

## A Rare Congenital Epulis – A Case Report

### Abstract

Congenital epulis (CE) is a rare lesion with unknown etiology and histopathogenesis. The lesion was first time described by Neumann in 1871 and thus name after the author. The lesion had been found to be prevalent in white female newborns. The recommended treatment for congenital epulis is prompt surgical excision due to interferences with feeding, respiration or adequate closure of the mouth. This article presents a case report of a male infant who presented a fibrotic mass in the primary central incisor region of the mandibular alveolar ridge. After a watchful waiting procedure and no spontaneous regression, the lesion was excised under local anesthesia and confirmed by histopathologic analysis as CE.

### Key Words

Neutral Zone, Complete Denture, Resorbed ridge

### Introduction:

Congenital epulis (CE) is a rare benign soft-tissue tumor of uncertain histogenesis, which is also known as “gingival granular cell tumor of the newborn”[1]. It occurs on the alveolar ridge in the anterior region of the maxilla or mandible of newborn infants. It is also termed as congenital granular cell tumor, congenital granular cell myoblastoma and congenital granular cell fibroblastoma[2]. The Greek word epulis means “swelling on the gingiva”. The tumour may be sessile or pedunculated. The exact pathogenesis of CE is still uncertain, as is its growth and progression[3]. It can range from normal to reddish pink in color. It is seen three times more frequently on the anterior alveolar ridge of the maxilla than from the mandible with a female to male ratio of 8 to 10:1[4]. Congenital epulis usually occurs as a single mass, although 10% of the cases occur as multiple masses[5].

The diagnosis is made clinically and tissue biopsy is not usually indicated before removal of the lesion, since the excised surgical specimen is usually sent for histopathologic examination and the diagnosis is confirmed retrospectively. The excessive tissue is composed of cellular, inflamed fibrous connective tissue. The appearance of an epulis fissuratum microscopically is an overgrowth of cells from the fibrous connective tissue. The epithelial cells are usually hyperkeratotic and irregular, hyperplastic rete ridges are often seen.

Treatment is by surgical excision (complete removal) of the fibrous tissue overgrowth and addressing the causative factor to prevent recurrence of the lesion. Other sources suggest that surgical excision may not be required in all cases. Common techniques for removal of the excess tissue include traditional removal with a surgical scalpel, electrical scalpel, or laser excision with a laser scalpel, e.g. a carbon dioxide laser, erbium:YAG laser, Neodymium-YAG laser, or diode laser.

In this report we describe the case of a one year old male infant with a growth on his mandibular alveolar ridge.

### Case Report:

A 1-year old male born after 39 weeks of gestation weighing 22 pounds was referred to the Outpatient Department of Periodontology and Oral Implantology, Himachal Dental College, Sundernagar, H.P with the chief complaint of a localized growth on the anterior region of mandibular alveolar ridge. The growth did not interfere with feeding and respiration, but with mouth closure. This growth was present since the birth of the patient as the history given by his parents. There was no family history of this type of a case.

Intraoral examination revealed a painless, reddish pink, pedunculated soft tissue mass measuring 2.5×1.5×1.5 cm, attached to the anterior mandibular ridge. The mass prevented normal closure of oral cavity. After taking the complete medical and dental history, the mass was

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excised with electrocautery under local anesthesia and fixed in 10% formalin solution for histological analysis. The postoperative period was uneventful.

Histological analysis revealed it to be similar to granular cell tumour composed of polygonal cells with abundant granular cytoplasm and small eccentric nuclei with occasional small nucleoli. There was a prominent vascular stroma with perivascular lymphocytes and histiocytes. There was no pseudoepitheliomatous hyperplasia of the overlying squamous mucosa and no nerve bundles were seen within these lesions. The findings were consistent with congenital epulis (**Image 1-4**).

### Discussion:

The congenital epulis (congenital granular cell myoblastoma, Abrikossoff's tumor, granular cell epulis of infancy, granular cell fibroblastoma) is a unique and rare congenital tumor of the alveolar mucosa of the jaws. The case presented in this article is noteworthy because the lesion was present in the mandible, which is reported

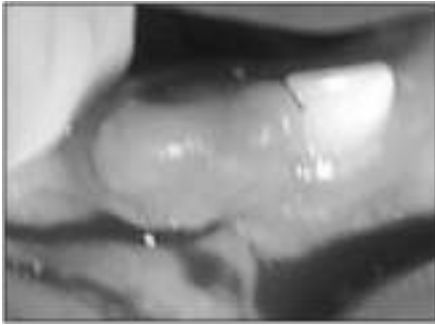


Fig 1 : Pre - Operative Photograph



Fig 2 : Excision Of Epulis



Fig 3 : Excised Lesion



Fig 4 : Post - Operative Photograph

females and a 3:1 incidence of occurring at maxillary alveolar sites[10]. The lesions do not have familial origin. The lesion develops late in utero as it often is not detected on antenatal ultrasound. If there is any fear of airway obstruction or difficulty with feeding, then prompt surgical treatment is necessary. Congenital epulis is often misdiagnosed before surgery because of its rarity and a lack of awareness of the condition by clinicians. The differential diagnosis of a large mass in the fetal or neonatal oral cavity includes hemangioma, lymphatic malformations, teratoma, rhabdomyoma and rhabdomyosarcoma[8]. Treatment consists of CE removal by surgery under local or general anesthesia. A “watchful waiting” procedure can be followed because small lesions spontaneous involution can occur, although this is rare[7]. Dentists may be consulted initially regarding such cases and should be aware of the potential for airway compromise and familiar with the differential diagnosis.

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to have a lower frequency of occurrence than the maxilla[6]. Congenital Epulis is an overgrowth with unclear histogenesis. It usually presents at birth with an obvious mass arising from the gingival mucosa of the maxilla or mandible[9]. Congenital epulis has an 8:1 incidence in