

Neonatal respiratory distress

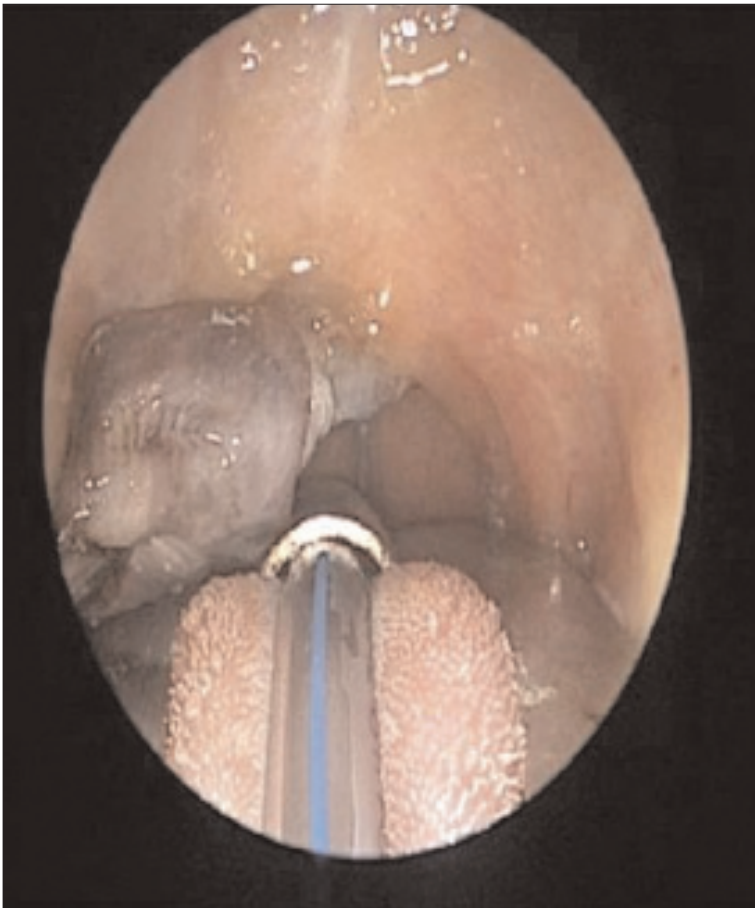
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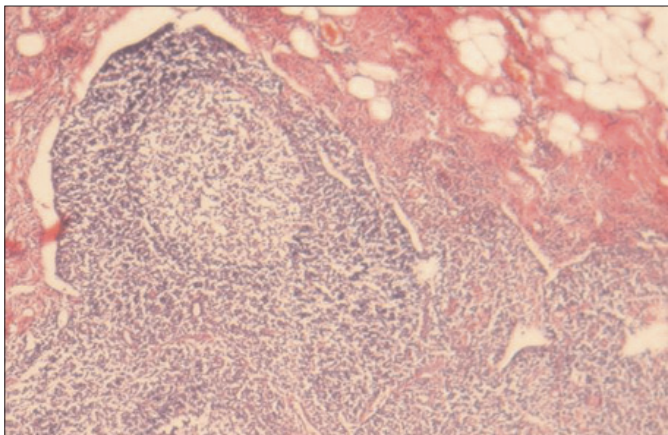
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Picture 1. Appearance of the oral cavity

Case

A 38-week male baby was born from a 36-year-old mother after a problem-free pregnancy by voluntary cesarean section. After birth low APGAR score and respiratory distress was found. The patient was tried to be intubated, but the trial was unsuccessful and ventilation was provided by performing intubation by oral route. Choanal atresia was excluded by inserting a nasogastric tube through the nasal passage. Other physical examination and laboratory findings were found to be normal. No pathology was found on chest graphy. After intubation respiratory distress improved and the patient was referred to the neonatal intensive care unit of our hospital. During otolaryngofarengeal examination the patient was extubated, but reintubated, since respiratory distress and cyanosis developed. Endoscopy was performed (Picture 1).



Picture 2. Appearance of the pathological findings

Diagnosis: Nasal hairy polyp

A large polypoidal mass was found in the oral cavity during otolaryngeal examination. Respiratory distress and cyanosis developed during examination. The patient was urgently taken to operation under general anesthesia. A mouth opener was placed and a 4x2x3 cm polypoidal mass which prolapsed downward from the oropharynx was visualized with the help of an endoscope. The mass was extending from the nasopharynx to the oropharynx and occupying the oral cavity to a large extent (Picture 1). Severe respiratory distress developed again during examination. Therefore, the patient was intubated and the mass was extirpated under endoscopic imaging. Magnetic resonance imaging was not performed before the operation because of the urgency of the case. After the operation all complaints of the patient improved and the patient was discharged on the second day.

The extirpated mass was a polypoidal mass with a dimension of 4x2x3 cm macroscopically with a smooth surface. Since histopathological examination revealed squamous epithelium, skin extensions, pilosebaceous glands and fibroadipose tissue, the mass was evaluated to be hairy polyp (Picture 2). In the follow-up after the operation, the patient was not seen again for 5 months.

Discussion

Hairy polyps (HP) are benign tumors which can be observed in any part of the body, wrap the fibroadipose tissue and are composed of skin appendages and extensions (1). They occur in the early embryogenesis period and are originated only from the ectoderm and mesoderm (2). Despite abundant discussions in the literature, the actual embryogenesis and nature of HP are not fully elucidated yet and continue to be a subject of discussion.

These tumors are usually localized in the nasopharynx, oropharynx, soft palate, hard palate, tonsillae, tongue, eustachy tube and middle ear. The most common localizations include the nasopharynx and oropharynx. When they develop in the oropharynx, they typically occur as pedunculated masses. The clinical status and urgency of the patient depends on the size

and localization of the polyp. Rarely, it may not be recognized until advanced ages, if it stays complaint-free.

Although HP occurs rarely, it is the most common congenital tumor of the oropharynx and nasopharynx (3). Kelly et al.(3) compiled 135 cases which were published until 1996 in the literature written in English. In addition, there are approximately 35 cases reported between 1996 and 2011 (4).

Hairy polyp usually occurs as a single disorder. However, it may rarely be associated with anomalies including cleft palate, uvula and external ear agenesis and facial hemihypertrophy (5). Malign transformation of these tumors have not been reported. Although it nearly always occurs in newborns and infants, it has also very rarely been reported at advanced ages (6).

The clinical picture depends on the size and localization of the polyp. The dimensions may range between 0.5 cm and 6 cm. Small lesions can lead to intermittent cyanosis or may stay asymptomatic. If the polyp is large enough to close the larynx, respiratory distress develops. Although radiologic imaging is beneficial, it can not differentiate diseases. However, computerized tomography and magnetic resonance imaging are absolutely necessary to assess if there is intracranial involvement.

In differential diagnosis, choanal atresia which leads to a similar clinical picture should be excluded by inserting a nasogastric tube through the nose. In addition, hamartoma, teratoma, hemangioma, neuroblastoma, meningoencephalocele, rhabdomyosarcoma, thyroglossal cyst and lingual cyst should be included in the differential diagnosis (7). Since it may extend into the brain, it is fairly significant to differentiate HP from meningoencephalocele.

The primary goal of treatment is to secure the airway. After the airway is secured, treatment consists of extirpating the mass fully as in our case.

In summary, all newborns with airway obstruction should be evaluated in terms of pharyngeal tumor. In all patients, endoscopic examination should be performed before surgery and radiological imaging should be performed to determine if the mass extends into the cranium. We could not perform any imaging method because of the urgency of our case. We were lucky, because the mass was not extending into the cranium.

References

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