

Esthetic denture using magnet attachment for a patient with anterior teeth missing: A case report

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Abstract

The patient was a 62-year-old female with three anterior teeth removed due to odontogenic myxoma in her mandibular jaw. Her chief concerns were esthetics and a functional prosthetic rehabilitation. For the missing teeth with a defect of the alveolar bone, a sectional removable partial denture (RPD) was fabricated using a magnetic attachment.

The metal base denture was composed of labial and lingual segments to utilize the undercut of adjacent teeth for the denture retention. The framework of lingual segment was first cast with Co-Cr alloy and then placed to the master cast. Next, the labial segment framework was cast to completely fit to the lingual segment. Both segments were connected using a magnetic attachment (PHYSIO MAGNET, NEOMAX). After artificial incisors were arranged on the labial segment framework, denture base resin was poured and polymerized, and the sectional RPD was finally completed.

Using magnetic attachments, the sectional RPD could be fabricated without a metal clasp, providing better esthetics and greater function and retention. However, long-term follow-up is necessary for keeping the connective strength between labial and lingual segments and confirming the cleaning condition of the joint area.
