

Research & Reviews: Journal of Dental Sciences

A Simple and Atraumatic Technique for Removing Failed Crowns and Fixed Partial Dentures

Dr. Sajani Ramachandran*
Pondicherry Institute of Medical Sciences

Mini Review Article

Received date: 13/07/2015
Accepted date: 10/09/2015
Published date: 16/09/2015

*For Correspondence

Department of Dentistry, Pondicherry Institute of Medical Sciences, Pondicherry 605014, India,
Tel: +91994136826.

E-mail: sajaniram@gmail.com

Keywords: Failed FPD, FPD removal, Winters cross bar, easy removal of FPD

ABSTRACT

Failure in fixed partial dentures may occur even when utmost care is taken in the treatment procedure as well as in the fabrication of the prosthesis, the reasons are many and varied. The removal of a failed prosthesis often presents with a very challenging situation to the clinician and any solution which eases the task without causing any undue trauma to the supporting teeth as well as reduce the discomfort to the patient would be desirable. A simple and a traumatic technique to remove a failed prosthesis using a Winters cross bar is described here.

INTRODUCTION

Replacement of missing teeth most aesthetically is possible now with many recent advances in dental materials and techniques. In spite of this sometimes failures in fixed partial dentures is inevitable^[1]. The causes for this are varied, however removing the failed prosthesis is quite a challenging job for a clinician. Many crown removal techniques have been described in literature^[2,3]. Some are by using instruments which may be pneumatic, back action or spring activated^[4]. Certain techniques using ultrasonic vibration or sectioning and removal using orthodontic pliers^[5] has also been described. The instruments used to remove the crown often use some jerky movements which can traumatise the supporting structures of the abutments. Sectioning the prosthesis seems to be a better option so that the supporting structures are least traumatized and the failed prosthesis can be removed easily. Here a technique is described by which a crown or a bridge can be removed using a winters cross bar after sectioning the crown. This is found to be least traumatic to the patient as well as it is a very easy and less time consuming procedure for the treating clinician. Winters cross bar is available in every clinic and is used for removing root stumps.

Procedure

1. Section the facial surface of the crown from cervical margin with a chamfer diamond bur (super coarse) through the ceramic and metal coping till the luting cement is visible using a high speed hand piece with water spray.
2. Extend the sectioning through the occlusal surface to the palatal or lingual surface. If it is a multiple unit bridge the sectioning has to be done on all the retainers on the abutments.
3. Use a Winter's cross bar on the occlusal surface to lift the sectioned portions. A right or a left side cross bar can be used depending on the section which needs to be taken out first
4. The sectioned bridge comes out in pieces without traumatising the tooth.

CONCLUSION

A failure in fixed partial dentures is a situation many practicing dentists face at some time or the other in their clinical practice. The removal of the failed prosthesis is one of the difficult tasks. The technique adopted should be such that it should not cause any damage to the supporting tissues and the patient also should not have any discomfort. Using the a traumatic technique described here the crowns can be removed in minimal time with minimal effort and causing minimal discomfort for the patient.

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