

IMMEDIATE DENTURE PLACEMENT: A CLINICAL CASE REPORT AND REVIEW

¹*Dr. Sania Mohsin, ²Dr. Arunachalam Sudheer, ³Dr. Harendra Shahi, ⁴Dr. Priya, ⁵Dr. Susmita Mondal,
⁶Dr. Suvajit Adak

^{1,6}Postgraduate Student, Department of Prosthodontics and Crown and Bridge Mithila Minority Dental College and Hospital.

²HOD and Professor Department of Prosthodontics and crown and bridge, Mithila Minority Dental College and Hospital.

³Professor Department of Prosthodontics and Crown and Bridge, Mithila Minority Dental College and Hospital.

^{4,5}Senior Resident, Department of Prosthodontics and Crown and Bridge, Mithila Minority Dental College and Hospital.



*Corresponding Author: Dr. Sania Mohsin

Postgraduate Student, Department of Prosthodontics and Crown and Bridge Mithila Minority Dental College and Hospital.

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ABSTRACT

This case report details the clinical management and prosthetic rehabilitation of a patient using immediate dentures following the extraction of non-restorable teeth. Immediate dentures provide an effective solution for maintaining aesthetics, function, and patient confidence during the post-extraction healing period. The treatment plan included comprehensive preoperative assessment, precise impression techniques, occlusal registration, and fabrication of the denture prior to surgical extraction. Immediate insertion of the prosthesis ensured the patient was never without teeth, minimizing psychological impact. Post-insertion follow-ups showed favorable adaptation, functional efficiency, and patient satisfaction with minimal adjustments. This case underscores the importance of multidisciplinary planning, patient education, and follow-up in achieving successful outcomes with immediate dentures.

KEYWORDS: Dentures after extraction, Temporary dentures, Same-day dentures.

INTRODUCTION

Immediate dentures are prosthetic appliances inserted immediately following the extraction of natural teeth, providing patients with uninterrupted aesthetics, speech, and function during the healing phase. They are particularly beneficial in cases where extractions are planned for teeth with poor prognosis due to periodontal disease, caries, or trauma. Unlike conventional dentures, immediate dentures eliminate the edentulous period, thus offering psychological comfort and improved patient acceptance.^[1] However, they require meticulous planning, accurate impressions, and regular follow-up to accommodate changes in the oral tissues during healing. This case highlights the use of an immediate denture to manage a partially edentulous female patient with mobile teeth in the lower left quadrant.

CASE REPORT

A 58-year-old female patient presented to the clinic with a chief complaint of mobile lower teeth and difficulty chewing on the left side. She also expressed concern about her appearance following extraction and wanted an immediate replacement.

Clinical

Intraoral examination revealed poor periodontal support with Grade II–III mobility in teeth 33,34, 35, and 36 and 37 (mandibular left posterior region). The surrounding gingiva showed signs of inflammation and periodontal pocketing. The remaining teeth were in functional condition with mild attrition and no active caries. The patient was partially edentulous.

Radiographic

An orthopantomogram (OPG) revealed severe horizontal bone loss in the affected quadrant with poor prognosis for the mobile teeth.

Diagnosis

- Chronic periodontitis
- Hopeless prognosis for teeth 33,34,35,36,37
- Partially edentulous mandibular arch

Treatment

An immediate partial denture was planned to replace the mobile teeth following their extraction. Pre-extraction impressions and bite registration were taken. A trial denture was fabricated with teeth 33,34,34,36,37 still in

place, allowing for smooth transition after extraction. Local anesthesia was administered, and the mobile teeth were extracted atraumatically. The immediate denture was delivered on the same day.

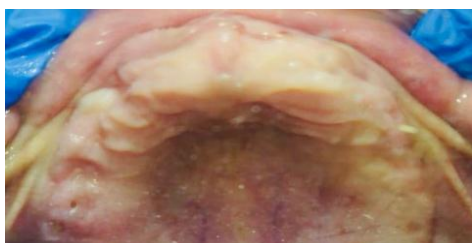
Post-operative

The patient was given post-extraction instructions, advised on denture hygiene, and prescribed analgesics. Follow-ups were scheduled at 24 hours, 1 week, and 1 month. Tissue adaptation was satisfactory, and no sore

spots were reported. A soft liner was added during the first review to improve comfort.

