

## Immediate Denture that Act as a Bandage: A Case Report

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### Abstract

An immediate complete denture is a replacement of the lost natural teeth and associated tissues which is inserted into the patients mouth immediately following the extraction of remaining teeth. The transition from dentulism to edentulism should be psychologically atraumatic as far as possible. The case presented here are interim (transitional or non transitional) immediate complete denture was planned after extraction of remaining natural teeth.

**Keywords:** Immediate denture, dental prosthesis.

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### INTRODUCTION

The immediate denture is a dental prosthesis that is constructed to replace the lost dentition, associated structures of the maxillae and mandible and inserted immediately following removal of the remaining teeth. There are two types of immediate dentures in the literature: conventional immediate dentures and interim immediate dentures [1]. In the traditional type, the conventional immediate denture is fabricated to immediately place after the extraction of natural teeth and can be used as the definitive or long-term prosthesis. The interim type is used for a short time after tooth extraction. After the achievement of healing period, the immediate denture may be relined or replaced with the newly fabricated final denture [2]. The interim immediate denture show numerous advantages like preservation of facial appearance and vertical height, muscular tone, phonetic and reduction of post-extraction pain [3].

One of the most important issues to be considered in immediate denture fabrication may be the difficulty to assess the occlusal vertical dimension (OVD) and centric relation after extraction of the posterior teeth.

### CASE REPORT

A 65 year old patient referred to the department of prosthodontics for replacement of missing teeth in lower right and left back region of the jaw and want a complete upper denture. On intra oral examination patient presented with retained lower anterior and lower left 1<sup>st</sup> premolar and which are periodontally unfavourable and a completely edentulous maxilla with no abnormality detected. As the teeth present are not periodontally sound so extraction of the teeth and fabrication of the conventional immediate denture was advised. Extraction of remaining teeth was planned followed by delivery of an immediate denture.

#### Procedure

The case was proceeded by taking the case history of the patient (Figure 1 and 2). Thereafter, preliminary impressions were made with irreversible hydrocolloid and poured with dental stone to obtain the primary cast. Maxillary and Mandibular special trays were made after applying separating medium on the cast. Maxillary and Mandibular border moulding was done using low fusing impression compound followed by final impression with zinc oxide eugenol paste for maxillary arch. For Mandible, dual impression was

made with irreversible hydrocolloid and cast were poured. Jaw relations were recorded and the record bases were sealed with bite registration paste followed by articulation on the mean value articulator (Figure-3). Shade selection, teeth arrangement and try-in was done in conventional manner (Figure-4).

On the articulator, alternate teeth was cut away on the cast and the labial portion of each root were excavated to a depth of 1-2 mm on the labial side and flush with the gingival margin of the lingual or palatal side. The selected teeth were placed in their specific positions after modification (Figure-5). The mandibular anterior teeth were extracted in toto after attaining informed consent of patient and sutures were placed.

(Figure-6) Maxillary and mandibular dentures were inserted after adjustments (Figure 7 and 8).

Immediate denture act as a stent on the extraction socket which help in healing. Patient was advised to wear the denture overnight and was called after 24 hours of the insertion. Patient complained of ulceration in mylohyoid region and maxillary palatal region and required trimming were done. Patient was advised to continue wearing denture and called for suture removal after a week. Further instructions were given and recalled after 6 months to check for stability and retention of both the dentures and relining was done (Table-1).

**Table-1: Procedure of fabricating Immediate Denture**

<b>First Step</b>	Case History, Preliminary Impressions, Border Moulding, Final Impression, Jaw Relations, Shade Selection, Teeth Arrangement and Try-In
<b>Second Step</b>	Alternate teeth was cut on the cast
	Labial portion of each root were excavated to a depth of 1-2 mm
	Selected teeth were placed in their specific positions
	Mandibular anterior teeth were extracted
	Maxillary and mandibular dentures were inserted after adjustments
	Advised to wear the denture overnight and was called after 24 hours of the insertion
	Suture removal after a week
	Recalled after 6 months to check for stability and retention of both the dentures and relining was done



**Fig-1: Maxillary Arch**



**Fig-3: Jaw relation**



**Fig-2: Mandibular arch**



**Fig-4: Teeth arrangement**



**Fig-5: Teeth were trimmed on the cast**



**Fig-6: Mandibular teeth are extracted**



**Fig-7: Maxillary denture inserted**



**Fig-8: Denture insertion**

## DISCUSSION

When removal of all teeth becomes necessary an immediate denture is an important treatment modality. There are many advantages of immediate dentures as it acts as a matrix which control haemorrhage, prevents contamination and provide protective covering over the wounds.

An immediate denture provides restoration of phonetics and masticatory functions and facilitates transition of the edentulous state [4]. All in all it help to boost the patient's confidence even after extraction of all teeth.

## CONCLUSION

In the era of implant and immediate implant treatment, immediate complete denture treatment should still be considered as an important treatment modality. A detailed extra oral and intra oral evaluation and correct treatment planning will lead to a successful replacement of missing structures with immediate dentures which is functionally acceptable and pleasing to the patient.

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