

PP-176 Prosthetic Rehabilitation of a Cleft Lip and Palate Patient with Digital Workflow: Case Report

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OBJECTIVE: Cleft lip and palate (CLP) is a common craniofacial anomaly that forms during the embryonic period. Dental deficiencies close to the cleft line are common in patients. Initial treatment typically involves tissue molding and surgical interventions. Maxillary deficiency is addressed with orthognathic surgery and orthodontic treatment. However, these treatments may not fully resolve functional issues related to aesthetics, phonation, and nutrition. Consequently, restorative and/or prosthetic treatments may be necessary for comprehensive treatment. This case report aims to present the rehabilitation of a CLP patient using a digital workflow and monolithic zirconia restoration.

CASE: A 31-year-old female patient with CLP was admitted to the Hacettepe University Hacettepe University Faculty of Dentistry, Prosthodontics Clinic to improve the masticatory function and aesthetic deficiencies after orthodontic treatment. In the anamnesis, it was learned that the cleft lines were closed, fixed orthodontic treatment and orthognathic surgery

were performed. Clinical examination revealed mobility and several missing teeth. In the treatment of the patient, chamfer margin preparations were performed on the remaining teeth, followed by digital impressions using the Trios3 scanner. A provisional restoration was milled for digital design evaluation and to assess patient expectations. Subsequently, a one-piece fixed monolithic zirconia restoration (Ivoclar IPS e.max ZirCAD Prime, Schaan, Liechtenstein) was milled, and after necessary adjustments, it was cemented.

CONCLUSION: The application of a one-piece monolithic zirconia restoration provided splinting of the teeth, addressed the patient's missing teeth, and met aesthetic expectations. Chewing functions were improved by ensuring occlusion. During periodic follow-up appointments, psychological improvement was observed in the patient, and no complications were reported.

Keywords: mouth rehabilitation, cleft lip, cleft palate, zirconium

PP-177 Prosthetic Rehabilitation Of A Large Maxillary Defect Due To Nasopharyngeal Tumor Resection: A Case Report

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INTRODUCTION: Nasopharyngeal tumors are malignant neoplasms located in the epithelial lining of the nasopharynx, and they often require aggressive treatment modalities including surgery, radiotherapy, and/or chemotherapy. Surgical resection of these tumors, especially when involving adjacent maxillary and palatal structures, frequently results in large maxillofacial defects. This case report presents the comprehensive prosthetic rehabilitation of a patient with a large acquired maxillary defect following surgical resection of a nasopharyngeal tumor.

Case Description: A 49 years old male patient with a large maxillary defect resulting from extensive surgical nasopharyngeal tumor resection applied to the clinic of Department of Prosthodontics. Following surgery, the patient had received postoperative radiotherapy and chemotherapy. Prior to definitive prosthetic rehabilitation, endodontic and periodontal treatments of the remaining teeth were completed. Support was taken from the remaining teeth (16-15, 12-11-21-22) to fabricate a precision attachment-retained obturator that provided partial separation between the oral and nasal cavities. A quadrilateral design was performed. For the mandibular

partial edentulism, a precision attachment-retained, metal framework removable partial denture was designed.

RESULTS: The patient's issues with speech and nutrition deficiency were resolved with the obturator prosthesis and the esthetic demands were fulfilled.

CONCLUSION: Within the scope of this case, the use of an obturator provided functional and esthetic rehabilitation of a patient with a large maxillary defect following oncologic surgery.

Keywords: Obturator, Maxillary Defect, Nasopharyngeal Tumor, Prosthetic Rehabilitation, Oral Cavity, Removable Prosthesis