



INNOVATIVE TECHNIQUE FOR IMPRESSION MAKING IN GRADE III MOBILE TEETH

Prosthodontics

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ABSTRACT

Grade III mobile teeth has no or very less bone support. Impression making is very difficult in such situation. There is chances of accidental tooth exfoliation during impression making. This article is aimed at modifying technique for making impression of grade III mobile teeth. Highly mobile teeth were ligated in figure of 8 with adjacent teeth using non absorbable surgical suture and then impression was made.

KEYWORDS

Grade III mobile teeth, suture material, impression technique

INTRODUCTION

During the fabrication of dentures, the presence of natural teeth is of distinct advantage. However, the technical procedures associated with construction of such dentures are more complex and time-consuming. The presence of the natural teeth requires the modification of each of the steps of construction. The area that present the greatest challenge to the dentists involves making of the impression.¹

Several techniques of impression making for removable partial denture and immediate denture, have been reported in order to prevent accidental exfoliation of periodontal compromised teeth during the impression procedure^{2,3}. Different techniques of making an impression for an immediate denture include using silicon or plaster in respect to anterior labial segment¹, combination of irreversible hydrocolloid and vinyl polysiloxane (VPS) without any block out materials², covering the mobile teeth with copper bands⁴, making a second impression using irreversible hydrocolloid for the dentulous portion over an impression of the edentulous portion previously made with an open tray⁵ and technique of blocking out the under cuts with wax has been the most common method used⁶.

This article describes a simple method to make a preliminary impression in the situation of a patient with extremely mobile teeth. The impression is made using a combination of irreversible hydrocolloid and non-absorbable surgical suture material.

CASE REPORT

A 32-year-old male patient reported to the Department of Prosthodontics and crown and bridge in Hazaribag College of Dental Sciences and Hospital with missing teeth in mandibular and maxillary anterior tooth region. Past dental history reveals use of removable partial denture in respect to 31 and 41. Patient has complain of compromised esthetics and want fabrication of fixed prosthesis in lower and upper arch. On intraoral examination grade III mobility was present in 32 and 42 (Figure 1). Radiographic examination revealed apical root resorption with interdental bone loss in respect to 32 and 42. Extraction was planned in respect to 32 and 42 followed by fabrication of interim prosthesis.

Informed consent was taken from the patient. Patient was explained about accidental tooth exfoliation of 32 and 42 during impression making. Before making impression 32, 33 and 42, 43 were ligated in figure of 8 respectively with non absorbable surgical suture (Figure 2). Then impression was made with alginate (Figure 3). Impression was removed easily without any tooth exfoliation and cast was poured with dental stone (Figure 4).



Figure.1 Intraoral view



Figure 2. Ligation of non-absorbable suture in figure of 8 on the teeth of interest



Figure 3. Preliminary impression



Figure 4. Primary cast

DISCUSSION

Even before making the final impression, prevention of unexpected tooth removal during the diagnostic impression phase is a challenge if they are periodontally compromised, usually highly mobile and with different long axis. So during impression making there are chances of accidental tooth exfoliation and even tearing of impression^{2,3}. This technique is a simple and safe way of impression making in case of even grade III mobile teeth.

The technique described has both advantages and limitations. The advantages are as the impression can be made even by one person, the labial vestibule can be recorded in a relaxed state, the procedure is not messy and is faster than other techniques and is cost effective.^{2,4} The limitation is that this technique is possible only if periodontally sound tooth is present adjacent to the mobile teeth.

CONCLUSION

This article presents a technique for making an accurate stonecast of mobile and/or misaligned teeth using non absorbable suture material. There is scope for more innovative techniques in making impressions for mobile teeth as exfoliation of teeth during impression making may not be acceptable to patients with high esthetic considerations.

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