

# Congenital Epulis: Rare Jaw Tumour in a 2-Day-Old Baby

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Figure 1.

# Introduction

Congenital epulis was first described by Neumann in 1871 and as a result has been called Neumann's tumor. The Greek term "epulis" means "on the gingiva." It is more specifically called "congenital granular cell epilus," and this is the title recommended by the World Health Organization. It has also been called congenital granular cell lesion, gingival granular cell tumor of the newborn, congenital epilus of the newborn, congenital granular cell myoblastoma, Abrikosov tumor and granular cell fibroblastoma. It has been estimated that the incidence of congenital epulis is 0.0006%, with multiple medical centers reporting only a few cases or less over multiple decades.

Congenital epulis commonly presents in neonates, with a mass noted to arise from the gingiva. The lesions are often covered with smooth pink to red mucosa and are sometimes ulcerated. The most common location is the anterior part of the maxillary alveolar ridge, usually in the region of the lateral incisors or canines. It has been reported to arise from the mandibular gingiva or tongue, as well as at multiple locations simultaneously. It is estimated that it is 2 to 3 times more common to occur on the maxilla than on the mandible, and 10% of the time multiple lesions may occur simultaneously. Congenital epulis more commonly occurs in female newborns than in male

newborns, with an estimated ratio of 9 - 10:1 female to male predominance. Congenital epulis is typically a few millimeters to a few centimeters in size but has been described to be as large as 9 cm.

The cause of congenital epulis is unknown. Microscopically, it is often composed of large sheets or ribbons of polygonal or rounded cells with a small, dark basophilic nucleus and eosinophilic granular cytoplasm. There are multiple theories as to the pathogenesis of congenital epulis. One theory is that given the female predominance, the growth of tumor stopping after birth, and the fact that some tumors have been shown to spontaneously regress, the cause may be influenced by maternal or fetal hormones during pregnancy; however, estrogen and progesterone receptors have not been found to be positive in congenital epulis.

Ultrastructural and immunohistochemical findings in reported cases have supported a mesenchymal origin of congenital epulis, as the cells have features of histiocytes and fibroblasts.

Congenital epulis has classically been managed by complete surgical excision under general or local anesthesia. There has also been a case report of  $CO_2$  laser use with general anesthesia. Congenital epulis has never been reported to undergo malignant transformation or to continue growth after birth. Even with incomplete excision, no recurrence has been reported. Spontaneous regression has been reported when surgical management is not attempted.



Figure 2.

## **Case Report**

A newborn healthy girl child (on the second postnatal day), was noted to have a smooth surfaced, non- xated mass, situated on the anterior part of the mandibular alveoli, developing from the gingival mucosa. The infant was unable to breast-feed, but there was no concern for airway compromise.

Pregnancy and delivery were uneventful, General physical examination, including laboratory tests, were otherwise normal.

The prenatal ultrasound did not show any perversion. When the parent's anamnesis taken inheritable illnesses was no reported. Furthermore, the patient had no other medical problems. Clinical examining revealed signs of a 3 cm stemmed, regular, pink-colorful soft-tissue gob on the alveolar crest to the left of the mandibular alveolar area. There was no ulceration, bleeding, pain or pus discharge associated with the swelling. A diagnosis of soft tissue benign tumor was made, After that, it was decided that the mass needed to be removed so it was completely excised under general anesthesia, with minimal intraoperative hemorrhage, and submitted for histopathological evaluation ,Post-operative recovery and surgical site healing was very good [1-8].



Figure 3.

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