



## LIP PIT WITH BIFID LABIAL FRENUM-A RARE CLINICAL CASE REPORT

Sudipta Kar\*

Senior Lecturer, Department of Pedodontics & Preventive Dentistry, Guru Nanak Institute of Dental Sciences & Research, Kolkata – 114, West Bengal, India.

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### ABSTRACT

DeMurquay in the year 1845 first described lip pits. It is an unusual congenital anomalies affecting the lips. Frenum is a fold in mucous membrane that attaches lips and cheek to the alveolar mucous membrane, gingival tissue, and periosteum. Lip pits can be identified in the region of lower lip, commissure or may be found in upper lip. The aberrant maxillary frenum may be responsible for esthetic problems, orthodontic problem or treatment relapse. The present case report is of a non syndromic case of a congenital upper lip pits with bifid labial frenum. In the non syndromic person is extremely rare. The patient did not manifest any other anomalies in the orofacial structures. Truly this is a rare case report.

### INTRODUCTION

Modern era is the era of esthetics. Midline diastema in central incisors is one of the major esthetic problems in adults or even in child. Now a days the parent of child is often visit to dental surgeon or hospital concerning on the esthetics of their beloved. Since the presence of an aberrant frenal attachment is one of the major causative factors for midline diastema, it becomes essential to focus on the clinical importance of frenal attachment. Labial frenal attachments are thin resilient folds of oral mucous membrane containing muscle fibers of orbicularis oris muscle. Lip pits can be identified as an isolated defect in both upper and lower lip. It may also be identified with different developmental disturbances like Van der Woude's syndrome [1], Marves and Cremer's syndrome [2], Oro-facial-digital syndrome and Popliteal Pterygium syndrome [3]. The lip pits may be present from birth. In clinical examination lip pits may vary from an isolated single pit in the central portion of the lip to two pits present bilaterally. The lip pit can be found on the inner surface of the lip, outer surface as well as on the distinct margin between the outer and inner lip.

Depth of the lip pit may vary from shallow to deep or it may be found as slight asymptomatic depression on vermilion border of lip the lip pits may vary also like no treatment when they are mild [4] or surgical excision [5] when it provides unaesthetic appearance.

### CASE REPORT

The present case deals with of a 8-year-old boy who was referred to the Department of Pedodontic and preventive dentistry Guru Nanak Institute of Dental Sciences & Research, Kolkata, West Bengal for the treatment of malaligned upper anteriors. Patient reported with the chief complaint of a median diastema between the two maxillary central incisors. On examination, a bifid labial frenum in association with midline diastema was observed (Figure 1). There was no past medical history related to any syndrome reported in this case. Family history was also noted. No such family history was also reported. General health checkup and through intra and extra oral examination also revealed no other abnormalities.

### DISCUSSION

The lip pits are an unusual developmental anomaly affecting oral cavity that can cause unesthetic appearance. Lip pits and bifid labial frenum are rare

Corresponding Author

**Sudipta Kar**

Email: - [dr.sudiptakar@yahoo.com](mailto:dr.sudiptakar@yahoo.com)



developmental anomaly that affects the region of upper lip. The bifid frenum is observed in approximately 1% cases in the population.

Literature review reveals that labial frenum in maxillary region has diverse morphology. Sewerin [6] has delineated eight types of different variations of frenum such as simple, persistent tectolabial, simple with appendix, double frenum, simple with nodule, frenum with nichum, and bifid frenum as well as frenum with two or more variations at the same time.

Aberrant frenum leads to midline diastema and requires surgical correction during orthodontic treatment. Presence of abnormal labial frenum may also interfere with retention of denture fit [7]. Whenever needed, can be one of the causes of gingival recession [8]. Aberrant labial frenum also can interfere with proper tooth brushing [9] causing gingivitis. All these clinical significances show that every general dental surgeon as well as specialized dental surgeon must give more emphasis for frenum assessment during intra oral examination of children.

**Figure 1. Child having upper lip pit**



**Figure 2. Same child having bifid upper labial frenum**



## CONCLUSION

This paper has enlightened us on a rare but significant morphology of oro facial region. The dental surgeons should give adequate attention to it during oral examination. If lip pit and frenum causes any esthetic disharmony necessary surgical intervention is often required. Pre orthodontic evaluation of individual cases is also necessary for acceptable post orthodontic results.

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## REFERENCES

1. Schinezel A, Klausler M. (1986). The Van der Woude's Syndrome (dominantly inherited lip pits and clefts). *J Med Genet*, 23(1), 291-292.
2. Marres HA, Gremers CW. (1991). Congenital conductive or mixed deafness, preauricular sinus, external ear anomaly and commissural lip pits: An A.D. inherited syndrome, *Ann Oto rhino laringol*, 10(1), 928-929.
3. Herold HZ, Samuel G, Baruchin AM, (1986). Popliteal pterygium synd. *Clin Orthop*, 4(2), 209-214.
4. A Souissi, D El Euch, M Mokni, T Badri, Ben Osman Dhahri. (2004). Congenital lower lip pits: A case report, *Dermatology Online Journal*, 10(2), 10. 164.
5. Kathleen Brogan Schwarz, James Peter Keating, Barbel Holtmann, Jessie Ternberg. (1979). Congenital lip pits and Hirschsprung's disease. *Journal of Pediatric Surgery*, 14(2), 162-165.
6. Sewerin I. (1971). Prevalence of variations and anomalies of the upper labial frenum. *Acta Odontol Scand*, 29,487-96.
7. Kaimenyi JT. (1998). Occurrence of midline diastema and frenum attachments amongst school children in Nairobi, Kenya. *Indian J Dent Res*, 9, 67-71.
8. Pushpavathi N, Nayak RP. (1997). The effect of mouth breathing, upper lip coverage, lip seal and frenal attachment on the gingiva of 11-14 year old Indian school children. *J Indian Soc Pedod Prev Dent*, 15,100-3.
9. Addy M, Summer PM, Hunter ML, Kingdon A, Shaw WC. (1987). A study of the association of frenal attachment, lip coverage and vestibular depth with plaque and gingivitis. *J Periodontol*, 58, 752-7.

## CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

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