# Congenital Epulis: A Case Report

## *KONJENİTAL EPULİS*

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**Abstract**

Congenital epulis is a rare benign soft tissue tumor encountered exclusively in newborns. The size of the mass differs from several millimeters to a few centimeters in diameter. Simple surgical excision is generally indicated. Herein, a newborn with congenital epulis and successfully managed by surgical excision was presented.

**Key Words:** Congenital epulis, granular cell tumor

**Özet**

Konjenital epulis sıklıkla yenidoğanları etkileyen bir benign yumuşak doku tümörüdür. Tümörün çapı milimetrelerden birkaç santimetreye kadar değişen büyüklüklerde olabilir. Genellikle basit cerrahi eksizyon endikedir. Bu çalışmada, basit cerrahi eksizyon ile tedavi edilen bir konjenital epulisli olgunun sunumu yapılmıştır.

**Anahtar Kelimeler:** Konjenital epulis, granülar hücreli tümör

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Congenital epulis (congenital granular cell tumor) is a rare benign soft tissue tumor encountered exclusively in fetus and newborns.[1] It results a mass in the mouth and typically arises from the anterior alveolar ridge. The lesion is more common in females (female/male ratio= 10:1), and located more common in the upper jaw (upper jaw/lower jaw ratio= 3:1).[2] The size of the mass differs from several millimeters to a few centimeters in diameter. Congenital epulis can cause feeding and/or respiratory problems if its size is sufficiently large.[3] Because the regression of mass is very unlikely and the recurrence risk after the surgery is almost zero, simple surgical excision is generally indicated regardless of the mass size.[4]

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We reported a newborn with congenital epulis, and successfully managed by surgical excision.

## Case Report

A 20-year old, Gravida 1-Para 0 woman with 39 weeks pregnancy attended to our delivery ward with 4 cm cervical dilatation and 80% effacement. Fetal compromise was noticed in fetal heart monitoring during labor, therefore, immediate cesarean section was performed. A 3100 gram female fetus was delivered with a 5. minute Apgar score of 9. The pediatrician noted a 4X2.5 cm sized mass with smooth surface in the mouth of the neonate (Figure 1). The physical examination revealed that the neonate was normal except the mass. The preliminary clinical diagnosis was congenital epulis. Since the mass did not cause a respiratory compromise, no endotracheal intubation needed. However, the neonate could not suck her mother due to mass. The plastic surgeon in our hospital resected the mass using local anesthesia on the same day of the delivery (Figure 2). No complication was encountered due to surgery. The neonate started to suck her mother uneventfully. The histopathologic ex-

