Reestablishing Esthetics With Extracted Teeth On A Mandibular Anterior Edentulous Area A Case Report

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Abstract: Introduction: There is always a great anxiety in many patients when aesthetic impairment is involved after the removal of teeth, and this anxiety tends to be more significant. Immediate dentures for many years were considered to be a resorption-increasing factor. Well-fitting immediate dentures act as a bandage isolating the healing tissues from thermal and chemical damage and preventing food from entering the sockets. <u>Case Report:</u> A female patient of age 43 years treated with immediate partial denture with extracted lower incisors as a replacement with self cure acrylic denture base. <u>Discussion</u>: Within the past decade, as aesthetics have received more emphasis with treatment planning, resorption of the alveolar ridge following tooth extracted teeth as a replacement as one of the strong indication for immediate is aesthetics. Conclusion: Immediate removable partial denture not only increases the aesthetic value, but also therapeutic purposes. For anterior region, where aesthetics is major concern, extracted teeth itself can be much helpful, which can provide excellent aesthetics.

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Key Words: Immediate partial denture, Aesthetics, Extracted Teeth

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Introduction: After tooth removal, placement of dentures immediately is a regular practice in dentistry especially when tooth extraction causes aesthetic problems. For removable partial dentures, immediate prostheses are usually provisional for use over a short period of time while the extraction site heals¹. These dentures are usually made with acrylic resin and wrought wires, and sometimes extracted teeth used for replacement aid in providing the comfort and security needed by the patient². There is always a great anxiety in many patients when aesthetic impairment is involved after the removal of teeth, and this anxiety tends to be more significant². Provisional dentures can be planned so that they will have a therapeutic function in addition to an aesthetic one, maintaining the vertical and horizontal repositioning of the mandible in cases of loss of vertical dimension and/or when the maximal intercuspal position suggests poor positioning of the articular condyle in the glenoid fossae³.

Immediate dentures for many years were considered to be a resorption-increasing factor⁴. It was thought that the denture insertion should occur after partial healing of the sockets and stabilization of the alveolar ridge. Comparative studies of patient groups have shown well-fitting dentures as a positive factor in the healing process⁵. A tendency for less resorption in cases provided with immediate-denture has been verified histologically⁶. Well-fitting immediate dentures act as a bandage isolating the healing tissues from thermal and chemical damage and preventing food from entering the sockets⁵. Additionally they distribute masticatory forces over the healing area reducing trauma to the site while providing the patient with an interim aesthetic solution.

Case Report: A female patient of age 43 years reported in the department of prosthodontics with mandibular anterior teeth. After proper diagnosis and treatment planning lower incisors were advised for extraction and same to be used for replacement with acrylic denture base. Diagnostic impression of maxillary and mandibular arch was made by alginate impression material. On the day of extraction, impression was made stabilizing teeth with putty body. Atraumatic extraction procedure was followed and extracted incisors were cleaned and retrograde root canal treatment was done (Fig. 1).

Fig. 1: Extracted teeth placed in impression



Fig. 2: Extracted teeth sealed with



Extracted teeth with were placed back into impression matching proper indentation. Cold cure acrylic resin was poured filling the periodontal area (fig. 2).

Then the impression was poured with dental stone and allowed to set and then impression was retrieved exposing the extracted teeth alongwith the self cure acrylic resin (Fig. 3). Lingual plate was fabricated in the conventional manner and was allowed to set. It was retrieved finished and was evaluated in the patient mouth on the same day (Fig. 4 & 5).

Fig. 3: Stone cast retrieved with extracted teeth



Fig. 4: Post operative Intra oral



Discussion: Patients' self-perceived needs, expressed desires and expectations are the essential parts of an evidence-based model for prosthodontic treatment planning⁷. Within the past decade, as aesthetics have received more emphasis with treatment planning, resorption of the alveolar ridge following tooth extraction, especially in the anterior region has become a significant problem⁸.

Fig 5: Intra oral in occlussion



There is a huge advantage of using the extracted teeth as a replacement as one of the strong indication for immediate is aesthetics. The use of a natural tooth pontic is an aesthetically acceptable treatment option for situations in which the anterior teeth need to be removed, and it reflects the dentist's concern for the patient's aesthetics, function and psychological wellness⁷. Denture was fabricated with cold cure acrylic resin as patient needed for a week and permanent denture fabrication was planned accordingly. Hence, denture was inserted on the same day, involving less chair side time for the patient. Patient satisfaction was high due to early and good treatment available to her.

Conclusion: Immediate removable partial denture not only increases the aesthetic value, but also therapeutic purposes. For anterior region, where aesthetics is major concern, extracted teeth itself can be much helpful, which can provide excellent aesthetics.

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