An interdisciplinary approach is often indicated in the planning and treatment of patients who have anatomic deficiencies in soft and hard tissues due to a congenital disorder. Successful treatment of such patients may include osseointegrated implants to increase prosthesis retention and stability. This clinical report describes the diagnosis and treatment of a patient with congenital disorder whose several teeth and supporting tissues were lost.

A 34-year-old man was referred to Marmara University Dentistry Faculty for dental rehabilitation. The patient’s history included a congenital disorder which affects the facial and intraoral appearance and mandibular opening. According to previous medical reports, he had many operations regarding facial asymmetry beginning from childhood. The patient’s chief concerns were relative to mastication, speech and esthetics. Extraoral examination indicated facial asymmetry and convex facial profile. Intraoral examination revealed a narrow maxillary and mandibular arch with an anterior open-bite and a limited inter-arch space including a few teeth. Previous operations resulted in scar bands in the mandibular vestibular region of the lost teeth. The remaining dentition included 7 maxillary teeth (right second molar, right second premolar, right canine, right lateral and central incisors, left central incisor and left canine) and 1 mandibular tooth (medially placed left canine). Several different restorative options were discussed with the patient and the patient expressed a desire to keep as many of the remaining teeth as possible.

In the maxillary arch, the use of a fixed partial denture (FPD) was contraindicated because of extensive tooth loss. Therefore, a removable partial denture (RPD) with extracoronal ball attachments was selected for esthetics, function, and ease of oral hygiene maintenance. The mandibular arch was primarily affected by the defect with the presence of scar tissue and the absence of alveolar ridge and adequate vestibule. Therefore, to provide retention and meet the esthetic requirements, an implant-supported hybrid prosthesis was planned over 5 implants and the single tooth with a telescope crown. Five implants (Camlog® screw-line implants, Biotechnologies, Basel, Switzerland) were placed and after healing period of 3 months, maxillary and mandibular prostheses were constructed.

At the 5-year follow-up, all implants were stable and the maxillary removable prosthesis with precision attachments and the mandibular hybrid prosthesis did not have any complications. The patient reported being satisfied with the prosthesis.

People with a congenital or craniofacial defect are common and oral problems must be evaluated individually to the most ideal treatment. Therefore, the changes in appearance, function and psychological well-being have an enormous effect on patients’ personal lives and are rewarding for the prosthodontist.