

Case Report

HAIRY POLYP OF OROPHARYNX CASE REPORT AND REVIEW OF LITERATURE

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ABSTRACT

Nasopharyngeal and oropharyngeal dermoid or hairy polyps are very rare lesion. Unlike differentiated teratomas, hairy polyps are derived from two germinal layers, ectoderm and mesoderm. Hairy polyps more closely resemble congenital anomaly or choriostoma rather than a teratoma. They mostly present as pedunculated mass in oropharynx and nasopharynx and are usually found at birth or soon after. A case of oropharyngeal hairy polyp in a one month old female neonate is presented along with review of literature

Keywords: Hairy Polyp, Oropharynx, Dermoid, Congenital Anomaly

INTRODUCTION

Most oropharyngeal tumors are teratomas which are classified as dermoid, teratoid and true teratomas (Kelly *et al.*, 1996) Neonatal oropharyngeal tumors are rare and represent only 2 percent of childhood malignancies (Cay *et al.*, 2004). Teratoid tumors of nasopharynx and oropharynx are called hairy polyp (Manjiri *et al.*, 2000). They are not true neoplasm, but a developmental anomaly of totipotential cells from two germinal layers, ectoderm and mesoderm (Mcshane *et al.*, 1989; Kemal *et al.*, 2000). So far to our knowledge 120 cases of nasopharyngeal hairy polyp and 15 cases of oropharyngeal hairy polyp are reported in the literature (Kemal *et al.*, 2000; Panitan *et al.*, 2007).

CASE

A one month old female baby presented with a history of respiratory distress and stridor especially during feeding and a soft fleshy mass protruding from the oral cavity resembling the tongue. On examination a soft tongue like mass was noted inside the oral cavity, which was attached to the left tonsillar fossa by a stalk (Fig 1). The mass was removed and sent for histopathological examination.



Figure 1: Tongue like projection in oral cavity

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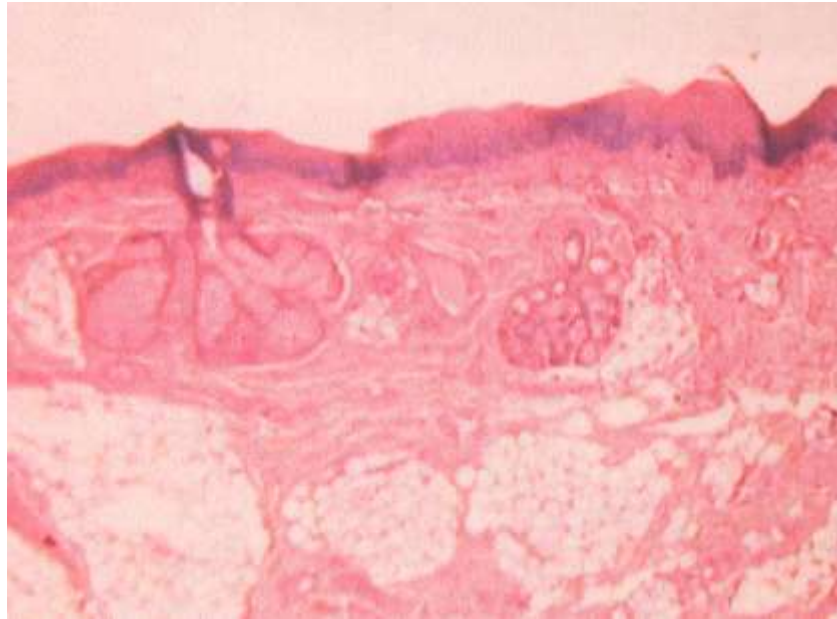


Figure 2: Low power view shows polypoid tissue covered by keratinizing stratified squamous epithelium with pilosebaceous unit. Underlying tissue composed of fibro adipose tissue (H&E).

