

Immediate partial denture for restoring esthetics and function of mandibular anterior teeth

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Abstract:

Being edentulous, particularly in the anterior region is highly traumatic for patients both esthetically and psychologically. This article presents a case of immediate esthetic and functional rehabilitation of a female patient after extraction of mandibular anterior teeth by fabrication of immediate partial denture which was inserted immediately following extraction of teeth. Due to their inherent advantages, immediate dentures have become indispensable part of prosthetic rehabilitation of patients.

Keywords: Immediate denture, Esthetic zone

Introduction

One of the problems of Prosthodontic practice is the treatment of patients who must have some, but not all of their remaining teeth removed. It can be solved by removing the hopeless teeth, allowing the extraction sites to heal, and constructing prosthesis after healing is complete.¹ This solution is acceptable to very few because of the loss of function and distorted facial appearance during this healing and construction period. This scenario is unacceptable to few patients when the esthetic zone is involved and thus a different treatment plan has to be devised to suit the needs of the patient.

Immediate denture is defined as “a complete or partial removable denture constructed for insertion immediately following the removal of natural teeth”.² The most important advantage especially from the patient’s perspective is that at no time at all he or she will be without teeth and therefore can continue their social and business activities without any embarrassment. Other advantages being less post operative pain as the extraction site is protected by the denture, easier to duplicate the shape, size and colour of the teeth being replaced, circum oral support, maintenance of muscle

tone and overall patient’s psychological and social well-being is preserved.³ Keeping in view these factors the following treatment plan was made for the patient.

Case Report

A female patient aged 45 yrs reported to the Department with chief complaint of missing lower front teeth since 5 years. The patient had 31 and 42 missing. There was pathological migration and tilting of 32 and 41 encroaching the edentulous space making the replacement of missing teeth complicated (Fig 1). There was horizontal bone loss and gingival recession in both 32 and 41 along with grade II mobility. Intraoral peri apical radiograph revealed bone support of 5 mm for 32 and 41. Thus a decision to extract 32 and 41 followed by placement of immediate partial denture for 31,32,41 and 42 was planned.

Step 1: Complete oral hygiene care and scaling was carried out.



Fig 1: Pre treatment condition of the patient.

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Step 2: Alginate impressions of both the arches were made and type III dental stone was used to pour the impressions (Fig 2). The shade of the teeth was selected at this stage.



Fig 2: Mandibular cast.

Step 3: The teeth 32 and 41 were trimmed in the cast and the ridge was smoothed to replicate the contour of an edentulous ridge (Fig 3). The height of the edentulous area was reduced according to the level of bone loss that has occurred in 32 and 41.

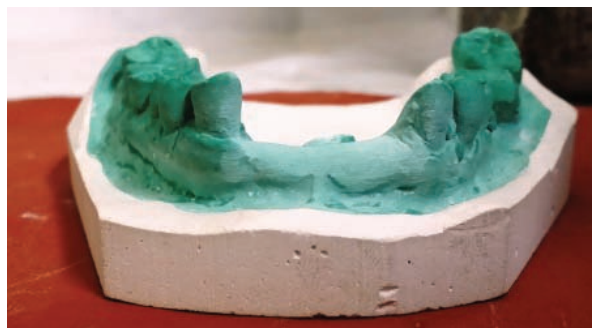


Fig 3: Cast altered to fabricate denture.

Step 4: Conventional teeth arrangement, clasp placement and wax up was done and acrylization of the immediate denture was done (fig 4). The denture was then polished and kept in 0.5% sodium hypochlorite solution for disinfection.



Fig 4: Finished and polished immediate partial denture.

Step 5: Extraction of 32 and 41 was done under local anaesthesia taking due precautions to minimize the amount of soft tissue trauma (Fig 5a, 5b). Once the bleeding had stopped the immediate denture was inserted and the occlusion was checked (Fig 6 & 7). Instructions were given to the patient.



Fig: 5a

Fig 5a & 5b: Extraction of 32 & 41 being carried out.



Fig: 5b



Fig 6: Insertion of immediate denture



Fig 7: Post treatment view of patient.

Post insertion care advised:

- First 24 hours the patient was advised to avoid rinsing, avoid drinking hot liquids and not remove the denture for first 24 hours.³
- The patient was recalled on the next day and the denture was removed and through examination for sore spots was done.
- Presently the patient is instructed to remove the denture at night regularly and instructions were given regarding denture use and hygiene.

The patient was recalled after 2 weeks for a routine check up and further maintenance instructions were emphasized.

Discussion

Immediate dentures fulfil an important role in today's treatment modalities by providing the patients with esthetics, function and psychological support after extractions and during healing period. Apart from the disadvantage that anterior wax try in is not possible in immediate dentures they have really being very helpful and satisfying for patients.

Further treatment options for the patient includes replacement of missing teeth by use of implants or fixed partial denture by taking both the canines as abutments after complete healing of extraction sockets.

Conclusion

Immediate dentures are still indispensable part of various prosthetic treatment plans and have being found to be very useful for the esthetic, functional and psychological maintenance of patient's oral health care.

References

1. Robert Bruce .W, Captain (DC) USN, Peter Kobes. Immediate removable partial dentures J. Prosthet Dent. 1972 July ; 28(1): 36-42.
2. Winkler Sheldon. Essentials of complete denture Prosthodontics. 2nd ed, AITBS publishers. India.
3. George ZA, Charles BL . Prosthodontic treatment for edentulous patients. 12th ed, Elsevier publishers 2004. India

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