

**FUNCTIONAL AND AESTHETIC OUTCOMES OF REMOVABLE  
PROSTHESES IN PATIENTS WITH EXTENSIVE TOOTH LOSS**

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***Annotation:*** Extensive tooth loss significantly compromises oral function, facial aesthetics, speech, and psychosocial well-being. Removable dental prostheses remain a widely used rehabilitative option due to their affordability, adaptability, and suitability for patients with advanced edentulism or systemic limitations. This thesis evaluates the functional efficiency and aesthetic outcomes of removable prosthetic treatment in patients with extensive tooth loss, focusing on mastication, speech, comfort, facial harmony, and patient satisfaction. Clinical findings indicate that appropriately designed removable prostheses can restore essential oral functions and improve facial appearance when supported by accurate diagnosis, individualized planning, and proper patient education. The results underscore the importance of prosthetic design, occlusal balance, and adaptation in achieving stable, functional, and aesthetically acceptable outcomes.

***Keywords:*** Removable prostheses, extensive tooth loss, oral rehabilitation, mastication, aesthetics, patient satisfaction, edentulism.

**Introduction**

Extensive tooth loss represents a major clinical challenge in prosthodontics, leading to impaired chewing efficiency, altered phonetics, facial collapse, and reduced quality of life. In many cases, removable prostheses remain the primary treatment option due to economic constraints, anatomical limitations, or systemic health conditions. Advances in prosthetic materials and fabrication techniques have improved the functional and aesthetic performance of removable dentures. However, outcomes



depend on multiple factors including ridge anatomy, occlusal design, vertical dimension restoration, and patient adaptation. A comprehensive evaluation of functional and aesthetic results is essential to optimize treatment planning and long-term success.

### **Objective**

The objective of this study was to assess the functional and aesthetic outcomes of removable prostheses in patients with extensive tooth loss. The study aimed to evaluate masticatory efficiency, speech clarity, comfort, facial aesthetics, and overall patient satisfaction following prosthetic rehabilitation.

### **Materials and Methods**

The study included 70 patients with partial or complete extensive tooth loss who were rehabilitated with removable partial or complete dentures. Clinical assessment involved evaluation of oral tissues, residual ridge morphology, occlusal relationships, and temporomandibular joint function. Prostheses were fabricated using standardized clinical and laboratory protocols. Functional outcomes were assessed through chewing tests, speech evaluation, and patient-reported comfort scales. Aesthetic outcomes were evaluated by facial profile analysis and patient satisfaction questionnaires. Follow-up examinations were conducted at 1, 3, and 6 months after prosthesis delivery.

### **Results**

The majority of patients demonstrated significant improvement in masticatory function and speech intelligibility following prosthetic rehabilitation. Facial aesthetics improved notably due to restoration of vertical dimension and lip support. Approximately 85% of patients reported satisfactory comfort and adaptation within the first three months. Minor complications such as mucosal irritation and initial instability were observed but resolved with prosthesis adjustment. Higher satisfaction levels were associated with accurate occlusal balance and proper extension of denture bases.

### **Discussion**

The findings confirm that removable prostheses can provide effective functional and aesthetic rehabilitation in patients with extensive tooth loss when proper clinical protocols are followed. Restoration of occlusal harmony and vertical dimension plays a key role in improving chewing efficiency and facial appearance. Patient education and follow-up care are critical for successful adaptation and long-term use. Although removable prostheses may not fully replicate natural dentition, they remain a reliable and practical solution for many patients, particularly where fixed or implant-supported options are not feasible.



### **Conclusion**

Removable prostheses offer significant functional and aesthetic benefits for patients with extensive tooth loss. Successful outcomes depend on careful clinical evaluation, precise prosthetic design, and continuous follow-up. When properly planned and executed, removable dentures restore essential oral functions, enhance facial aesthetics, and improve overall quality of life, confirming their continued relevance in modern prosthodontic practice.

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