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CONGENITAL EPULIS OF THE NEWBORN*
A Case Report

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Congenital epulis of the newborn is a rare benign tumor, also known as a congenital gingival granular cell tumor. Although it is a benign lesion, the tumor may cause feeding and respiratory problems when too large or when multiple tumors exist. In this article, a case of congenital epulis is presented and its treatment is discussed.
Key words: epulis, newborn.

Congenital epulis of the newborn is a rare benign tumor, also known as a congenital gingival granular cell tumor. It was first described in 1871, and fewer than two hundred cases have been reported since then[1].

This benign pedunculated mass arising from the alveolar ridges of the maxilla or mandible, which is covered with oral mucosa, is excised surgically, since it can cause respiratory and feeding problems[1,2].

In this article, a case of congenital epulis is presented and the treatment is discussed.

Case Report

A thirty-minute-old female infant was admitted to the Neonatal Intensive Care Unit of Hacettepe University Children's Hospital for the evaluation and management of the mass originating from the lower jaw. She was born at 40 weeks of gestation by spontaneous vaginal delivery following an uncomplicated pregnancy and labor.

Physical examination was unremarkable, except for the 3 x 2 x 2 cm had mass protruding from the mouth and originating from the incisor area of the mandibular gum pad on a 5-6 mm pedicle. The entire mass was covered with oral mucosa (Fig. 1). Though respiration was unaffected, the mass interfered with lip closure and feeding.

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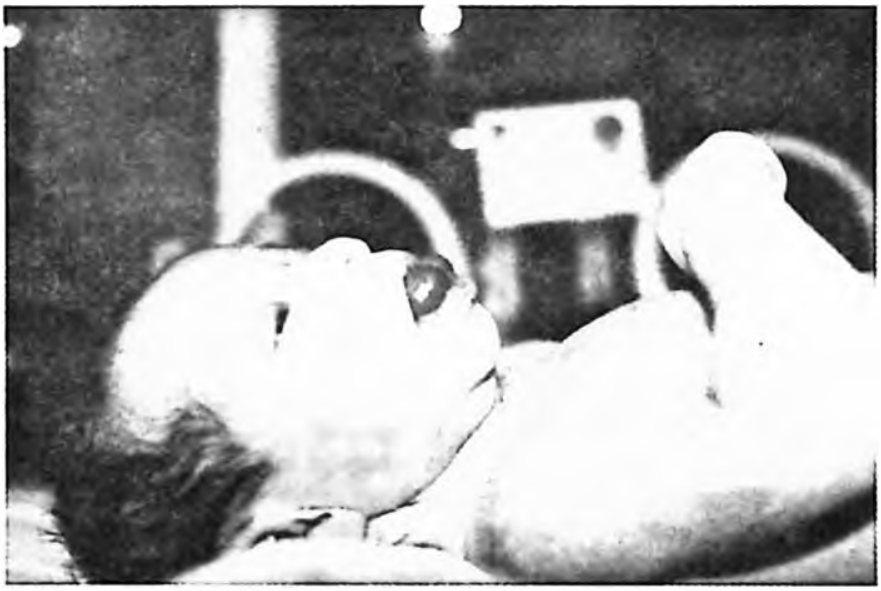

Fig. 1: General appearance of the mass.

The mass was fully excised surgically under local anesthesia the following day and the wound closed with firm sutures. Postoperative wound healing was uncomplicated.

Histopathological examination of the mass revealed clusters of large round or oval pale-staining granular cells containing centrally placed prominent nuclei (Fig. 2). The cells were separated by thin connective tissue in some areas. The whole mass was covered by stratified squamous epithelium. All those features were consistent with congenital epulis of the newborn.

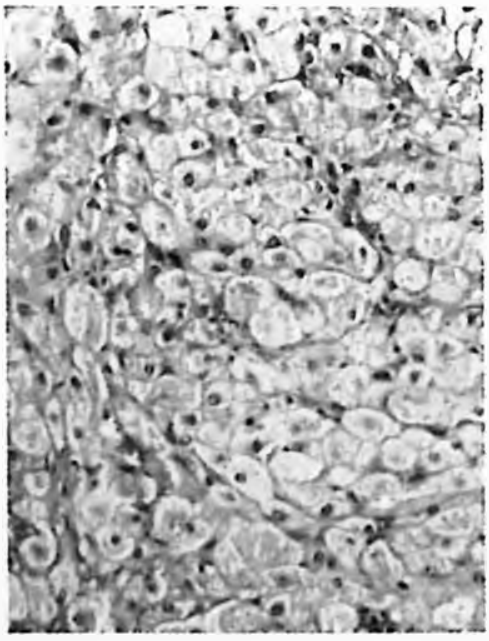

Fig. 2: Large round-oval cells with pale-staining fine granular cytoplasm and prominent nuclei. (Hematoxylin and eosin stain, x 20).

Discussion

Congenital epulis is a rare benign lesion occurring in the newborn, of unknown etiology. It is a pedunculated tumor originating from the gingiva, firm in consistency, with a size ranging from several millimeters to 9 centimeters[1].

Females are affected 10 times more than males[1]; however, cytogenetic and hormone receptor studies have given no explanation for the striking female predominance[3].

The mass usually originates from the upper jaw; the maxillary alveolar ridge is affected as often as the mandible, usually in the incisor-canine region. Cases of multiple tumors on both maxilla and mandible have been reported[1].

Although it is a benign lesion, the tumor may cause feeding and respiratory problems when too large or when multiple tumors exist[1,2]. The tumor does not grow after birth and spontaneous remissions have been reported on occasion[1].

Microscopically, the tumor consists of solid sheets or clusters of large, uniform, pale-staining granular cells; the overlying mucosa is of stratified squamous epithelium without pseudoepitheliomatous hyperplasia[4]. A prominent arborizing fibrovascular network in the thin connective tissue septa is noted throughout the tumor[1].

The histogenesis of the tumor remains controversial. Recent theories of origin include epithelial cells, undifferentiated mesenchymal cells, pericytes, fibroblasts, smooth muscle cells, nerve related cells, and myofibroblasts[3].

A few cases of congenital epulis have been discovered incidentally by routine prenatal ultrasound examination[5].

The treatment is surgical excision; recurrences have not been reported[1,2]. Laser treatment (excision by laser) is another choice, also allowing rapid recovery[5].

The differential diagnosis includes hemangioma, fibroma, granuloma, embryonal rhabdomyosarcoma, malignant granular cell myoblastoma, alveolar rahbdomyosarcoma, chondrogenic and osteogenic sarcomas and schwannoma[1,2,4].

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