### **CASE REPORT**

# **Hairy Polyp of Nasopharynx**

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### **ABSTRACT**

Hairy polyps are rare benign congenital malformations occurring in the nasopharynx or oropharynx. They arise during early embryogenesis and are invariably benign. They usually present at or soon after birth with signs of airway obstruction or feeding difficulties. Hairy polyps rarely present in older patients and only few cases have been reported in adults. We report a case of hairy polyp of nasopharynx in a 22-year-old female.

Keywords: Hairy polyp, Nasopharynx, Adult.

## INTRODUCTION

Hairy polyps or dermoids of the nasopharynx are an unusual but well-recognized entity. To date approximately 137 cases have been recorded. The hairy polyps are rare developmental malformations usually presenting as pedunculated mass in the nasopharynx or oropharynx. They usually present at or soon after birth with signs of upper aerodigestive tract obstruction. Intranasal gliomas, rhabdomyosarcoma, meningoencephalocele, Rathke pouch cyst, pharyngeal hypophysis, craniopharyngioma are the differential diagnosis of this uncommon lesion. Very few cases of hairy polyps are reported in adults. We report a case of hairy polyp in a 22-year-old female.

### **CASE REPORT**

A 22-year-old female attended the Dr BRAM Hospital with symptoms of nasal obstruction for last 2 months. There was no history of rhinorrhea, rhinosinusitis, epistaxis or headache. On nasal endoscopy, a solid and solitary mass was seen attached to the left lateral wall of nasopharynx. The pedunculated mass was hanging in the oropharynx (Fig. 1), gray-white in color, firm in consistency and did not bleed to touch. Rest of the otolaryngological examination was normal. X-ray paranasal sinuses showed mild haziness of left maxillary sinus. The routine laboratory investigations were within normal limits.

The mass was removed transnasally using an endoscope under general anesthesia. The base attachment was



Fig. 1: Hairy polyp hanging in oropharynx

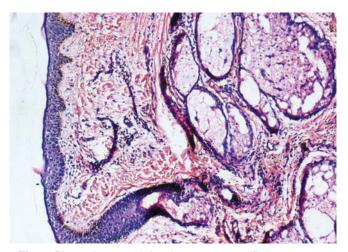
cauterized using bipolar diathermy. The excised mass was submitted for histopathology. There were no intraoperative or postoperative complications and 1 year follow-up did not reveal any recurrence.

On gross examination, the excised mass was  $4 \times 1.5 \times 1.5$  cm, cylindrical, with grey-white appearance. The cut surface was also greyish white (Fig. 2).

On histopathological examination, the mass was covered with mature stratified squamous epithelium with presence of appendages, like sebaceous and sweat glands below the epithelium (Fig. 3). The central portion consisted of mature



Fig. 2: Completely excised mass



**Fig. 3:** Photomicrograph showing mature stratified squamous epithelium with sebaceous gland (H & E 100x)

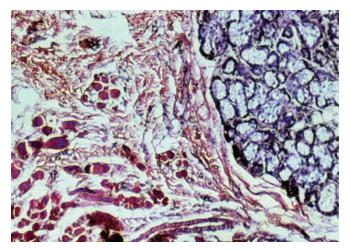


Fig. 4: Photomicrograph showing mature fat cells and muscle (H & E 400x)

fat cells and muscle (Fig. 4). Based on these features, a diagnosis of hairy polyp of nasopharynx was made.

## **DISCUSSION**

Hairy polyps of nasopharynx are rare lesions with an incidence of less than 1: 40,000 live births and till date only

137 cases are reported. <sup>1</sup> In 1918, Brown Kelly was credited for the first report of hairy polyp. <sup>2</sup> The hairy polyps have been labelled in the earlier literature as dermoid, teratoid, complex hamartoma and even teratoma. <sup>2</sup> Unlike the more differentiated types of teratoma, hairy polyps are derived from only two germinal layers, namely, the ectoderm and mesoderm. <sup>3</sup> Hairy polyps are not true neoplasm but represent a developmental malformation. <sup>4</sup> They arise during early embryogenesis. A hairy polyp arises from either the segregation of epithelial and mesodermal elements during the fusion of the lateral palatine process or from the incomplete reabsorption of the buccal nasopharyngeal membrane. <sup>5</sup> They are invariably benign with very little growth potential. <sup>6</sup> Their size varies from 0.5 to 6 cm<sup>1</sup> and may present as sessile or pedunculated mass.

Hairy polyps most frequently present in the neonatal period but occasionally be discovered in childhood and rarely in older age. Half of the cases are presented in the first year of life.<sup>5</sup> Our case was a 22-year-old female, who presented with symptoms of nasal obstruction for the past 2 months. Hairy polyps are more common in females as compared with males in a ratio of 6:1.<sup>7</sup>

Depending on the location, size and mobility, different symptoms and findings may present. Mild respiratory difficulty, nasal obstruction and drainage are the most common complaints, whereas feeding difficulty, vomiting, coughing, earache and drainage, epistaxis and protruding mass in the oropharynx may also be seen.<sup>7,8</sup>

Differential diagnosis of nasopharyngeal mass in children includes a long list. Hamartoma, teratoma, dermoid, hemangioma, neuroblastoma, rhabdomyosarcoma, glioma, meningocele and a foregut thymic, thyroglossal or lingual cyst should be considered. These must also be ruled out in adults. Radiological examination has an important role to play in ruling out these entities. Computed tomography (CT) and magnetic resonance imaging (MRI) can differentiate between their tissue characteristics, localize the origin of the tumor, rule out any intracranial or pharyngeal extension of lesion and evaluate eustachian tube and middle ear involvement. Surgical removal of this benign lesion is curative and there is no recurrence.

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