Congenital Lower Lip Pits-A Case Report

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Abstract

Lip pits are rare anomalies that can occur in the upper lip,lower lip or oral commissure. Although lip pits may be seen near the oral commissures or midline of upper lip mostly occur on the lower lip and are associated with van der woude syndrome.This case report presents the non- congenital lip pits of a 6 year old female patient.

KEYWORDS: Lip pits, Congenital, Lower lip.

INTRODUCTION:

Lip pits are unusual congenital anomalies affecting the lips. It was first reported and described by Dcmurguay in 1845.Congenital lower lip pits had been reported in about 0.001% of the population and 65% to 75% of the cases are associated with cleft lip or palate[1]. Congenital pits of the lower lip in association with clefting of the lip or palate or both occur in many syndromes.Von de woude was the first to combine lower lip pits with cleft lip or cleft palate introducing a new clinical entity which described its mode of heredity.Lip pits can occur in the region of upper lip,lower lip or the oral commissure and is more common among the females.Eventhough they may be seen near the oral commissures or midline of upper lip but mostly occur on the lower lip.Two third of the lip pits are associated with cleft lip and palate and the other one third have minimal findings such as hypodontia or isolated lower lip pits. The current report is a non syndromic case of a congenital lip pits and the patient not having any other anomalies in the oro facial region[2,3].

CASE REPORT:

A healthy 6 year old female patient reported with the complaint of irregularly arranged lower front teeth. The remainder of the patient's social, birth and medical history were unremarkable. The patient's family history was negative for the presence of lip pits.

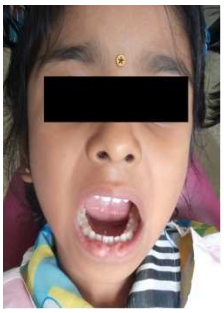

Fig 1 : Presence of bilateral lip pits in the lower lip.

On general examination there were no associated anomalies in the body. Intraorally all the teeth were normal in size, shape and number.

There was no evidence of cleft lip and palate present.

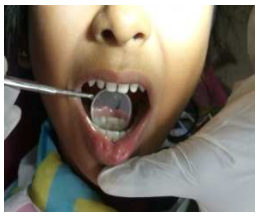

Fig 2 : Retained 71 & 81 and lingually erupting 31 & 41.

Dental examination revealed mixed dentition, lingually erupted 31 and 41, Retained 71 and 81 and decay present in 75 and 85. A diagnosis of bilateral congenital lip pit was made. Oral prophylaxis was done followed by glass ionomer restoration in 75 and 85. Oral hygiene instruction was given. Retained 71 and 81 were extracted under local anesthesia and surgical correction was made for the lower lip defects.

Fig 3 : Extracted socket of 71 & 81. (post operative).

DISCUSSION:

Lip pits are usually bilateral, often symmetrically placed depression are observed on the vermillion portion of the lower lip on each side of the midline. The dimples are usually circular but they may be transverse slits or sulci[4].

Lip pits are developmental anomalies that occur either in association with other developmental disturbance or as an isolated defect.Various syndrome associated with lip pits are Van de woude's syndrome, popliteal pterygius syndrome, orofacial digital syndrome and Marres and Cremer's syndrome.Lip pits occurring in the commisures are more common than those that occurring in midline [5].

Most of the lip pits are located in the lip vermillion and on the muco-cutaneous line at a distance of about 5-25mm from each other. They may be located at the apex of the elevation which may fuse in the midline producing a snout like structure. The depression represents blind sinuses that descend through the orbicularis oris muscle to a depth of 1mm to

2-5mm and communicate with the underlying minor salivary gland through their excretory ducts. Although usually bilateral and symmetrically placed, and asymmetric single pit, a central single

pit or bilateral asymmetrical pits may occur. The appearance of the pits may be remarkably subtle[6].

Lower lip pits are usually asymptomatic. The only symptom might be the continuous or intermittent drainage of water or salivary secretions. The mucous accumulation occurs more rapidly before and during meal times or in relation to crying, when infants are concerned. Fistulae represent failure of closure of evanescent sulci that appear 10-14th month of the embryonic period. The anomaly is attributable to a defective gene which would explain the familial appearance and the frequent association with cleft lip, cleft palate(or both) or the anomaly is the result of retardation or inhibition of a certain phase in the normal development of embryonic lower lip , hence the consistency of location [7].

At 5.5 weeks during the developmental stage of the head and neck, the fusion of the mandibular arch and sulcus lateralis of the lower lip occurs. While the fusion of the maxillary and fronto-nasal process come about at 6 weeks. It is hypothesized that a common event may simultaneously disturb fusion in both locations. This event results in the strong association between the lip pits and cleft lip or cleft palate.[8] The features associated with lip pits constitutes : Cleft lip or palate occurs in 21% of the patient, hypodontia is only rarely observed.However hypodontia is found in 10-81% of the patient's with Van-de-woude syndrome.Other features and anomalies associated in patients with lip pits include syndactyly of the hands, club foot, genito urinary abnormalities and cardiovascular abnormalities. Patient often perceive these pits as depressions made by the maxillary central incisors although the pits are present from birth much before maxillary incisors erupt. The clinical picture of the lip pits may vary ranging from a single pit in the centre of the lip to two pits (one on the right and one on the left) or one pit on either side or left side.Their occurrence can be on the inner lip surface, outer lip surface or on the margin between the inner and outer lip. They may be shallow or deep varying from asymptomatic slight depression on vermillion border to pits that form canals ranging from 1-25mm, which generally extend in to the orbicularis oris muscle. The lip pits may require no treatment if they mild. The treatment of pits is surgical excision to alleviate the discomfort for cosmetic reasons [9,10].

CONCLUSION:

Recognition of lip pits is important given the multiple other associated anomalies. Proper evaluation and treatment of these associated abnormalities and genetic counselling is of utmost importance. Cases with considerable deformation and complication must be treated wisely since lips form the essential part of one's face.

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