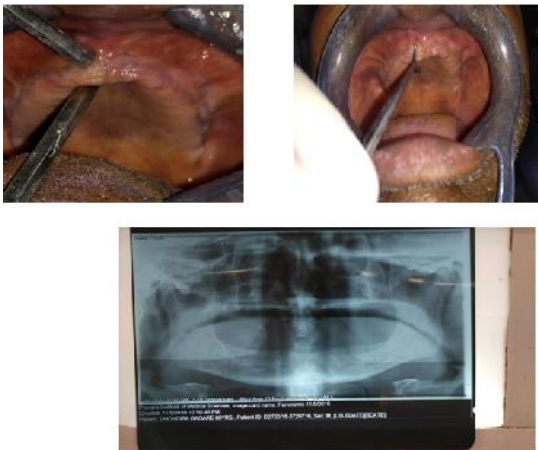
Conventional muco-compressive and muco-static impression techniques are not suitable for such cases, as the displaceable soft tissue exhibits 'recoil' upon compression. Subsequently, selective impression techniques are used to record the normal denture bearing area under compression, while ensuring the flabby tissue remains undisplaced.<sup>(6)</sup>

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The purpose of this article is to describe a conservative yet convenient approach of making impression of the displaceable tissues using a modified impression tray and commonly available dental material without negotiating the philosophy of impression making.<sup>(1)</sup>

**Case Report:** A male patient of age 80 years reported to the Department of Prosthodontic, VYWS Dental College and Hospital, Amravati with the chief complaint of broken denture and difficulty in mastication. No relevant medical history was found. On intraoral examination it was noted that there was an area of flabby tissue in the maxillary anterior region extending from the canine region from one side to other and blanching of the tissue was seen when pressure was applied with the end of the mouth mirror.



Various treatment options were discussed with the patient but he was reluctant to go for any procedure involving surgery. So, it was decided to fabricate a new set of complete denture, paying special attention to recording the flabby tissues in undisplaced state.

**Technique involves the following steps:** The preliminary impression was made using irreversible hydrocolloid impression (DPI IMPRINT ALGINA TE) material and mandibular impression with impression compound and primary cast was poured. Extent of the displaceable tissue was marked on the impression so that it would be transferred to the primary cast.



A closed fitting autopolymerising tray was fabricated such that the flabby area marked on the cast was left uncovered.



Special trays were fabricated; one for mandibular arch and one for maxillary arch– one with a window in flabby tissue area, with a key corresponding to the access made on the tray for making final impression. The tray was border molded using green stick compound and the final impression was made with polyether and mandibular with zinc oxide eugenol.

The tray was retrieved and excess final impression material, flowing into the area associated with ‘flabby tissues’ was removed using a scalpel.



- )] The tray was then replaced over the denture bearing area. A low viscosity alginate was mixed and painted over the flabby tissue area.
- )] Master cast is obtain and occlusion rims are fabricated in conventional
- )] Manner.



- Facebow transfer is done and jaw relation is taken.
- )] The patient was satisfied with the stability, aesthetics and function at subsequent appointments.



Upper and lower rims are mounted on semi adjustable articulator



Try-in was done



- The processing was done in a conventional manner and the dentures were delivered.



- The patient was satisfied with the stability, aesthetics and function at subsequent appointments.
- ) Post Insertion instruction are given to the patient.
- ) Patient was explained for maintenance and follow up visit.

## CONCLUSION

In conventional complete denture prosthodontics, variety of modified impression techniques are available to solve the problems caused by flabby tissue during denture fabrication. The following criteria can be considered to select proper impression technique:

- ) Patient's requirements
- ) Extent of flabby tissue
- ) Importance of optimizing other design factors

In this technique, consideration has been given to the choice of impression material as well as to the design of the impression tray to minimize the amount of pressure exerted on flabby tissue.

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