A Midline Nasal Mass in a Term Neonate

A term infant with pneumothorax was admitted to the neonatal unit for respiratory support after birth. Examination revealed a skin-colored mass extending from the nasal septum, occluding the right nasal aperture (Figure 1). The pneumothorax resolved, but the respiratory distress persisted with desaturations, particularly during feeding. A nasopharyngeal airway was inserted.

A postnatal computed tomography scan showed a 3-cm peripherally enhancing mass completely occluding the right nasal passage extending to the crista galli (Figure 2). Assessment of the bony anatomy revealed no intracranial extension. On day 14, the lesion was debulked endoscopically. Histopathological analysis confirmed a nasal glioma.

Congenital nasal anomalies are rare, affecting only 1 in 20 000-40 000 newborns.[1] Resulting from disordered development of the primitive neural plate, types include dermoids, encephaloceles, and gliomas.[2] Nasal gliomas are thought to be encephaloceles, with 20% having a vestigal stalk connecting to the intracranial space.[3] Gliomas are typically located proximal to the nasal root. Histologically, they resemble encephaloceles but are often quite vascular and easily mistaken for hemangiomas.[2] Neuroimaging can help determine the presence or absence of intracranial connections.[4] Biopsy should be avoided until intracranial attachment has been excluded.

Left untreated, nasal gliomas can result in bony atrophy and intracranial communications can act as inoculation sites with a risk of meningitis and encephalitis. Treatment is complete surgical excision early in life to avoid complications and achieve optimal cosmetic outcomes. ■

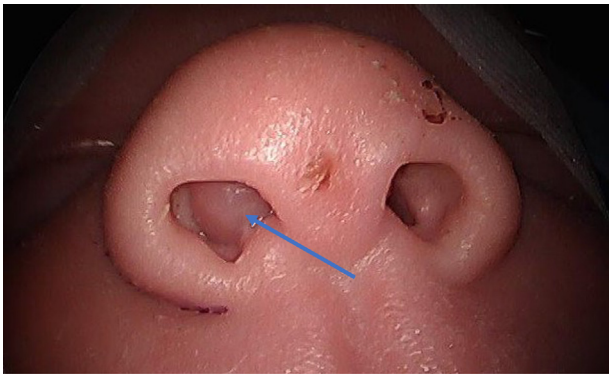

Figure 1. Nasal mass obstructing the right naris.

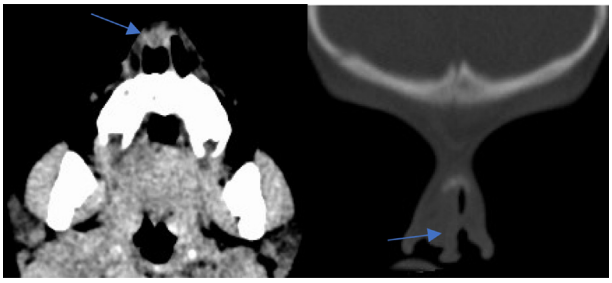

Figure 2. Noncontrast computed tomography scan showing a soft tissue lesion in the anterior right nasal passage.

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