

## UNTANGLE THE MULTIPLE ABERRANT FRENUM BY VESTIBULAR DEEPENING PROCEDURE: A CASE REPORT

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### ABSTRACT

Multiple aberrant frenum with Shallow vestibule has been major cause of Gingival recession especially in mandibular anterior region along with inadequate width of attached gingiva. Multiple techniques have been developed to increase the depth of vestibule and the width of attached gingiva. This case report present , Untangle the Multiple aberrant frenum and increasing the width of attached gingiva by conventional vestibular deepening procedure.

**KEYWORDS:** Multiple aberrant frenum, Vestibular deepening, Gingival Extension Procedure.

### INTRODUCTION

Periodontal plastic surgery not only emphasized on biological and functional problems that affect the periodontium but also focused to improve esthetic appearance .

Gingival recession is defined as exposure of root surface by the apical migration of junctional epithelium (JE), results in a unesthetic appearance and dentinal hypersensitivity.<sup>[1]</sup> Aberrant frenum along with inadequate vestibular depth which causes Gingival recession is a very common clinical finding in front region of lower jaw.

The term mucogingival surgeries was given by Friedman in 1957, to describe the surgical procedure that corrects the relationship between the gingival and oral mucous membrane such as attached gingiva, shallow vestibules and aberrant frenum that hinder to maintain the marginal gingival health.<sup>[2]</sup> However, several independent and effective surgical procedures have been developed for shallow vestibule, gingival recession, and aberrant frenum which causes mucogingival problems. The aim of this vestibular extension procedure is to increase the depth of vestibule and the width of attached gingiva and give sutures which does not allow both the edges of epithelium to come in contact during process of secondary healing.

### CASE REPORT

A 18-year-old female reported to the Department of Pedodontics & preventive Dentistry, Career P.G. institute of dental sciences & hospital, Lucknow, U.P. India, with chief complaint of receding gum then from there she was referred to the Department of Periodontology, for management of mucogingival problem. On her intra oral examination, revealed class-II gingival recession (P.D. Miller 1985) on front lower teeth because of the vestibular depth inadequate in that region and some tooth mobility was found. Thus, to prevent the progression of gingival recession and increase in width of attached gingiva, vestibular deepening procedure was planned and patient was informed about the procedure.

### Surgical Procedure

Before surgery, ligature wire splinting was done [Fig-1] then local anesthesia was administered and a horizontal incision was given with 15-no. B.P. blade at the mucogingival line [Fig-2]. A partial thickness flap was reflected [Fig-3] and flap was undermined. Undermined flap was sutured with continuous locking suture. Lead foil was placed in the vestibule, to prevent both edges of epithelium attachment [Fig-4]. The operated area was covered with Coe pack (periodontal dressing). No post-operative complications were developed and there were no signs of relapse after 6-month [Fig-5].

### DISCUSSION

Several studies indicated that role of adequate depth of vestibule is very important for the maintenance of oral hygiene. Wennstrom *et al.* reported that combination of shallow vestibule and inadequate width of attached gingiva might favour the food accumulation during mastication and difficulty to maintain the oral hygiene.<sup>[3]</sup> Goldman was first

introduced the rationale and techniques of the emerging field of mucogingival surgery in 1956.<sup>[4]</sup> Gingival recessions and Shallow vestibule may occur without any symptoms but this may explore the patient due to poor esthetics appearance, difficulty to perform plaque control procedures, dentinal hypersensitivity etc. *Kazanjian* were first introduced techniques to deepen the vestibule in edentulous patients in 1924.<sup>[5]</sup> Several technique have been developed since 1956 but most of them are unsatisfactory due to scar formation and frequent relapse of the state of the vestibule because of all these technique exposing the extensive areas of bone. Thus, the purpose of these vestibular deepening procedures is to prevent Gingival traction produced by muscular and fibrous attachments due to shallow vestibule and inadequate amount of attached gingiva, lead to progression of gingival recession and plaque accumulation.<sup>[6]</sup> However, *Wade* (1969) reported that prior to root coverage procedures, adequate width of attached gingiva is common requirement.<sup>[7]</sup> Thus, the presence of adequate amount of attached gingival zone is required for maintaining the periodontal health.<sup>[8]</sup>



(Fig-1:Pre-operative)



(Fig.-2:Incision placed)



**Fig-3 :Immediately after surgery**



**Fig-4: Suture placed**



**Fig-5 : After 6-month – postoperatively: obtain adequate depth of vestibule & width of attached gingiva**

**CONCLUSION**

The conventional vestibular deepening is a successful procedure for gaining adequate depth of vestibule and width of attached gingiva, to prevent the progression of gingival recession.

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