

Clinical Study of Median Maxillary Labial Frenum Attachment Various Types

¹Dr. Muhannad Abdulrhman Mohammed Halwani, ²Rakan Saed Safar Althobaiti

¹ Dentist "G.P" at King Khalid University KKU Dental Clinics – Abha - Aseer Region – KSA – Mine Other

² Dental Student at King Khalid University KKU - Abha - Aseer Region – KSA- Co Other

I. INTRODUCTION

Frenum can be defined as "a fibrous band of tissue attached to the bone of the mandible and maxillae, and is frequently superficial to muscle attachments." [1] The frenum of the oral cavity are categorized into different types: Frenulum linguae, under the tongue; the frenulum labii superioris, inside the upper lip; the frenulum labii inferioris, inside the lower lip; and the buccal frena which connect the cheeks to the gingiva. [2] The frenulum labii superioris or median maxillary labial frenum (MMLF) is found on the underside of the center of the upper lip that connects to the midline of the attached gingiva between the central incisors. The origin is often wide but the tissue of the frenum itself narrows in width and is inserted in the midline into the outer layer of periosteum, and into the connective tissue of the intermaxillary suture and the alveolar process. [3] A normal frenum attaches apically to the free gingival margin so as not to exert a pull on the zone of the attached gingiva and usually terminating at the mucogingival junction. However, its level may vary from the height of vestibule to the crest of the alveolar ridge and even to the incisal papilla area in the anterior maxilla. [3],[4] Several classifications for frena based on morphology have been proposed. [5],[6] However, this classification may not be adequate, especially in the aspect of the (MMLF) , as several variations in its morphology have been observed which have not been classified till date. Many dentists are not aware of the variations of (MMLF), misinterpreting them as pathological entities. Certain degree of confusion exists in classifying frena types, leading to difficulties in diagnosis and treatment planning. Aberrant frena often cause problems such as loss of papilla, recession, diastema, difficulty in brushing, alignment of teeth, and psychological disturbances. [5] Morphological variations of (MMLF) need to be addressed, differentiating them from abnormal ones during various dental procedures. The present study aims to propose a detailed and revised classification of normal (MMLF) based on morphology.

II. AIM

The aim of this study was to identify the different types and most common of "MMLF" Median Maxillary Labial Frenum in local population in Saudi Arabia Abha .

III. MATERIALS AND METHOD

The study was conducted on patients who were attending a KKU dental clinics hospital Abha . The age of the patients range from 13years to 75 years. A study involving 117(males) patients was performed by clinical assessing the maxillary frenum attachment under direct visual method.

IV. RESULTS

Study population included 117 adults males, who were willing to participate in clinical cross-sectional survey at the KKU dental clinics , Abha, one of the most populous states of KSA. The study included only the examination of Frenum morphology based on convenience sampling. A total of 117 individuals were approached, out of which 117 agreed to participate in the study and aged between 13 and 75 years , The most common type of MMLF observed was the Mucosal frenum 53 (45.3%) [Fig 1], followed by gingival frenum with 45 (38.5%) [Fig 1], then papillary frenum with 11 (9.4%) [Fig 1], and papilla frenum with 8 (6.8%) [Fig 1], prevalence of maxillary labial attachment frenum [Fig 1], [table1].

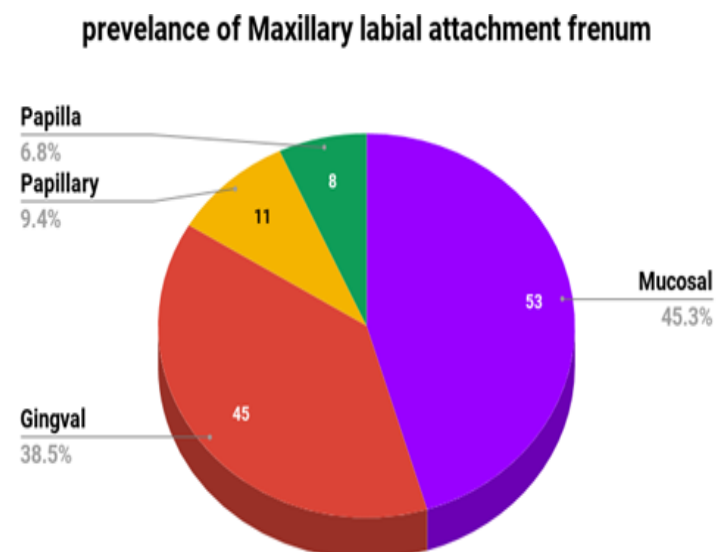


Fig 1 : Prevalence of Maxillary Labial Attachment Frenum.

Type of MLAF	Prevalence of Maxillary labial Attachment Frenum	
	NO of Patients	Percentage
Mucosal frenum	53 Patients	(45.3%).
gingival frenum	45 Patients	(38.5%).
papillary frenum	11 Patients	(9.4%).
Papilla frenum	8 Patients	(6.8%).

Table 1 : Prevalence of Maxillary Labial Attachment Frenum.



Fig 4 : Clinical pic of Papillary Frenum Attachment .



Fig 5 : Clinical pic of Papilla Penetration Frenum Attachment



Fig 2 : Clinical Pic of Mucosal Frenum Attachment



Fig 3 : Clinical pic of Gingival Frenum Attachment

V. DISCUSSION

MMLF appears as a fold of mucous membrane extending from the mucous lining of the mucous membrane of the lips towards the crest of the residual ridge on the labial surface. [1] Several morphological variations of MMLF are being observed in day-to-day practice which is not documented in the literature. Need of the hour is to properly classify them in various categories in order to address them while performing various dental procedures.

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The most common type of MMLF observed was the Mucosal frenum 53 (45.3%) followed by gingival frenum with 45 (38.5%) then papillary frenum with 11 (9.4%) , and papilla frenum with 8 (6.8%) .

VI. CONCLUSION

The most common Morphological type of MMLF appears is that mucosal frenum. This information can be used to perform safer MMFA surgery during surgical interventions in maxillary labial frenectomy operations and to predict the probability its potential impact on speech and the difficulty of pronunciation of certain letters.

VII. ACKNOWLEDGEMENT

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