

Letter to the Editor

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Palatal teratoma in a 1-day-old full-term female neonate

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Dear Sir

Palatal teratomas are exceedingly rare congenital tumors composed of multiple tissue types [1]. This case highlights the unique challenges in diagnosis, management, and surgical intervention for a palatal teratoma causing significant airway obstruction in a neonate.

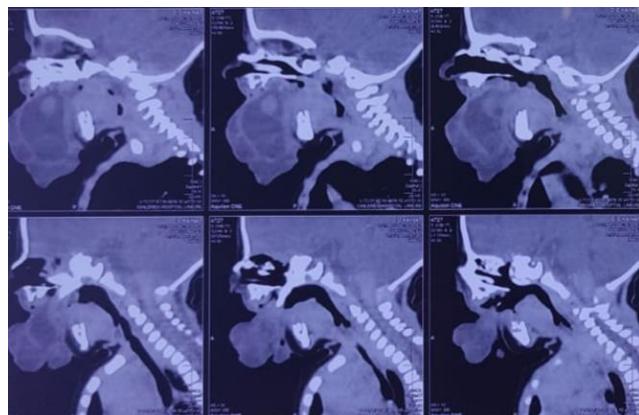


Figure 1: Showing CT scan of the patient with visible narrowing of the nasal airway.

A 1-day-old full-term female infant presented in the Emergency Department with a prominent swelling protruding through the mouth. On examination, the swelling originated from the hard palate, concurrent with a cleft palate. It was soft, cystic, transilluminant, and engorged. The mass was impairing the baby's ability to feed though there was no respiratory distress. Anticipating a difficult airway, the anesthesia team preemptively planned nasotracheal intubation using fiberoptic endoscopy. Immediate MRI of the airway revealed a narrow nasopharynx measuring less than 3mm (Fig. 1).

Under general anesthesia, successful resection of the mass was achieved. Surgical exploration revealed a 7cm x 8cm well-circumscribed cystic mass containing yellowish thin fluid (Fig. 2). Additionally, the mass contained a wedge-like bony tissue arising from the

posterior hard palate. A complete excision of the mass was performed and submitted for histopathological evaluation. Following surgery, the neonate's recovery was uneventful. The baby showed steady improvement and was discharged home for scheduled follow-up visits. The patient is currently doing fine; on a follow up of our plastic surgery department for the repair of cleft palate. Histopathological examination detailed findings consistent with a mature teratoma, showing stratified squamous epithelium, mature glial tissue, calcification, fibrosis, giant cells, and dilated vascular channels within the biopsy specimen as shown in Figure 3.



Figure 2: Preoperative picture showing mass arising from the palate; second set showing postoperative picture.

Palatal teratomas are exceedingly rare congenital tumors composed of multiple germ cell layers usually occurring in females. They present at birth but can be diagnosed antenatally and pose unique challenges due to their potential to cause airway obstruction and feeding difficulties in neonates [1-3]. In all of the cases presented in literature previously cleft palate was a common association [1-3]. Anticipating a difficult airway, multidisciplinary team management with a preemptive plan for nasotracheal intubation using fiberoptic endoscopy is prudent, as practiced in the index case.

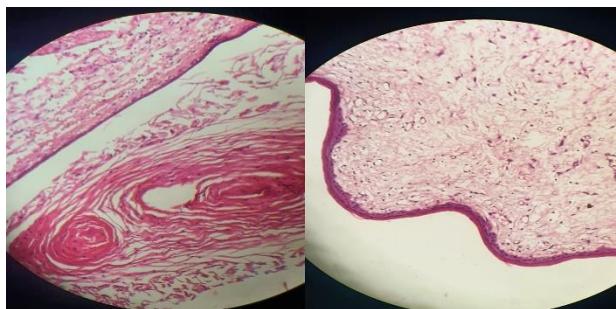


Figure 3-Histopathological picture of the sent specimen showing mixed cell type as described in detail above.

Treatment is straightaway surgical excision immediately after birth as delay in excising intraoral lesions may result in respiratory compromise and feeding difficulties. EXIT can be opted if the problem is diagnosed antenatally as done by 1 of the cases retrieved from the literature [4].

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Managing palatal teratomas demands a coordinated approach involving anesthesia, radiology, surgery, and pathology to ensure timely diagnosis, appropriate surgical intervention, and postoperative care. Challenges lie in anticipating airway compromise, surgical excision, and addressing associated structural anomalies.

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