Congenital Epulis: A Case Report: Management and Treatment

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Abstract

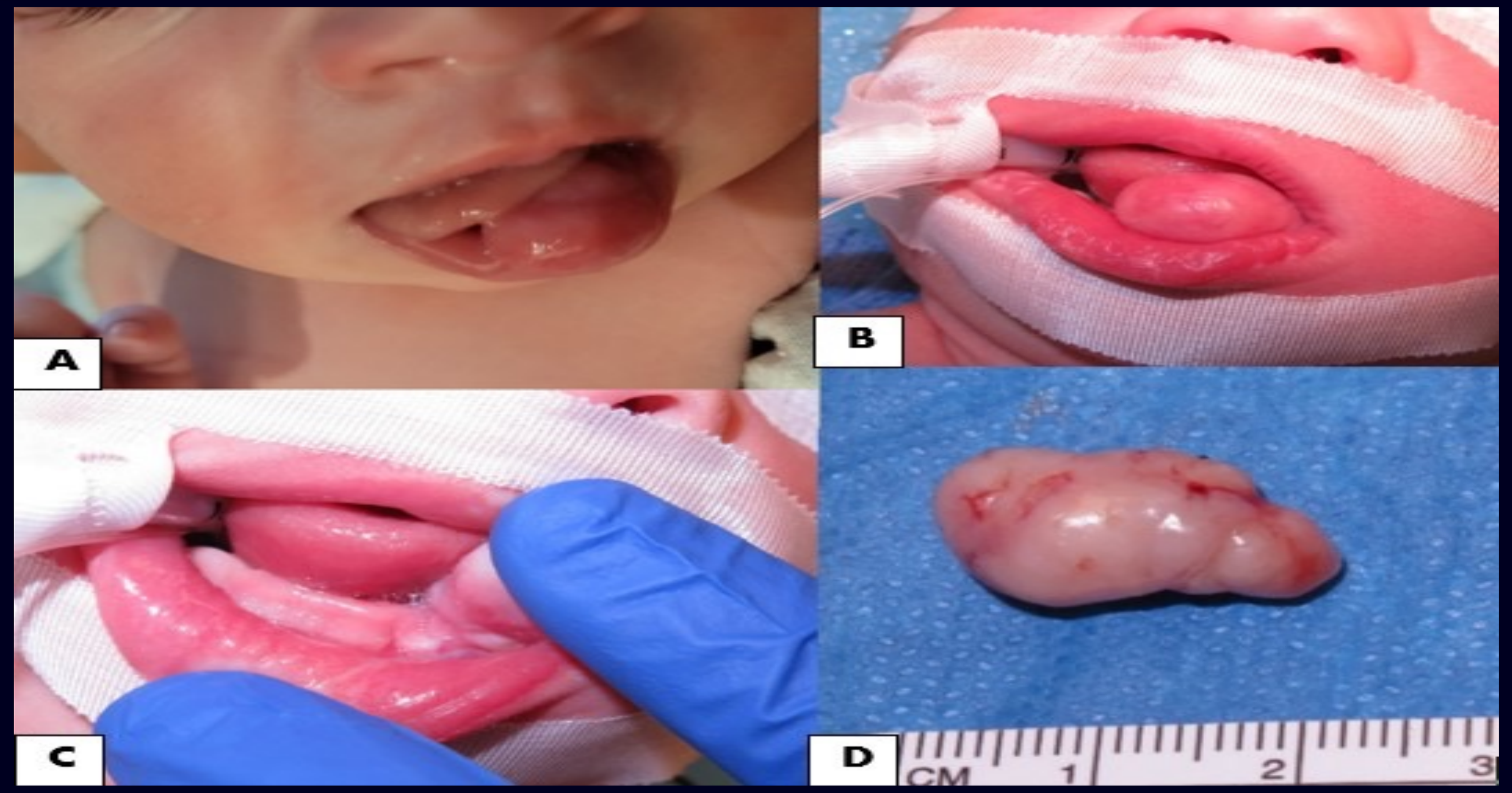
Congenital Epulis or Congenital Granular Cell Tumor is a rare benign soft tissue tumor of the newborn. It is seen as a mass arising in the mouth from the alveolar ridge. This is a case report of a 1-day old girl born with Congenital Granular Cell Tumor (CGCT) or Congenital Epulis. Upon clinical examination, the lesion was found to be firm, pedunculated, and attached to the mandibular alveolus slightly left of the midline. The overlying mucosa appeared normal. The growth was causing obstruction in feeding ability of the newborn. In this case report, the patient had difficulty in feeding, hence surgical excision under general anesthesia was performed with immediate post-op ability to nurse. Diagnosis was confirmed based on histopathological report.

Introduction

Neumann's tumor, congenital granular cell tumor, or congenital epulis of the newborn, is a rare condition. The lesion was first described by Neumann in 1871. The most common site is the gingiva of the anterior alveolar ridge, predominantly in the maxillary alveolus. The origin of this benign lesion is uncertain; there are many theories proposed to describe the etiology, including neurogenic, fibroblastic, myoblastic, odontogenic, endocrinologic, and histiocytic. The tumor appears as sessile or pedunculated swelling with a smooth surface that is normal to red in color. The size may range from a few millimeters to centimeters, and larger lesions may interfere with respiration and feeding[3]. These lesions can be identified with imaging, including pre-natal ultrasound and post-natal MRI. Spontaneous regression is rare; the lesion is usually surgically treated without recurrence[478]. This report documents the presentation and management of a congenital granular cell tumor of the mandibular alveolar ridge. The lesion was treated with the surgical excision. Even small tumors in the oral cavity of newborns may pose a risk of airway obstruction and/or interference with feeding[9]. Dentists should be aware of these rare lesions, well versed in providing relevant consults, diagnosis, and necessary recommendation regarding management[2].

