European Journal of Molecular & Clinical Medicine
ISSN 2515-8260 Volume 07, Issue 2, 2020

Crown Lengthening- A Clinical Case Report

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ABSTRACT:

Sufficient crown height is necessary for the placement of crown .Inorder to place a crown it is necessary to lengthen the height of the crown by gingivectomy. Appropriate amount of crown structure is necessary for crown placement because retention is obtained by the crown structure which is remaining so that the crown placed remains undisturbed.The concept of crown lengthening was first introduced by D.W. Cohen (1962)2 and is presently a procedure that often employs some combination of tissue reduction or removal, osseous surgery, and / or orthodontics for tooth exposure. The amount of tooth structure exposed above the osseous crest (about 4mm) must be enough to provide for a stable dentogingival complex and biologic width to permit proper tooth preparation and account for an adequate marginal placement, thus ensuring a good marginal seal with retention for both provisional and final restorations.

KEYWORDS: Crown lengthening, Gingivectomy, Crown Height.

INTRODUCTION:

Crown lengthening has become a primary surgical procedure for prosthetic rehabilitation of teeth Crown lengthening can be done with scalpel, electro cautery, LASER, etc.

FIGURE 1: buccal view

FIGURE 2: palatal view

Case History:

Patient named Mrs: Illakiya aged 24 years, female had come for crown placement but on clinical investigation, it was found out that there was not much clinical height and had to undergo a surgical procedure for it to be done.

MATERIALS AND METHODS:

The patient had come to department ofperiodontics, sree balaji dental college for the placement of crown .But it was found out that the crown height was insufficient. So a crown lengthening procedure had to be done in order to provide sufficient crown height for the placement of crown .The surgical outcome with the buccal and palatal views are shown above. (FIGURE 1 and 2). The techniques of surgical crown lengthening are: a- External Bevel gingivectomy b- Internal Bevel Gingivectomy with or without bone reduction c- Apically positioned flap with or without bone Reduction d- Combined technique (Surgical and orthodontic)

Discussion:

Crown lengthening is a very important procedure in dentistry. It is done to increase the crown length in order to help the crown to be seated on the tooth for efficient mastication and aesthetics .Sufficient crown length is necessary for proper positioning of the crown .Crown lengthening can be done by either using a scalpel blade or electro cautery. Electro cautery is done to reduce the crown width .crown lengthening is done for sufficient crown height for a crown to be seated in the correct position .Scalpel and blade was used to increase the crown height by proper reduction of the gingival contour and providing a height for crown lengthening.

CONCLUSION:

Human dental anatomy has remained relatively constant for centuries. While human dental anatomy is taught in the dental curriculum, much too often clinicians witness restorations of teeth that are not proportional to one another.It is concluded that sufficient amount of height is necessary for crown placement .Surgical techniques have evolved over years for the crown lengthening procedures which has done tremendous improvement in the field of prosthetic rehabilitation.This is the first technique that uses optimal tooth proportions to determine the correct position of the osseous topography supporting those teeth. Measurements are performed directly on the teeth with disposable and removable aesthetic gauges so that they will not interfere with surgical instrumentation.

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