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Expect the Unexpected

Neonatal Oral Mass Diagnosed at Birth

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A FULL-TERM, 3.5-kg neonate was transferred for management of a large, mobile intraoral mass. The infant demonstrated no signs of airway obstruction or respiratory distress and had normal oxygen saturation without support. The child did not seem dysmorphic and the mass was isolated to the anterior maxillary alveolar ridge, easily mobilized out of mouth. A prenatal ultrasound at 20 weeks did not identify any anomalies.

Adequate ventilation was achieved after mobilizing the mass extraorally and achieving adequate mask seal. At this point, a mask induction with spontaneous ventilation was performed, followed by uneventful intubation. The mass was considered low risk for airway obstruction during induction because it did not disturb the airway anatomy, and was easily mobilized out of the mouth.

Epulis, or congenital granular cell tumor, is a rare tumor of variable size and number originating from gingival epithelial tissue seen in newborn infants, affecting female infants 8:1, and is rarely malignant.^{1,2} Differential diagnosis for neonatal oral masses includes teratoma, hemangioma, lymphatic

malformation, or congenital malformation or neoplasm.³ When diagnosed prenatally, consideration for airway obstruction at birth may require intervention upon delivery. However, prenatal diagnosis is not always achieved. Considerations before induction of anesthesia focus on the anatomic location of the mass, distortion or obstruction of the airway, and signs of airway obstruction. Although computed tomography or magnetic resonance imaging studies may yield information about airway involvement, the infant may require an airway intervention before or during the study.

References

1. Lapid O, Shaco-Levy R, Krieger Y, Kachko L, Sagi A: Congenital epulis. *Pediatrics* 2001; 107:E22
2. Koch BL, Myer C III, Egelhoff JC: Congenital epulis. *AJNR Am J Neuroradiol* 1997; 18:739–41
3. Kim YD, Kim HJ, Lee NK, Ha WH, Lee CH, Park SE: Congenital epulis: Prenatal ultrasonographic and postnatal MR features with pathologic correlation. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2008; 106:743–8