

## **EXPECT THE UNEXPECTED- CONGENITAL EPULIS OF THE NEWBORN**

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### **ABSTRACT**

Congenital epulis is a rare tumor of the newborn. It arises from the gingival mucosa and is most commonly present at the anterior part of the maxillary alveolar ridge. It is a benign tumor with a marked female predilection. Herein, we report a case of congenital epulis of a newborn which interferes with mouth closure and breast feeding.

**Key words:**

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### **INTRODUCTION**

Congenital granular cell lesion (CGCL) is a rare benign soft tissue lesion of unknown etiology, but having a close resemblance to granular cell myoblastoma. This soft-tissue tumour is smooth-surfaced, pedunculated, sometimes lobulated and arises from the alveolar crest. The most common site is anterior part of the maxillary alveolar mucosa. The name "Epulis", attributed to the lesion is a Greek word and means "on the gum" or gum boil.

The original description of the lesion was given by Newmann(1) in 1871 and hence it is also known as Newmanns tumor. The other names for the lesion are granular cell tumor or congenital gingival granular cell tumor.(2) Epulis is seen only in the newborn and is a different entity from other granular cell tumors. Congenital Epulis has a female predilection with 8:1 ratio. These lesions mostly occur individually but cases of multiple congenital epulis has also been reported. (3)

**Case report**

A 16 days old female neonate was brought to our clinic by her parents for their concern regarding a mass protruding from her oral cavity. The baby's weight at birth was 2.75 kg and had a normal full-term delivery.

On clinical examination, a round 3x2cm pedunculated, pink coloured, smooth soft tissue mass covered by mucous membrane was seen protruding from the mouth attached to the anterior aspect of the left maxillary alveolar mucosa(Fig.1). The mass was firm in consistency and non-tender on palpation. It prevented normal mouth closure and also interefered with the natural breast feeding. There was absence of any airway obstruction. The baby did not manifest

any other medical conditions and the general physical examination along with laboratory tests revealed to be normal at delivery.



**Figure 1** The lesion



**Figure 2** Incision being given

A differential diagnosis of congenital epulis was made to be hemangioma and teratoma. Decision was made to excise this mass under general anesthesia. The mass was completely resected with an elliptical incision (Fig. 2) to the peduncles and hemostasis was achieved with diathermy and sutures were placed (Fig. 3). The excised tissue (Fig. 4) was subjected to histopathological examination. The intraoperative and postoperative courses were uneventful. The newborn recovered with no complications, and breastfeeding was initiated on the subsequent day of operation.



Figure 3 Suturing being done



Figure 4 Excised lesion

Histopathological examination showed tissue lined by stratified squamous epithelium and underneath there were sheaths of large monophilic cells with bland nuclear



Figure 5 Postoperative healing after 1 week

chromatin and abundant eosinophilic granular cytoplasm. These findings were consistent with the histopathology of granular cell epulis. Postoperative checkup was done after 1 week (Fig. 5) and healing at the lesion site was observed.

## DISCUSSION

Congenital epulis is a rare but distinct entity of uncertain histogenesis. It exclusively occurs in newborn infants. It usually presents as a solitary polypoid nodule firmly attached to the labial aspect of the dental ridge by a narrow or broad base. Upto 10 percent of the cases may also present with multiple lesions.(3) Surgical excision of the lesion is the treatment of choice. Surgery should not be radical as it minimizes the danger of damaging the underlying tooth buds. The histogenesis is uncertain and the proposed cells of origin include odontogenic epithelium, undifferentiated mesenchymal cells, pericytes, fibroblasts smooth muscle cells, nerve related cells and histiocytes. (4). The usual size of the lesion is small, but lesions more than 7 cm have also been reported.(5). In cases of multiple congenital epulis of newborn (CEN), tongue affection has been traced. (6) Chattopadhyay *et al.* have emphasized the possibility of detecting the tumor during pregnancy via ultrasound.(7)

Differential diagnosis includes hemangioma, fibroma, granuloma, embryonal rhabdomyosarcoma, malignant granular cell myoblastoma.(8) Clinical diagnosis is based on predominance of female patients, tumor location in anterior maxillary region, presence at birth and absence of growth potential.(9) Possibility of spontaneous remission should be taken into consideration.(10) Precise and early diagnosis of these lesions are necessary to prevent interference with feeding and respiration and normal development of jaw and teeth.

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