MAVEN

CASE REPORT

ABERRANT MUCOBUCCAL FOLD: A CASE REPORT

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ABSTRACT:

Mucobuccal fold is a normal anatomical structure in the oral cavity which attaches lip, cheek and tongue to the alveolar mucosa and gingiva. In oral cavity there are three maxillary frenii and five mandibular frenii. But the aberrations or abnormal in these mucobuccal fold at times may cause prob- lem to gingival and periodontal health either due to interference in plaque control or due to muscle pull. In addition to this, an abnormal attachment can cause aesthetic and functional problem such as in case of localised gin- gival recession, loss of vestibular depth. Therefore management of these ab- berant structures is important. The present case report discusses the man- agement of an aberrant mucobuccal fold. (2017, Vol. 01; Issue 01: Page 42 - 45)

Keywords: Aberrant mucobuccal fold, Frenotomy, Frenum.

INTRODUCTION

Frenum is a fold of mucous mem- brane which encloses muscle fibres that attaches lips and cheeks to the alveolar mucosa and /or gingiva and underlying perioseum (1).There are three maxillary and five man- dibular frenii. The main function of these structures is to provide sta- bility to the lip and the tongue (2). Throughout their development pro- cess as the teeth erupt, this attach- ment generally changes to achieve their destined configuration (3). Plack et al (1974) has classified fre- num as (4):

- Mucosa: when the frenal fibres are attached to the mucogingival junc- tion.
- Gingival: when frenal fibres are at- tached within attached gingiva
- Papillary: when fibres are extend- ing into interdental papilla

• Papilla penetrating: when frenal fibres cross the alveolar process and extend upto the palatine pa- pilla

Frenum or mucobuccal fold may in- terfere with the maintenance of gin- gival health when they are attached too closely to gingival margin either due to interference in plaque con- trol or due to muscle pull (5). Clini- cally, papillary and papilla pene- trating frena are considered as pathological and have been associ- ated with loss of papilla, recession, diastema, difficulty in brushing, malalignment of teeth and it may also interfere the denture fit or re- tention. Management of aberrant frenum in usually carried out with frenectomy and frenotomy/freno- plasty procedures. Frenectomy is the complete removal of frenum and frenotomy/frenoplasty is the repo- sitioning of this attachment.

CASE REPORT:

A 9 year old female patient reported to the department of Periodontics, Guru Nanak Institute of Dental Sci- ences and Research, Kolkata, with a chief complaint of overlapping tis- sue in the left upper tooth region (Fig 1). On clinical examination, a fold of mucosa in a tube like man- ner joining the adjacent papilla without the connection of underly- ing gingiva was revealed (Fig 2). It was not an aberrant frenum, but aberrant mucobuccal fold with re- spect to maxillary deciduous left ca- nine region. It appeared to be a pa- pilla penetrating frenum according to Plack1974. Frenotomy was de- cided in this case with the prior consent of patient's parent.

Fig 1: Abberant mucobuccal fold

Fig 2: Depicting tubular nature of folding without being attached to gingiva.

Infiltration anaesthesia and incisive nerve block was administered (con- taining lignocaine hydrochloride and 1:80000 adrenalines). A tissue forcep was used to engage the base of the palatal tissue and incision was given thereafter. As soon as the incision was made the mucobuccal fold was set free (Fig3). The tissue was excised using a dissecting scis- sor and frenal attachment was un- dermined so as to place it more to- wards the mucogingival junction (Fig4). Area was irrigated with nor- mal saline and pressure pack was given both palatally and buccally. After achievement of haemostasis periodontal pack was given. Post operative instructions were given

together with antibiotics and analgesics. The patient was recalled 1week post-operatively revealing uneventful healing.

Fig 3: Frenal attachment set free.
Note: Intact attached gingiva

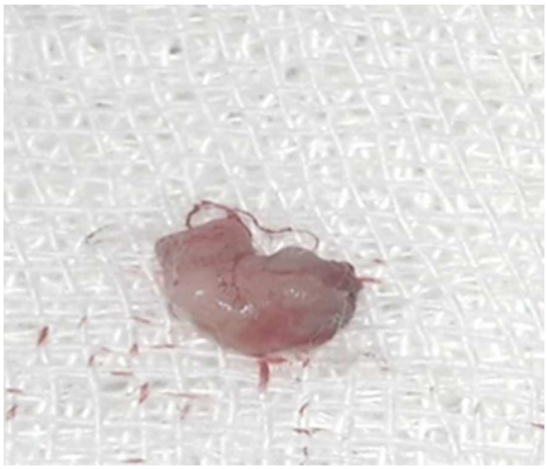

Fig 4: Excised mass

DISCUSSION:

Prevalence of different types of fre- num attachment and its signifi- cance in periodontal health is an important aspect of treatment plan.

The mucosal type of frenal attach- ment is most common with a per- centage variation of 46.6% in max- illary arch and 92% in the mandib- ular arch. Gingival is the second most commonest with percentage variation of 34.4% in maxillary and 6.5% in mandibular arch.The papil- lary shows a variation of 3.1% in maxillary and 0.2% in mandibular arch.The papillary penetrating shows 16.1% in maxillary and 1.2% in the mandibular arch.

Abnormal frenum/ mucobuccal fold and muscle pull are detri- mental to periodontal health as it contribute to accumulation of plaque and calculus, leading to in- flammation and pocket formation

(6). Marginal attachment of frenum, as an etiologic factor in periodontal disease, is recommended for exci- sion (7).

Conventional technique of frenec- tomy was introduced by Ascher (1961) and Kruger (1964). Miller modified this technique and intro- duced V-Y Plasty and Z Plasty to manage problem associated with aberrant frenum.

Use of electrosurgery and Lasers in recent years has advantage over conventional technique such as minimal tissue consumption, mild bleeding and minimal post-opera- tive complications. But the main disadvantage are high cost and re- duced surgical precision resulting in inadvertent thermal necrosis and photo acoustic injury (8, 9).

CONCLUSION:

Aberrant frenum or mucobuccal fold can interfere with normal oral hygiene maintenance and can re- sult in other mucogingival prob- lem.The present case report sug- gests early detection and correction of aberrant frenum by clinician,

which can have positive effect on periodontal health and disease progression.

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