Congenital Epulis in a Newborn

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Congenital epulis is a rare, benign intraoral tumor of the newborn that is most frequently located on the mucosa of the anterior maxillary alveolar ridge. First described by Neumann in 1871, these tumors appear smooth, pedunculated and pink, and are distinguished from other soft-tissue tumors by their maxillary or mandibular alveolar location.

Case Report
A full-term female infant was born through normal spontaneous vaginal delivery. The pregnancy was uncomplicated, and prenatal labs indicated the presence of group B streptococcus, for which the mother was adequately treated with antibiotics. Apgar scores were 9 and 9 at one and five minutes, respectively.

Shortly after birth, four soft-tissue masses were observed in the anterior maxillary and mandibular ridges of the infant’s mouth. These masses were all round, pedunculated and protuberant without noticeable fluctuance. The infant’s hard and soft palates were intact. She appeared vigorous and not in respiratory distress. However, she was unable to close her mouth completely, and the masses were affecting her ability to breast- and bottle-feed. A feeding tube was subsequently placed.

Diagnosis
Otolaryngology was consulted and the masses were excised under general anesthesia. Pathology revealed a granular cell tumor, also known as congenital epulis.

The baby tolerated the procedure well. Oral feedings were initiated immediately after surgery, and she was discharged to home breastfeeding exclusively. Six weeks after surgery, there was no recurrence of these masses. The infant was gaining weight and thriving.

Discussion
Congenital epulis occurs more frequently in females than males (8:1 ratio). Most cases involve a solitary mass. Approximately 10% involve multiple lesions.¹

The etiology of the condition is unknown. Several theories exist on the cellular origin of these masses including that they may be of odontogenic, myoblastic, neurogenic, fibroblastic, histiocytic or endocrinologic origin.²

The differential diagnoses for masses in the neonatal oral cavity include congenital malformations such as encephalocele or dermoid cysts, and neoplasms including hemangioma, lymphoma or rhabdomyosarcoma. CT imaging and MRI can help determine the extent and characteristics of congenital epulis masses.

Because these masses can interfere with feeding or respiration, surgical excision is generally indicated. Spontaneous regression of congenital epulis has been reported in a few cases; one could opt for watchful waiting if the mass is small and not causing feeding or breathing difficulties. There have been no published cases of recurrence following excision.¹

REFERENCES

In 2013, Minnesota Medicine became aware of the need to highlight research being done by the state’s medical trainees. It was pointed out that not only fellows but also medical students and residents were conducting studies that would be of interest to a larger audience.

We decided to invite medical students, residents and fellows to submit brief papers describing original research or a clinical case. We would publish the best ones in a special section. Submissions were to be brief yet adequately describe the research or case.

Two dozen manuscripts were submitted and reviewed. The following were selected for publication in this issue. The deadline for submissions for fall publication is June 21.

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