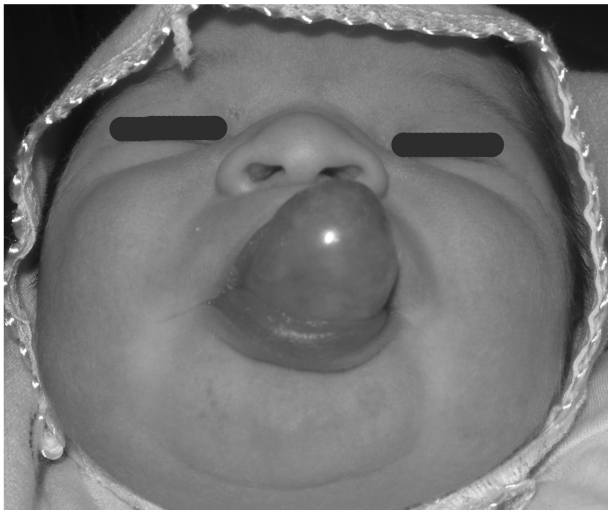

**Figure 1.** Congenital epulis filling the mouth of neonate.

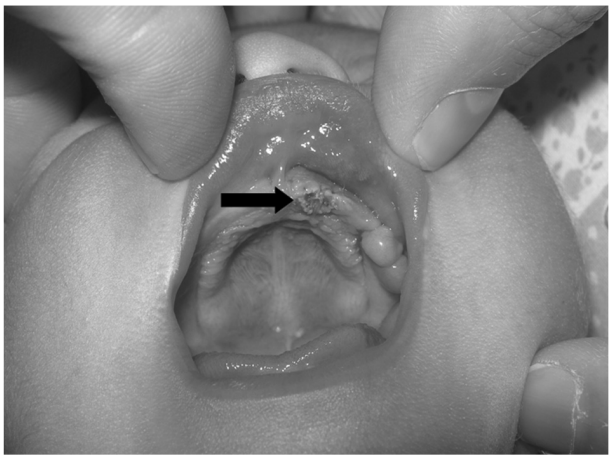

**Figure 2.** Appearance of gingiva after the resection of congenital epulis (Black arrow).

amination of the mass revealed the diagnosis of congenital epulis (Figure 3). There was no recurrence and remaining mass in control of the infant after 6 months of the delivery.

## Discussion

Congenital epulis is a relatively rare lesion, with 167 cases reported by Zuker and Buenechea in 1993.[5] It is usually an isolated finding without associated congenital abnormalities.[6] Generally, the tumor arises at the lateral incisors, but the unruptured teeth are not involved.[6] If the mass results feeding problems and/or respiratory compromise, emergency surgical excision should be performed.[7] In presented case, there was no respiratory compromise. However, the neonate could not suck her mother. Thus, the surgical excision was performed on the same day of the delivery.

The exact pathogenesis of congenital epulis is not known. The odontogenic, fibroblastic, histiocytic, myogenic, neurogenic, and reactive etiologies were accused of in the etiology.[8] However, the odontogenic or ameloblastic origin is most likely in the etiology because of the presence of multiple epithelial nests within the lesion. The hemangioma, lymphoma, fibroma, rhabdomyoma, granuloma, heterotopic gastrointestinal cyst, Epstein's pearls and granular cell myoblastoma should be considered in the differential diagnosis of the congenital epulis.[5] The differential diagnosis was made usually by clinical examination of the mass. The mass is erythematous, round, most often pedunculated, and covered by a smooth mucosal surface. The predilection for newborn females, anterior maxillary location, and presence at birth favor the diagnosis of congenital epulis. Histologic examination reveals large cells with eosinophilic cytoplasm, within a network of dense fibrous connective tissue and numerous vascular channels.[9] These eosinophilic cells are usually surrounded by a delicate stroma of collagen and covered by a thin epithelium without pseudoepitheliomatous hyperplasia (Figure 3).[9] However, the granular cell myoblas-

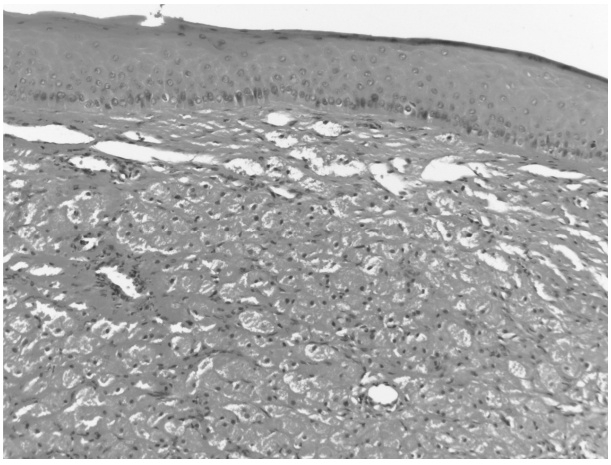

**Figure 3.** The histopathologic examination of the mass revealed.

toma usually locates deeper in the tissue, has pseudoepitheliomatous hyperplasia, can arise anywhere in the gastrointestinal submucosa or soft tissues of the body, and can occur at any age rather than newborn. Since the granular cell myoblastoma has recurrence rate of 8% and malignant transformation, the differential diagnosis should be carefully made by clinically and histopathologically.[9] In the presented case, the clinical examination of the mass suggested the diagnosis of congenital epulis, thus simple excision of the mass was performed. Histopathologic examination of the mass confirmed the diagnosis of congenital epulis.

Simple surgical excision of the mass is usually enough for the treatment of congenital epulis. Although the recurrences and malignant transformation are not encountered even with incomplete excision, the newborn should be followed up carefully.

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