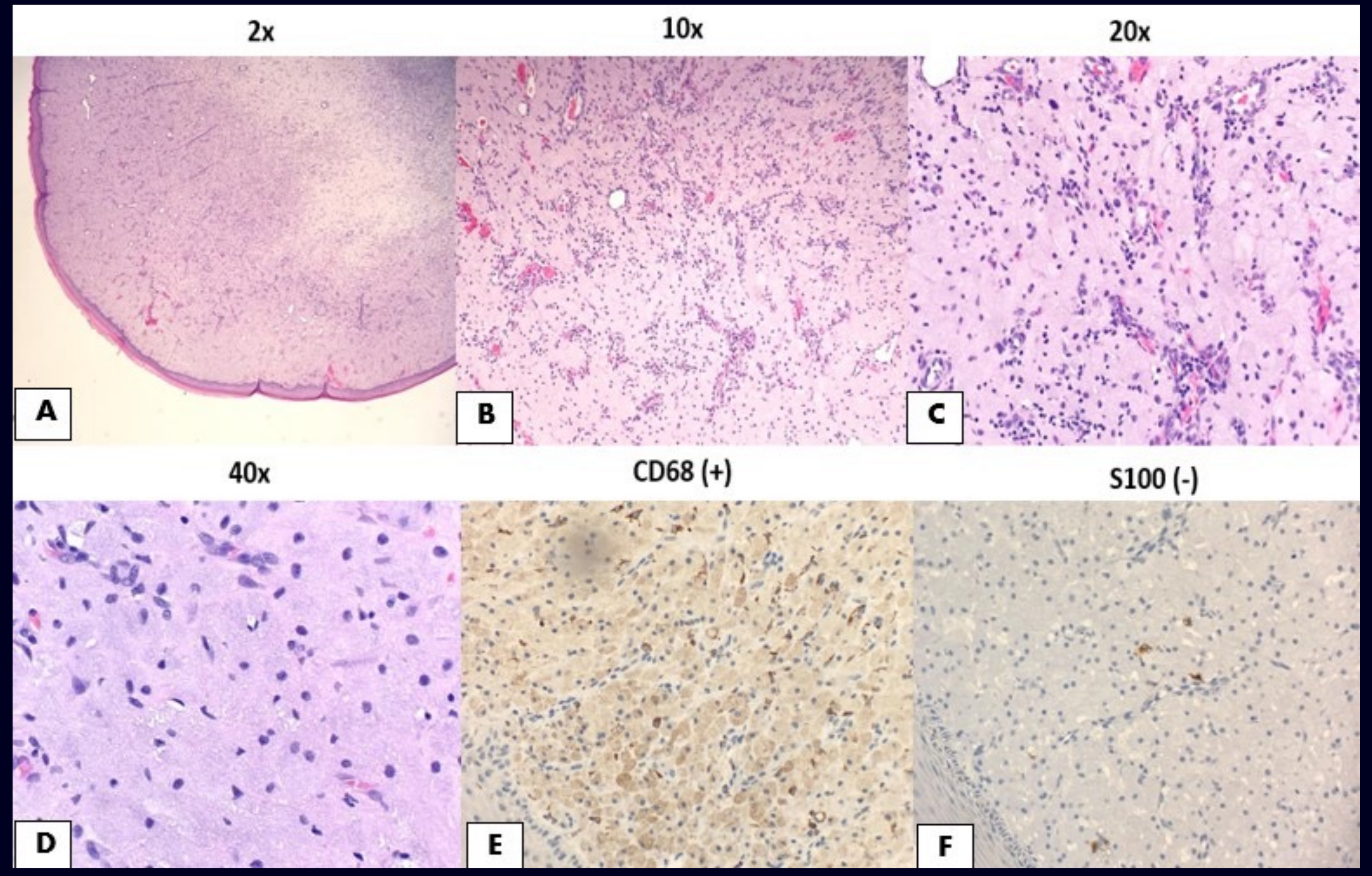
Case report

Figure 1



A needle tip Bovie electrocautery was then used to transect the lesion at the base (Fig. 1-C)

Figure 2



Polypoid mass (Fig. 2-A)homogeneous cells with granular eosinophilic cytoplasm and basophilic centrally located nuclei positive for CD 68 (Fig. 2-B & C)

Polygonal cells positive for CD 68 (Fig. 2-D). The cells were positive for CD 68 (Fig. 2-E) and negative for S100 (Fig. 2-F)

Relevant findings

- **Born vaginally at 37 weeks of pregnancy**
- **Benign appearing exophytic mass**
- **attached to the lower left alveolar mucosa**
- **Pink with no sign of inflammation**
- **Measured 3cm x 2cm x ½ cm**
- **Mobile with tongue movement**
- **No discomfort**
- **No immediate concerns pertaining to airway obstruction**
- **Interfere with breastfeeding & precluded lip closure.**
- **All other physical examination & lab tests were WNL**
- **Surgery was performed when the patient was 6 days old**

Discussion

- Etiology of congenital epulis is unspecified
- Arises at the future site of the maxillary canine or the lateral
- lobular or ovoid, sessile or pedunculated protruding swelling with a smooth mucosal surface
- Diagnosis at the antenatal stage may prove helpful in timely management of the lesion
- When it interferes with feeding and breathing, the treatment is excision
- If there is risk of airway obstruction, immediate intervention is deemed necessary
- Spontaneous regression may occur in cases of small lesions
- Recurrence is uncommon

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