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## Precision Attachments for Partial Edentulous Rehabilitation: An Option in Prosthodontic Treatment

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### ABSTRACT

**Patient's chief complaint:** A 48-year-female patient was referred to Prosthodontic Department Hasanuddin University Dental Hospital, Makassar with complaints of experiencing difficulties chewing food due to partial tooth loss in upper jaw and all teeth in lower jaw. The patient had used a denture on the lower jaw, but the denture felt loose. The patient want to make dentures on both jaws without using wires so they don't interfere aesthetic. **Patient's oral status:** Intra-oral examination showed partially edentulous maxilla where there were nine remaining teeth with gingival recession and total edentulous mandible. **Treatment plan:** Partial denture with an attachment retained metal framework (hybrid denture) that can support the patient's esthetic and conventional complete denture on the mandible. **Details of the therapy:** Performed preliminary impressions on the maxilla and mandible for manufacturing study model. Determination of tentative vertical dimension followed by maxillomandibular relationship record then mounted on articulator. Preprosthetic treatment was performed including periodontal treatment in the form of scaling in maxilla, then endodontic treatment of teeth 13,14,24, and 25. Preparation of abutments 13, 14, 24, and 25 for the manufacture of PFM split crowns. Abutment impression with two step technique using polyvinylsiloxane. The mold is filled with dental stone and processed in the laboratory. Try-in coping metal and female, pick up impression and tooth-shade selection. Try-in split crown and metal frame. On the mandible individual tray are made and then border molding. Secondary impression was carried out using polyvinylsiloxane. Beading and boxing are done to make the cast that has been done secondary impression and processed in the laboratory. Two dots method was used to determine the maxillomandibular relation and measure vertical dimension. Packing and finishing, followed by insertion of the denture. **Summary:** Precision attachment in dentistry are the functional mechanical parts of the removable partial denture. Precision attachment denture has always been considered beneficial for the patient because it combines both fixed and removable prosthodontics, giving a more esthetic and functional outlook to the denture. Use of precision attachment has simplified and amplified the aspects of retention, function and esthetics when compared to the conventional removable partial dentures.

**Keywords:** maxillary partial denture, extracorona precision attachment, patient comfort