

# “Immediate Complete Denture With A Denture Try In – Case Report”

Vishwadeepak Singh<sup>1</sup>, Pulkit Jain<sup>2</sup>, Khurshid A Mattoo<sup>3\*</sup>

<sup>1</sup> Assistant professor, Department of Prosthodontics, Teerthankar Mahaveer dental college, TMU

<sup>2</sup> Postgraduate student, Department of Prosthodontics, Subharti dental college, SVSU

<sup>3</sup> \*Assistant professor, Department of Prosthodontics, College of dentistry, JU

## Abstract

The concept of immediate denture is a treatment option that is based on the principles of aesthetics. The denture has certain disadvantages out of which one of the common disadvantages is that it does not allow a denture trial procedure. We present a case of an elderly adult male patient who had a few anterior maxillary natural teeth present and therefore denture trial was possible. Since the textbooks mention that the denture trial is a drawback of immediate dentures, certain patients do allow such a procedure, although the entire procedure may not be carried out.

**Keywords** — completely edentulous, denture trial, extraction, surgical guide

## I. INTRODUCTION

The immediate denture treatment is a well-known treatment option in complete denture prosthodontics. It may be a complete or a partial denture that is made to be installed immediately after extraction of the remaining natural teeth.<sup>1</sup> Advantages include that the patient does not have to undergo through a period where he looks completely edentulous. With such an advantage, many patients are lured into such treatment provided the remaining natural teeth are indicated for extraction and provide no help to improve existing oral condition. For a prosthodontist, trying a denture before processing allows him to overcome his and technicians flaws and therefore is an important feature of all types of prosthetic care. Most of the types of immediate dentures do not provide this option for a prosthodontist since the trial denture cannot be inserted inside the oral cavity as natural teeth are present. However, there are some situations that do allow one to perform such clinical step. This article describes one such case.

## Case report

An elderly male patient aged 72 years reported to the post graduate section of the department of prosthodontics seeking a solution to his problem of inefficient eating. The patients' medical, social and drug history were noncontributory and during his overall clinical examination, there was no finding that would have had a negative effect on his dental treatment. Intra oral examination revealed presence of maxillary three anterior teeth that had severe

cervical and labial erosive lesions present on their surfaces (**Fig 1**). After thorough evaluation of all concerned variations the treatment options that were presented to him included an implant supported prosthesis for maxillary and mandibular arches, an immediate denture for maxillary arch and conventional complete denture for mandibular arch and finally an immediate denture for maxillary arch and a conventional complete denture for mandibular arch. The patient consented to the latter option since his financial position did not allow other treatment options conducive. Routine clinical and laboratory procedures as that for any immediate complete denture were undertaken except the complete denture was also tried in the patient's mouth (**Fig 2**). The denture trial allowed verification of tentative centric relation besides allowing verifying the selection of teeth. A surgical guide made of clear self-cure denture base acrylic resin allowed the oral surgeon to perform any surgical corrections during extraction of the remaining natural anterior teeth (**Fig 3**). On the day of denture insertion the remaining natural teeth were extracted followed by suturing of the extraction sites. The processed complete denture was then inserted and the patient was instructed regarding the maintenance and oral hygiene care for the immediate denture prosthesis (**Fig 4**). A follow up protocol was given to him and the denture was relined at a later stage. The patient during his follow up appointments reported his satisfaction with the complete denture which has improved his look.

## Discussion

A case has been presented where an immediate denture was fabricated for a patient who had maxillary anterior teeth present. Since the anterior teeth were in a favorable position, it allowed the clinician to perform a denture trial, which is rare in immediate denture fabrication especially when all anterior teeth are present. The critical aspect of fabricating an immediate denture that allows a denture trial is the thorough analysis of the diagnostic casts. The analysis of cast includes the position of teeth, their labial inclination, amount of supra eruption and presence of soft or hard tissue undercut. Denture trial in immediate dentures is possible if the trial denture base is modified in such a way that it bypasses the natural teeth and is placed on its final resting place. This has led to the development of

flange designs for immediate denture service.<sup>2-4</sup> The status of remaining natural anterior teeth has a definite bearing on the type of denture trial that can be done in such cases. Immediate denture can have a very wide array of combinations depending upon the location and number of remaining natural teeth. Sometimes, only posteriors are present while at times only one side posteriors may be present. Therefore, each situation will demand a different flange design if one wants to perform a denture trial. Since anterior teeth generally are the one which are lost last in the oral cavity, most of the patients that are indicated for immediate dentures have most of the maxillary anterior teeth present. Presence of anterior teeth in such cases hampers insertion of a trial denture which is the reason that immediate dentures don't allow the anterior teeth trial procedure.

A denture trial is a critical and a very important clinical step during which a prosthodontist verifies the results of his clinical procedures especially those of jaw relations. Negligence or carelessness during this procedure have been reported to cause a denture failure.<sup>5</sup> The case presented in this article minimizes denture failure, although a complete denture trial was not possible in this case.

### Conclusion

An immediate complete denture is a treatment option that always tempts the patient since it eliminates his edentulous period exposure. At the same time a prosthodontist is fond of the denture trial since it allows him to refine his prosthesis. Denture trial in immediate dentures is possible with modification of denture flange.

### Acknowledgements

The authors would like to acknowledge the efforts of the laboratory technicians of the department whose selfless work never sees the limelight.

### References

- [1] The Glossary Of Prosthodontic Terms. J Prosthet Dent. 2005; 94(1):10-92.
- [2] Smith RA. Immediate complete dentures – a starting point. J Am Dent Assoc 1973;87:641-5.
- [3] Pound E. An all-inclusive immediate denture technic. J Am Dent Assoc 1963;67:16- 22.
- [4] Pound E. Controlled immediate dentures. J Prosthet Dent 1970;24:243-52.
- [5] Mattoo KA, Sarwar S. Inconsiderate try in of Complete Denture Prosthesis – An Iatrogenic Failure. J Med Sci Clin Res 2017; 5 (09): 27858-861



Figure 1: Intra oral view of existing teeth



Figure 3: Surgical guide during extraction



Figure 2: Posterior denture trial in procedure



Figure 2: Final denture