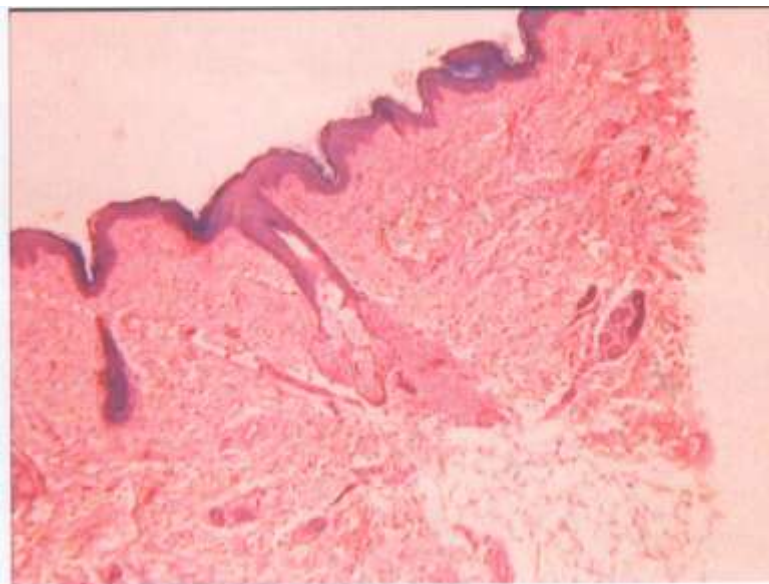


Figure 3: Low power view shows polypoid tissue covered by keratinizing stratified squamous epithelium with pilosebaceous unit. Underlying tissue composed of fibro adipose tissue (H&E).

On gross examination the mass was polypoid, globular measuring 3.5 x 2 cm. Microscopic examination showed polypoid mass composed of well organized tissue. The surface was covered by stratified keratinising squamous epithelium with many pilosebaceous units. Underlying tissue composed of fibroadipose tissue, skeletal muscle, sebaceous gland, eccrine glands and lymphoid collection. These hair follicles opened to the surface of epidermis (Fig. 2, Fig. 3).

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DISCUSSION

Most oropharyngeal tumors are teratomas which are classified as dermoid, teratoid and true teratomas (Kelly *et al.*, 1996) Neonatal nasopharyngeal and oropharyngeal teratoid tumors are commonly known as hairy polyp as they are solid polypoid mass covered by hairy skin (Anand *et al.*, 1978, Manjiri *et al.*, 2000)

Teratomas and teratoid tumors are the most common tumors of neonatal period (Barson, 1978). Most common location of teratoma is seen as sacrococcygeal teratoma (45%) followed by teratomas of the gonad, anterior mediastinum and retroperitoneum (Panitan *et al.*, 2007). They are very rare and only 120 cases of neonatal nasopharyngeal dermoid/hairy polyp and 15 cases of oropharyngeal dermoid/hairy polyp are reported in recent literature reviews (Panitan *et al.*, 2007; Kemal *et al.*, 2000). Hairy polyps are sometimes viewed as a congenital anomaly or choriostoma rather than a true teratoma (Kelly *et al.*, 1996, Sexton, 1990). They are benign lesion predominantly found in female with no known case of neoplastic transformation (Anand *et al.*, 1978; Walsh *et al.*, 1996). Lesions are generally single and only few cases of double presentation have been found in the literature (Anand *et al.*, 1978).

The incidence of hairy polyp is 1/40000 with the most frequently observed type congenital nasopharynx mass (Kara *et al.*, 2014). These polyps tend to occur more often in females (10:1 female to male gender distribution) and predominantly on the left side of the naso-oropharynx (Robert *et al.*, 2018). Clinical presentation depends on size and location of the mass, with respiratory obstruction and feeding difficulty. In our case feeding difficulty and respiratory distress was the main complaint. Diagnosis is usually done by clinical and histopathological examination. Radiological study is at times required to differentiate the lesion from meningoencephalocele, hemangioma, neuroblastoma, glioma, thyroglossal or lingual cyst (Anand *et al.*, 1978; Kochanski *et al.*, 1990).

In our case the mass was seen to have a pedunculated stalk without bony involvement. Pathologically teratoma is defined as a tumor composed of multiple heterotopic tissue foreign to the site and they are classified as (Sexton, 1990). Dermoid which is most common type of teratoma containing tissues of ectodermal and mesodermal origin, mostly present in the neonatal period. Teratoid which contains poorly differentiated tissues from three germ layers and True Teratoma similar to teratoid but the germ layers are differentiated (Panitan *et al.*, 2007; Sexton, 1990). Some authors prefer the term oropharyngeal hairy polyp to dermoid, because these lesions more closely resemble a congenital anomaly or choriostoma rather than a true teratoma (Kelly *et al.*, 1996; Sexton, 1990). Sexton explained that using the term dermoid is unsatisfactory since it may be confused with benign cystic teratomas in other locations the term does not indicate whether the proliferation is a normal malformation or a true neoplasm (Sexton, 1990). In his opinion hairy polyps are choriostoma or aberrant rest which is developmental malformation and not true neoplasm like a teratoma. Heffner *et al.* support Sexton's conclusion that hairy polyps are developmental anomalies arising from the first branchial cleft area (Heffner *et al.*, 1996).

It is unlikely for this type of mass to invade the surrounding structure and to recur after removal. There are no reported incidences of malignant transformation of hairy polyp (Kelly *et al.*, 1996).

In our patient there is no recurrence in a follow up period of more than four years.

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