

Case Report

Nasolabial hamartoma: a rare case report

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ABSTRACT

Nasolabial cysts are rare, nonodontogenic soft tissue developmental cysts occur in the maxillary lip and nasal alar regions. Patients usually presents with an asymptomatic soft swelling with obliteration of the nasolabial fold. Due to it's origin from entrapped epithelium in an embryonic fusion plane developmentally, this cyst is considered to be a Hamartoma. Hamartomas are non-neoplastic malformations, or inborn errors of tissue development. They are characterized by an abnormal mixture of tissues indigenous to that area of the body. Complete surgical excision is the accepted method of treatment. This report aimed to present a case of nasolabial cyst hamartoma, which is rare in presentation.

Keywords: Nasolabial cyst, Hamartoma, Non-odontogenic cyst

INTRODUCTION

Nasolabial cysts account for 0.7% of all nonodontogenic cysts that arise in the anterior maxillary region. The prevalence of nasolabial cysts is cited to be higher in African Americans with a female preponderance of 4:1.¹ Mostly unilateral, 10% of it occurs bilaterally. Hamartoma are characterized by an abnormal mixture of tissues indigenous to that area of the body, but with an excess of one or more of the tissue.² We report a case of nasolabial cyst hamartoma. To the best of our knowledge, this has been very rarely reported.

CASE REPORT

A 60 year old male presented with nasal asymmetry and left nasolabial fold fullness for 8 yrs. Clinical examination revealed a swelling in the left nasolabial fold measuring 3×2 cm, non-tender. On palpation it is soft to firm in consistency but with normal overlying skin with obliteration of the left Nasolabial fold with elevation of the left nasal ala (Figure 1). Computed tomography (CT)

non contrast revealed a well-defined subcutaneous soft tissue density measuring 2×1.6 cm located in the left nasolabial fold and nasal alar region.



Figure 1: Nasolabial swelling.

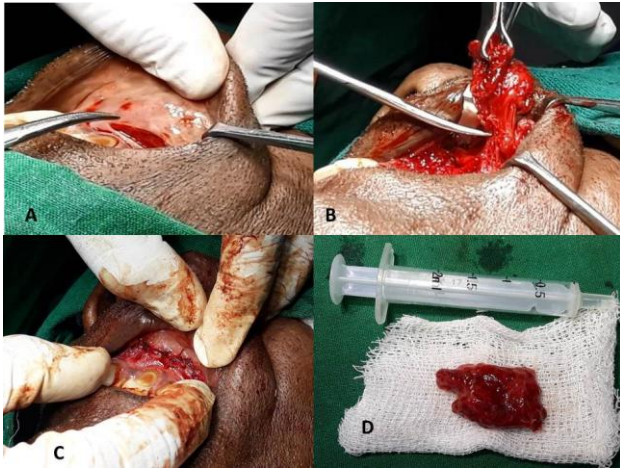


Figure 2: Intraoperative, (A) incision, (B) dissection, (C) suture, (D) specimen in toto.

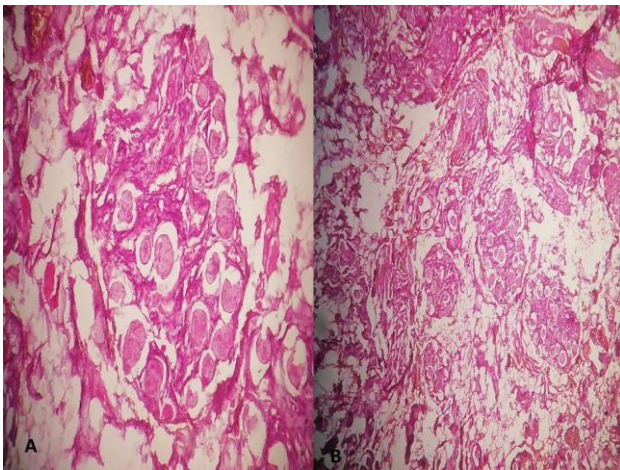


Figure 3: Histopathology- fibrocollagenous tissue enclosing numerous blood vessels and lobules of adipocytes and striated muscle bundles.



Figure 4: (A) Post op status, (B) wound healed well.

The patient underwent surgical excision through a sublabial approach under local anaesthesia. Intraope-

ratively it was found to be a cystic mass which is found to be encapsulated with no infiltration to surrounding tissues and was excised completely (Figure 2). Post-op period was uneventful. Histopathological examination revealed fibrocollagenous tissue enclosing numerous blood vessels and lobules of adipocytes and striated muscle bundles which is found to be hamartoma (Figure 3). The patient has been on regular follow up visits and is now 2 yrs with no complaints or recurrence (Figure 4).

DISCUSSION

Klestadt' popularized his facial cleft theory in 1913. He proposed an entrapment of embryonic nasal epithelium in a facial cleft formed by the merging of the maxillary, lateral, and medial nasal processes, this made nasolabial cyst to be classified as fissural cyst.³ In the developmental theory, the nasolabial cyst is considered to be a hamartoma, similar to branchial cleft cyst. Developmental mishaps in face provide an opportunity for anomalous dentition, nasal septum distortion and cyst formation. Hamartomas are non-neoplastic malformations or inborn errors of tissue development. They are characterized by an abnormal mixture of tissues indigenous to that area of the body, but with an excess of one or more of the tissue types.⁴ Development of hamartomas may involve errors during fetal growth, or can develop from disturbances of immature tissues in the post-natal period.³ Head and neck hamartoma are uncommon but not rare. Hamartoma arising from the nasal cavity are rare. There have been only five cases reported and our case was very rarely reported. Bull et al described the facial deformity of the nasolabial cyst is pathognomonic when infection supervenes, facial pain or nasal pain, purulent discharge into the nose or oral cavity. Remaining extra-osseous, it presents as a smooth fluctuant mass between the nasal floor and gingivolabial sulcus.⁵ Most cysts were grey in color which contains mucoid or yellowish serous fluid. In cases of hemorrhage, there occurs brown color fluid and mucopurulent material when there is infection, lined by ciliated pseudostratified columnar epithelium with numerous goblet cells. Squamous metaplasia seen because of infection. The outer cyst wall was composed of fibrous connective tissue, with attached striated muscle.⁶ Neither cholesterol crystals nor malignant transformation occurs. Plain radiograms don't show this lesion except when it causes significant maxillary bone erosion.⁷ The cystic nature and enlargement of this lesion and its relation to the nasal and maxillary bone is revealed by CT and magnetic resonance imaging (MRI). In MRI cyst contents more clearly seen than CT.⁸ Ultrasonography may be an alternative method to diagnose nasolabial cyst.⁹ Complete surgical excision through sub labial approach is the treatment of choice.

CONCLUSION

Nasolabial cyst with nasolabial hamartoma is extremely rare. To our knowledge, this is the first reported case of nasolabial cyst with hamartoma. The patient we have

reported differs from the previous case reports of nasal hamartoma, is that the tumour arises from the nasolabial fold contained fibrocollagenous tissue with lobules of adipocytes with striated muscle bundles. Histopathological examination is always warranted. Radiological studies have limited value in diagnosis. If it is completely resected, recurrence is extremely rare and prognosis is very good.

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