Association between congenital nasolacrimal duct cyst and bilateral choanal atresia

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INTRODUCTION

Choanal atresia (CA) is defined as a failure in the development of communication between the nasal cavity and the pharynx, originating from incomplete closure of the nasal cleft during the 4th week of gestation. This obstruction can present as an anomaly or be associated with other anomalies. CA is more common among females, with a bilateral incidence of between 70% to 80% of cases, although it can be unilateral, with nasal obstruction being the most evident symptom. According to the American Academy of Otolaryngology (AAHNS), an enlarged choana can be detected through the nasal cavity into the pharynx, which can be confirmed by endoscopic surgery and suffering cyst marsupialization.

CASE REPORT

CASE 1

Female neonate, at 37 weeks of gestation, presented with progressive respiratory failure immediately after birth. The maneuver of pushing a probe through the nasal cavities was not efficient, leading to the suspicion of complete CA. Since there was a progressive worsening of the patient's respiratory status, we proceeded with orotracheal intubation to stabilize the patient. Facing the initial suspicion of CA, we ordered a skull and face CT scan, which showed bilateral CA, and also a mass in the left-side inferior meatus. Such lesion was masupialized, draining a mucoid-looking secretion. Following that, the choanai was bilaterally open through endoscopy (Figure 1). The patient evolved well and was successfully extubated after recovery from anesthesia. The patient presented with progressive respiratory failure immediately after birth through NFE, which is not always available. That is why neonatologists usually are the first to raise the hypothesis of CA by noticing the failure in pushing the nasal aspiration tube farther through the nasal cavity into the pharynx.

DISCUSSION

Choanal atresia is more common among females, which we also found in our sample. They can be uni or bilateral, and 60-70% are unilateral. Both described cases were bilateral, as it happened to most of the patients who required early intervention. The incidence is 1 for every 5-7 thousand live births. The diagnosis is ideally established in an urgent basis immediately after birth through NFE, which is not always available. This is not so many complications as the T
do en operation room we confirmed CA and found a fluid cystic lesion in the left-side inferior meatus. Such lesion was masupialized, draining a mucoid-looking secretion. Following that, the choanae were bilaterally open through endoscopy (Figure 1). The patient evolved well and was successfully extubated after recovery from anesthesia. The patient presented with progressive respiratory failure immediately after birth through NFE, which is not always available. That is why neonatologists usually are the first to raise the hypothesis of CA by noticing the failure in pushing the nasal aspiration tube farther through the nasal cavity into the pharynx.

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