

## Management of a Flabby Tissue by Window Technique : A Clinical Case

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### Abstract

*The presence of displaceable denture bearing tissue often presents difficulty in making complete dentures. Unless managed properly such flabby tissues affect retention and stability of complete dentures. In particular, problems arise during impression making when forces distort the mobile denture bearing area. Various impression techniques have been proposed to solve this problem. This article presents a case report of management of flabby tissues over anterior maxillary ridge by Watson's Window technique.*

**Key words:** Window technique, flabby tissue, retention, stability, impression technique.

### Introduction

Fibrous or flabby tissues over residual ridge is a superficial area of mobile tissue affecting the maxillary and mandibular alveolar ridges[1]. It develops when hyperplastic soft tissue replaces the alveolar bone and is commonly seen in the anterior part of the edentulous maxillary ridge when a patient is using a complete maxillary denture opposed by a Class I distal extension plate partial denture in the mandibular arch or overlying an atrophic knife-edge mandibular ridge[2]. Published studies indicate that the prevalence of flabby ridges can vary, occurring in up to 24% edentate maxilla to 5% edentate mandible[3,4]. Historically, flabby ridges found in the anterior maxilla were a feature of the 'combination syndrome'[5,6].

### Case Report

A 64 year male patient reported to the department of Prosthodontics with the chief complaint of ill fitting and loose denture particularly upper denture. On examination patient was found to be completely edentulous and an

area of flabby/ displaceable tissues was present in the anterior region of maxillary denture bearing foundation (fig1).



**Figure 1: Flabby tissues in maxillary anterior region**

Following a discussion with the patient regarding the available treatment options implant supported overdentures was ruled out. It was decided to provide a new set of complete dentures to the patient with special emphasis on the impression technique for recording maxillary denture bearing area. Watson's Window technique was used to make the impression of maxillary denture bearing area.

- 1) Preliminary impression of the maxillary arch was made in irreversible hydrocolloid impression material i.e Alginate (Zelgan) in stock metal perforated tray to ensure minimum distortion of flabby tissues.

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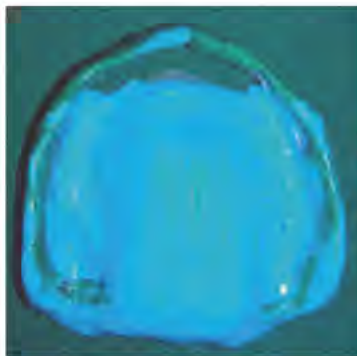
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**Figure 2: Preliminary impression**

- 2) The impression was poured in Type II gypsum dental plaster to obtain primary cast. Region of displaceable tissues was identified on the primary cast and a double thickness of spacer wax was adapted over the areas marked while single thickness of spacer wax was adapted on the rest of the denture bearing area.
- 3) A custom tray was fabricated over the cast in auto polymerizing acrylic resin (DPI India). Then a window was cut within the custom tray in the region of flabby tissues to expose the area
- 4) Sectional border molding was done using low fusing impression compound (DPI India) and extensions were checked.
- 5) Tray adhesive was applied and loaded with medium viscosity poly vinyl siloxane impression material (Aquasil DENTSPLY CAULK) and entire maxillary denture bearing area except the region of flabby tissues was recorded by medium body impression material .



**Figure 3 : Window in Custom tray**

- 6) The light body polyvinyl siloxane (Aquasil DENTSPLY CAULK) was injected over the flabby areas with the help of syringe and the tray was placed back intraorally in its position. (Fig4).



**Figure 4 : Flabby tissues in light body PVS and rest in medium body PVS**

- 7) Then a pick-up impression with the alginate (Zelgan,Densply) was made in order to provide support to the custom tray.( Fig 5).



**Fig. 5 : completed final impression (pick up impression)**

- 8) Impression was then poured in type III gypsum Dental stone (Kalabhai Dental stone) .
- 9) Preliminary impression of the mandibular arch was made in medium fusing Impression compound and final impression was recorded in Zinc-oxide eugenol impression paste.
- 10) Casts were retrieved, temporary records bases and occlusal rims were fabricated.
- 11) Jaw relation was recorded and mounted on semi adjustable articulator
- 12) Teeth arrangement was done achieving bilateral balance for even tooth contact in excursive movements and try in was done .7 (Fig 6)



**Figure 6 : Arrangement of teeth**



- 13) The waxed up denture was acrylised in re inforced heat polymerizing acrylic resin (DPI India)
- 14) Denture insertion and follow up was done.
- 15) At subsequent review appointments the patient was satisfied with denture stability, aesthetics and function. (Fig 7, Fig 8).



Fig. 7 : Pre-operative



Fig. 8 : Post – Operative

### Discussion

The performance of a complete denture is often a reflection of its support and retention. The final impression of a complete denture should record the entire functional denture bearing area to ensure maximum support, retention and stability during its use[8]. Flabby and displaceable tissues pose significant problems to provide stable and retentive dentures, particularly problems arise in impression making when the forces may distort mobile denture bearing tissues. In this case report management of a flabby ridge was done by window technique.

Window technique introduced by Watson,[9]. records the flabby or displaceable tissues with minimum pressure using light body elastomeric impression material and other denture bearing areas are recorded by selective pressure using medium body elastomeric impression material. The greatest advantage of this technique is that it records the flabby tissues in minimum pressure, does not involve additional armamentarium or extra visits of the patient and does not involve any surgical procedures. The impression technique can be accomplished relatively quick, and uses materials with which the general dental practitioner is already familiar .Polyvinylsiloxanes are dimensionally stable and do not need to be poured immediately. They are also less brittle than impression plaster[10].

Considering the other treatment options in this case, surgical resection of the tissues was not preferred because it decreases the sulcus depth, adversely affecting the retention and moreover causes surgical trauma to the patient.

### Conclusion

This paper has described an impression technique for management of a denture bearing area with flabby tissues. The materials used are readily available and used in contemporary general dental practice. The technique does not require additional clinical visits compared to conventional complete denture. The time required for the specialized impression technique is not excessive. This technique can be readily completed by the general dental practitioner, in a primary dental care setting.

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