

A DERMOIDAL CYST IN THE NASOPHARYNX OF A NEWBORN

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Summary

Introduction. Dermoidal cysts, arising from the developing ectoderm, can be sometime found within head and neck region. Nasopharyngeal localization that can obstruct the airway and create life-threatening situation may occur in 7% of all cases (10, 14). They should be excised as soon as possible, since sudden apnoeic cardiac arrest may occur.

Case report.

We describe a case of a three-week-old infant in whom dermoidal cyst caused almost complete obstruction of the airway. The cyst was excised after tracheostomy and child made uneventful recovery.

Conclusions. An impaired nasopharyngeal patency in newborns should be regarded as a life threatening disorder. In selected cases, dermoid cysts can be responsible for impaired choanal patency and then they should be radically removed

Key words: dermoidal cyst, nasopharynx of a newborn

INTRODUCTION

Dermoidal cysts are congenital malformations, originating from abnormal formation of the ectodermal tissues. Various layers of the skin can be found within connective tissue, ovaries, or the central nervous system (2, 5, 7, 9). Localisations within head and neck region are rare (14); tumours can be found in the nasal and/or oral cavity, orbital and salivary glands, in 60% jointly with facial cysts (1, 3, 6, 10, 11, 13, 16). Dermoids, localized in the nasopharyngeal cavity, albeit very rare in infancy (only few cases have been described), may seriously obstruct the airway, leading to sudden asphyxia and cardiac arrest (4, 15).

CASE REPORT

We describe a case of a three-week-old dystrophic infant, born at 41 weeks of gestational age, which was transferred to the ICU from a regional hospital because of increasing problems with patency of the airway. His body weight at birth was 2500 g and he was initially discharged home but quickly re-admitted because of respiratory and feeding problems. His condition deteriorated rapidly during transportation and he required

endotracheal intubation. On admission the condition of the child was stable; he was intubated, sedated and ventilated. Endoscopic and radiological examinations (fig. 1) revealed a tumour, protruding from the left wall of the upper throat region, which had dimensions of 5 x 17 x 18 mm, completely blocking the airway. Because of the difficulties during intubation, potential risks of sudden asphyxia and tumour malignancy, emergency tracheotomy was performed and the pedunculated tumour was partially excised via the oral cavity and middle throat. The peduncle of the tumour had dimensions of 2 x 1 x 1 cm. The wound healed without complications. Histopathological examination of the excised tissue identified a dermoid cyst (fig. 2). After surgery the child was breathing and eating without difficulty and was decannulated at 13.07.2010. The infant was discharged in good condition to a regional paediatric centre to recover. He remains in our observation.

DISCUSSION

Impaired patency of the upper airway in infants always poses a direct threat to life because of inability of breathing and feeding (12). The most common causes



Fig. 1. CT of dermoid cysts in the nasopharynx.

are congenital choanal malformations or protruding tissues (neoplastic or developmental). A dermoid cyst, which can be classified as mature teratoma, found in the described case, should be always removed, as early as possible, both for patency of the airway, but also a possibility of turning malignant (8). Only few similar cases were described previously (4, 15).

In presented case only rapid establishment of the artificial airway with subsequent surgery allowed to avoid serious consequences.

CONCLUSIONS

1. An impaired nasopharyngeal patency in newborns should be regarded as a life threatening disorder.
2. In selected cases, dermoid cysts can be responsible for impaired choanal patency and than they should be radically removed. □

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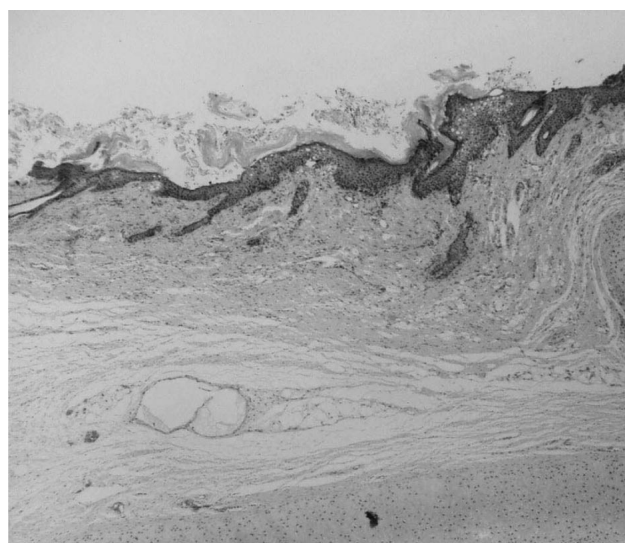


Fig. 2. Nasopharynx dermoid cyst, lined by epidermis, with adnexal structures in the wall.

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