Outcome

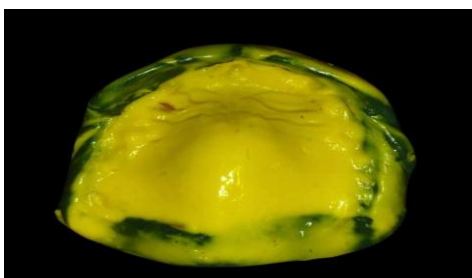
The patient adapted well to the denture, reporting restored function and improved appearance. Healing progressed normally, and the denture remained stable and well-fitting. Plans for a definitive prosthesis will be considered after complete healing.



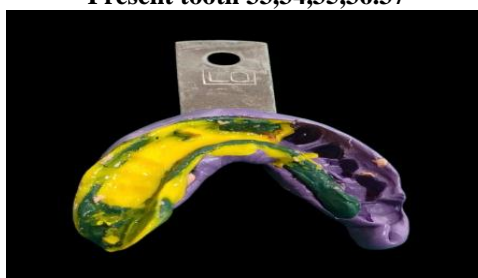
1. Edentulous maxilla



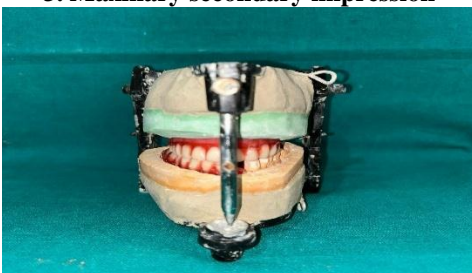
2. Partially Edentulous mandible
Present tooth 33,34,35,36,37



3. Maxillary secondary impression



4. Mandibular Secondary impression



5. Trial Denture



6. Teeth arrangement after try in



7. Extracted teeth 33,34,35,36,37



8. Sutured site after extraction 33,34,35,36,37



9. Armamentarium used



10. Soft liner applied on the intaglio surface



11. Right lateral view of final denture



12. Frontal view of final denture



13. Left Lateral view of final denture



14. Pre-operative



15. Post-operative

DISCUSSION

Immediate dentures play a crucial role in the management of patients requiring full or partial tooth extractions, offering both functional and esthetic benefits immediately after tooth removal. In this case report, the use of an immediate denture provided the patient with immediate replacement of lost dentition, preserving facial contour and enhancing psychological comfort.

One of the primary advantages of immediate dentures is the prevention of the esthetic and functional difficulties associated with edentulism during the healing phase. The immediate placement allows for continuity in mastication, speech, and appearance, which can significantly improve patient satisfaction and quality of life.

However, challenges such as tissue healing, bone resorption, and changes in denture fit over time must be considered. In this case, careful planning and execution minimized common complications such as excessive pressure on extraction sites and poor retention. Regular follow-ups ensured timely adjustments to accommodate tissue remodeling and prevent sore spots.^[2]

Moreover, immediate dentures can serve as a transitional prosthesis that allows patients to adapt gradually before receiving definitive prosthetics. This interim period is critical for monitoring oral tissue health and patient adaptation.

While immediate dentures offer many benefits, it is important to note that they require skilled clinical and laboratory coordination. Accurate impressions, meticulous teeth arrangement, and patient education on maintenance and expectations are vital for successful outcomes.^[3]

In conclusion, this case demonstrates that immediate dentures are an effective treatment modality for immediate tooth replacement, with careful case selection and management leading to satisfactory esthetic and functional results. Future long-term studies could further

clarify the impact of immediate dentures on alveolar bone preservation and patient quality of life.

CONCLUSION

Immediate dentures provide an effective and timely solution for patients requiring tooth extraction, offering immediate restoration of esthetics and function. This case report highlights the benefits of immediate denture therapy in maintaining facial structure, improving patient comfort, and facilitating a smoother transition during the healing phase. Proper case selection, careful clinical technique, and diligent follow-up care are essential to manage challenges such as tissue remodeling and denture fit adjustments. Overall, immediate dentures serve as a valuable interim prosthesis that enhances patient satisfaction and quality of life.

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