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Magnetic Attachment as Retained for Mandibular Overdenture: Case Report

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ABSTRACT

Patient Chief Complaint: A 41-year-old female, came to the Dental Hospital of UNHAS with a chief complaint of difficulty in eating and lack of confidence. **Patient Status**: Clinical examination shown a complete edentulous in the upper jaw and partial edentulous in the lower jaw. The remaining teeth were 33, 34 and 43. Treatment Plan: Magnetic Attachments were planned on 33 and 43 and metal coping on 34 as retained for mandibular overdenture. **Details of Therapy**: Pre prosthetic treatment was carried out by root canal treatment on teeth 33, 34 and 43. Primary impression of the maxillary and mandibular arch was made. Magnetic attachments were planned on 33 and 43 and metal coping on 34. The abutment tooth decapitated about the same as the gingival margin. A bevel around the circumference was made. Surface shape of the root tooth was dome-shaped, and the finishing line is shoulderless. Post space impression was made with polyvinyl siloxane. Metal coping for 34 and cast post with keeper magnet for 33 and 43 was fabricated. The metal coping and cast posts metal containing keeper magnet were carefully cemented using glass ionomer cement. Border moulding was done for maxillary and mandibular arch. Occlusal rims were fabricated on final cast. Vertical dimensions and jaw relation was done then face-bow transfer and mounting the rims on the articulator. Try in, then denture was processed and inserted in patient's mouth. The magnets are placed under the mandibular denture, which is faced the keeper teeth, then polished and checked for comfort, occlusion, and retention. **Clinical Significance**: Magnetic attachments significantly increase the retention of mandibular overdenture; patient is more satisfied and comfortable. Patient doesn't experience difficulties in insert and removing the denture because when the denture is slightly shifted, the magnetic attachment returns it to its original position.

Keywords: magnetic attachment, edentulous jaw, overdenture