CASE REPORT

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Hairy polyp of the oropharynx in a newborn: a case report*

Y.G. Karagama[1], R.S. Williams[2], G. Barclay[2], J.L. Lancaster[1], G.K. Kokai[3]

[1] Department of Ear, Nose and Throat Surgery, Arrowe Park Hospital, Wirral, United Kingdom
[2] Royal Liverpool University Hospital, Liverpool, United Kingdom
[3] Department of Paediatric Histopathology, Royal Liverpool Children's Hospital, Liverpool, United Kingdom

SUMMARY

An unusual case of an oropharyngeal mass in a neonate causing intermittent airway obstruction during the first 24hours following delivery is presented. This mass was confirmed to be a hairy polyp. We discuss the incidence, histology and peri-operative management of this unusual lesion.

Key words: hairy polyp, neonate, airway obstruction

INTRODUCTION

Teratomas are tumours derived from pluripotent cells that have derivatives from two or more germ layers (Mack 1990, Michael et al., 1996). Congenital teratomas occur with an incidence of 1 in 4,000 live births, with sacrococcygeal teratomas being the commonest (45%), followed by teratomas of the gonads, the anterior mediastinum, and the retroperitoneum. Oropharyngeal teratomas constitute ≤2% of the total (James et al., 1984).

Congenital oropharyngeal teratomas can present with acute upper airway obstruction. Distinguishing it from other central nervous system (CNS) congenital malformations such as meningoceles and encephaloceles can pose a diagnostic challenge.

CASE REPORT

A neonate presented with intermittent episodes of respiratory distress during the first 24 hours following a normal delivery at 40 weeks gestation. The neonate also experienced intermittent bouts of coughing which accompanied her respiratory distress. Following one bout of coughing, a polypoidal lesion was noted at the angle of the mouth. The lesion was secured with ribbon gauze (Figure 1) to prevent re-inhalation and arrangement made to take the patient to theatre.

Examination under a general anaesthesia revealed a polypoidal mass originating from the right anterior tonsillar pillar by a narrow pedicle. The pedicle was divided with cutting diathermy and the lesion sent for histology.

The child made an unremarkable recovery with feeds being commenced shortly after surgery.

Pathology

The lesion was a pedunculated grey-black mass measuring 3.4

Figure 1. Oropharyngeal mass protruding through the mouth.

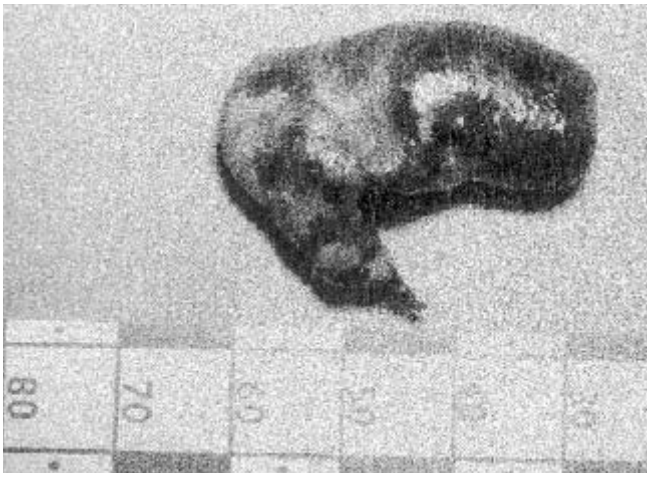

Figure 2. Macroscopic picture of the mass in Figure 1.

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x 1.5cm (Figure 2). Microscopically, it was covered by a continuous layer of non-keratinising squamous epithelium. The underlying fibroconnective stroma, consisted of a loose and oedematous interstitium containing numerous dilated vessels, pilo-sebaceous glands, and groups of sweat glands (Figure 3). These features were diagnostic of the so-called "hairy polyp" (also known as teratoid polyp)

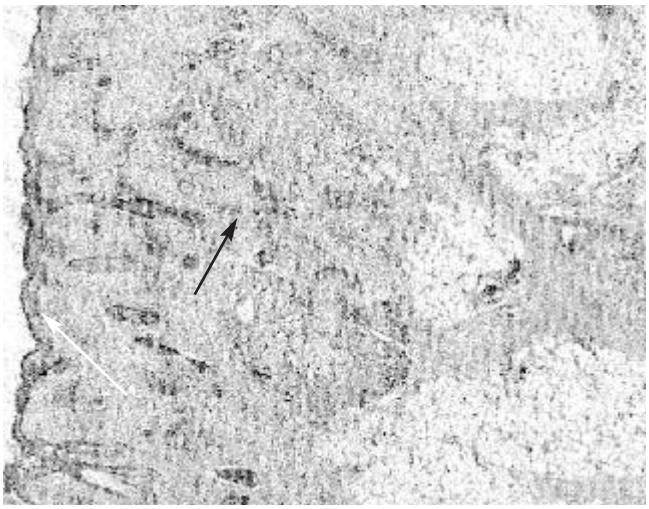

Figure 3. Microscopic picture of the mass in Figure 2 showing the features of a hairy polyp- non keratinising squamous epithelium (white arrow), fibroconective stroma (black arrow) consisting of blood vessels, pilo-sebacious glands and sweat glands.

DISCUSSION

Pharyngeal teratomas are rare congenital tumours seen in the newborn (Mack, 1990). Malignant alteration/transformation has not been reported within these tumours (James et al., 1984).

Teratomas are generally classified into 4 types (Alan et al., 1987; Mopriarty et al., 1993).

- Dermoids frequently called 'hairy polyps'- This type is the most common and contains tissue of ectodermal and mesodermal origin. The real nature of the "hairy polyp" has not been clarified yet and its genesis is still a matter of controversy and discussion: some authors consider it as a congenital anomaly or a choriostoma, while others regard it as a true teratoma (Mack, 1990).
- Teratoids contains tissue from the three primary germ layers, but poorly differentiated.
- True teratomas are similar to teratoids, but differentiated into recognisable tissues histologically (cartilage, teeth, etc.) Malignant alteration/transformation of these tumours, although known to occur elsewhere in the body, has not been reported in the pharynx.
- Epignathi are also tridermal in origin but differentiated into recognisable organs, sometimes with limbs or even a second fetus visible. They are very rare and generally incompatible with life.

The commonest differential diagnosis of a naso/oropharyngeal teratoma is an encephalocele. This is readily distinguishable from a naso/oropharyngeal teratoma, as it transilluminates (Mopriarty et al., 1993). Other differential diagnoses include, rhabdomyosarcomas, craniopharyngiomas, chordomas, hamartomas, haemangiomas, gliomas, neurofibromas (Alan et al., 1987; Mopriarty et al., 1993).

Naso/oropharyngeal teratomas usually present with obstruction of the upper respiratory tract. Other symptoms reported include snoring, rhinorrhoea, recurrent cough and failure to gain weight. If the teratoma is small it may be diagnosed later on in life presenting with speech problems (Mack, 1990; Mopriarty et al., 1993).

Respiratory difficulty may be dramatic and require urgent means of securing the airway. The tumour may then be excised surgically. The upper airway should be evaluated for oedema, distortion or haemorrhage especially in the early postoperative period (James et al., 1984). Twenty five percent of patients die before surgical intervention is possible and the mortality rate is between 9.7% and 17% despite surgical intervention (Mopriarty et al., 1993).

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Y.G. Karagama
22 Falkland Rise
Leeds LS17 6JQ
United Kingdom

Tel/Fax: +44 (0)151-6700-153
e-mail gadzama@themail.co.uk