

PP-103 Functional and Aesthetic Restoration in Advanced Periodontal Bone Loss: A Digital Workflow Approach

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INTRODUCTION: A 48-year-old female patient presented to our clinic with aesthetic and functional concerns. Clinical and radiographic evaluations revealed advanced alveolar bone resorption in the maxillary anterior region, accompanied by pathological migration of the teeth due to periodontal disease. Given the patient's high aesthetic expectations, a multidisciplinary treatment approach was planned following periodontal therapy.

Case Description: After completion of periodontal treatment, it was decided to proceed with zirconia-supported restorations to address both aesthetic and functional demands. All teeth were prepared with a chamfer finish line. Intraoral scanning was performed for digital impressions. In the mandibular

posterior region, missing teeth were restored using non-hex Ti-base abutment-supported fixed partial dentures.

Discussion: Through the use of chamfer-prepared restorations, both aesthetic and functional rehabilitation were achieved in teeth affected by periodontal destruction. Additionally, the restorations contributed to the maintenance of periodontal health by ensuring proper contour and hygiene accessibility. This case highlights the importance of an interdisciplinary approach in managing patients with severe periodontal involvement and high aesthetic demands.

Keywords: Periodontal Diseases, Digital Dentistry, Zirconium, Interdisciplinary Communication

PP-104 Functional and Esthetic Outcomes of Full-Mouth Rehabilitation Following Vertical Dimension Reestablishment Using Posterior Composite Build-Ups: A Case Report

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INTRODUCTION: Loss of vertical dimension of occlusion (VDO) is a clinical condition that can significantly impact both function and esthetics. It may lead to impaired mastication, temporomandibular joint (TMJ) discomfort, facial disharmony, and reduced quality of life. Restoring VDO requires a systematic approach involving proper evaluation, neuromuscular adaptation, and establishment of a stable occlusal and TMJ relationship. This case report presents the functional and esthetic outcomes of full-mouth rehabilitation following VDO reestablishment using posterior composite build-ups and a gradual increase in occlusal height to promote TMJ stabilization.

Case Description: A patient with reduced VDO was treated with posterior composite resin build-ups. The vertical dimension was increased by 1 mm per week over five weeks, allowing neuromuscular adaptation and TMJ repositioning.

After successful adaptation, definitive restorations were completed. Pressable ceramic (e.max) laminate veneers were placed from first premolar to first premolar (5-5) in both arches. Zirconia crowns were used on the first and second molars (6 and 7). Throughout the procedure, esthetic, functional, and occlusal parameters were carefully monitored to ensure optimal outcomes.

The patient adapted well to the new VDO, showing marked improvement in facial esthetics and occlusal function. High patient satisfaction was reported at the conclusion of treatment.

Discussion: This case highlights the effectiveness of a controlled, stepwise approach to VDO restoration. Using composite build-ups allowed reversible testing of neuromuscular tolerance before final restorations.

The combination of e.max veneers and zirconia crowns restored function and esthetics while preserving TMJ stability. No complications were observed during the one-month follow-up, supporting the short-term success of the approach. Long-term monitoring is essential to confirm the durability of results.

Keywords: Vertical dimension of occlusion (VDO), full-mouth rehabilitation, composite build-up, neuromuscular adaptation, TMJ stability, esthetic dentistry.