

CONGENITAL EPULIS

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ABSTRACT

Congenital epulis is a rarely-encountered pathology the majority of which originates from the gingival mucosa, particularly the anterior portion of the maxillary alveolar arch. A one-day-old neonate was brought with an oral mass disrupting nursing. On examination, a 3X2 cm spherical mass originating from the upper gingiva was

found. The mass was excised under local anesthesia, and histopathologically diagnosed as congenital epulis. During a follow-up of 4 months no recurrence was found in the patient. Congenital epulis has to be among the diagnoses considered initially in gingival masses in neonates.

• **Key Words:** Congenital epulis, gingival mass, neonatal feeding disorder *Nobel Med 2010; 6(3): 90-92*

KONGENİTAL EPULİS

ÖZET

Kongenital epulis çoğunluğu gingiva mukozasından ve özellikle de maksiller alveolar arkın ön kısmından köken alan nadir görülen bir patolojidir. Bir günlük yenidoğan ağızda emmesini bozan kitle nedeni ile getirildi. Yapılan muayenesinde üst gingivadan kökenli 3x2 cm ebatlı

yuvarlak kitle görüldü. Kitle lokal anestezi altında eksizyon yapılarak çıkarıldı. Patolojisi konjenital epulis gelen hastanın 4 aylık kontrolünde patolojiye rastlanmadı: Özellikle yenidoğan dönemi gingival kitlelerde konjenital epulis ilk akla gelen lezyonlardan olmalıdır.

• **Anahtar Kelimeler:** Kongenital epulis, gingival kitle, yenidoğan beslenme bozukluğu *Nobel Med 2010; 6(3): 90-92*

INTRODUCTION

Congenital epulis, also called as congenital myoblastoma, congenital granular cell tumor (CGCT), or Neumann tumor, is a rarely-encountered pathology. The majority of cases originate from the gingival mucosa, most commonly in the anterior portion of the alveolar ridge of maxilla.^{1,2} In this case report, we wish to present a neonate with gingival mass.

CASE

A female neonate born with a weight of 3200 grams on

the 38th week of pregnancy from a 28-year-old mother who made her first delivery through the abdominal C/S route was brought with an oral mass disrupting nursing. On examination, a 3X2 cm ellipsoid mass extending out of the oral cavity was found, ensheathed with mucosa and attached with a stalk to the gingiva at the incisor region of maxillar alveolae (Figure 1,2). The patient began being fed through a nasogastric tube and was referred to the Otorhinolaryngology Clinic of Yüzüncü Yil University. There, following complete systemic examination and pediatric consultation, it has been concluded that no other pathology coexisted, and the mass was excised under local anesthesia. Hemorrhages →

were controlled via cauterisation and suturing with 4/0 chrome catgut (Figure 3).

The histopathological examination of the mass that was excised revealed that microscopically the mucosal mass was comprised almost entirely of large, rounded and polyhedral, histiocyte-like cells with small, dark oval nuclei and abundant eosinophilic granular cytoplasm (Figure 4). There were vascular channels between granular cells, but fibrous stroma was minimally present. There was no pseudoepitheliomatous hyperplasia, which is commonly seen in the granular cell tumors of adults. Lesional cells did not display immunoreactivity for S-100 protein as do the granular cells in granular cell tumors and for CD-68 as do the histiocytic cells in histiocytic tumors. On the 3rd postoperative day, the nasogastric tube was removed and the patient began receiving orally. On the 7th postoperative day the patient was discharged. At the end of a 4-month follow-up, no complication or recurrence was observed.

DISCUSSION

In the neonate, gingival and intraoral masses have unfavorable effects particularly on the nutrition of infants. The most commonly encountered lesions of the gingivae in neonates are Epstein pearls and Bohn nodules, though infantile or congenital choriocarcinomas, congenital leiomyomatous epulis, pyogenic granulomas, congenital malignant rhabdoid tumors and nodules secondary to desmoterol poisoning are also observed.³⁻⁷

Congenital myoblastoma, also known as congenital gingival granular cell tumor, is a rarely-encountered benign mesenchymal tumor that has first been described by Neumann in 1871 as “congenital epulis”. The majority of cases originate from the gingiva in the anterior portion of the maxillary alveolar ridge. This localization is 2-3 times more frequently observed than mandibular localization.^{1,2,8}

Congenital epulis is more commonly encountered in female neonates, the female: male ratio being 8:1.⁹ This female preponderance has been proposed to source from intrauterine endogenous hormonal stimulation. This theory has been supported by several experimental studies. However, the studies focusing on the estrogen and progesterone receptors in congenital epulis cases have revealed negative results.⁸

Congenital goiter and midfacial hypoplasia have been reported to coexist with congenital epulis. These tumors are usually solitary; however, it has been reported that 5-16% of the cases may be multiple.¹⁰ When they are multiple, the mandible and maxilla are their most common localizations,^{8,11} while in very rare cases they



Fig 1. The 1-day-old neonate with the oral mass



Fig 2. The case is stabilized. Appearance prior to surgery



Fig 3. The appearance of the mass that was excised.

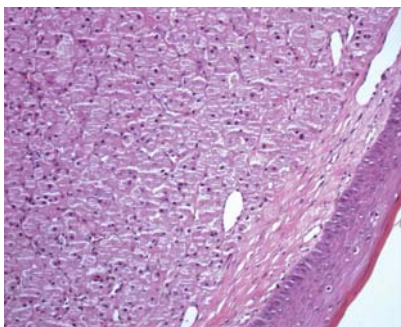


Fig 4. The tumor being shown is composed of well-defined, large granular cells with small dark nuclei and vascular channels (H-E X 250).

have been reported to exist in the tongue. These patients should be investigated for the possibility of the presence of tumors in other organs. In our case, no abnormality was found during pediatric consultation and radiological investigations.

The diameter of congenital epulis varies from 0.1 cm to 4 cm. Up to today, the largest tumor that has ever been reported had a diameter of 7.5 cm. In our case, the size was 3X2 cm. Simple surgical excision is sufficient in treatment. No recurrence or relapse has been observed during the follow-ups of patients. Likewise, our case was treated with simple surgical excision and no recurrence or relapse had occurred during the 4-month follow-up.

CONCLUSION

In conclusion, it should be kept in mind that congenital epulis, among all gingival masses of neonates, is an easily-treated lesion.



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