

## Hairy Polyp in Nasal Vestibule

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Hairy polyps are rare congenital benign masses of the head and neck. They mainly occur in the nasopharynx and oropharynx. This paper reports a 12-month-old female patient who had a 0.5-cm sausage-shaped mass in the left nasal vestibule with nasal obstruction and habitual nose-picking. This lesion was surgically removed with no complications under monitored anesthesia. There was no evidence of recurrence through 24 months. To the best of our knowledge, this is the first English literature report of a patient with a hairy polyp arising from a nasal vestibule.

**KEY WORDS:** Hairy polyp · Nasal vestibule.

### INTRODUCTION

Hairy polyps are rare benign masses appended to the skin that are commonly found in the nasopharynx or oropharynx. There are no reports of hairy polyps located in the nasal vestibule in the English literature. We are reporting a case of a hairy polyp that arose in the nasal vestibule of a 12-month-old female.

### CASE REPORT

This case report was approved by the Institutional Review Board at the Inje University School of Medicine. A 12-month-old female patient visited the outpatient clinic of the Department of Otorhinolaryngology in Busan Paik Hospital with left nasal obstruction and habitual nose-picking. On physical examination, a 0.5-cm sausage-shaped mass was observed in the left nasal vestibule (Fig. 1). This mass was gray, pedunculated, rubbery and covered with skin. Under monitored anesthesia, the mass was surgically removed. The mass was attached right nasal vestibular

skin without any fistula tract. There were no specific complications during surgery. Macroscopically, the mass was a gray-white, 0.5 × 0.2 × 0.2-cm tumor with a polypoid shape. Microscopically, the mass was covered by squamous epithelium and contained adnexal structures (Fig. 2). Two years later, there was no evidence of tumor recurrence.

### DISCUSSION

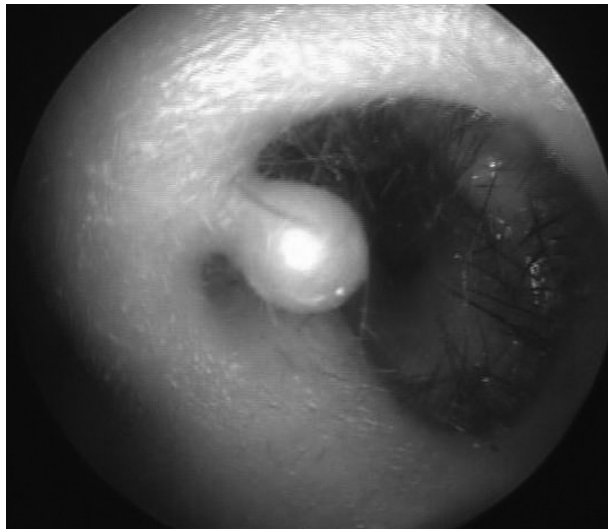
Hairy polyps are rare benign lesions containing components of both ectodermal and mesodermal origin. They commonly occur in the nasopharynx and oropharynx.<sup>1)</sup> This type of lesion is generally sausage- or pear-shaped and pedunculated.<sup>2)</sup> Arnold classified the teratomas of the head and neck region as epignathi, teratomas, teratoids, and dermoids (so-called hairy polyps).<sup>3)</sup> Epignathi, also known as parasitic fetuses, which are extremely rare, contain cells derived from all three germ cell layers—the ectoderm, mesoderm and endoderm—and can contain organs and limbs.

Teratomas, which also contain cells derived from the

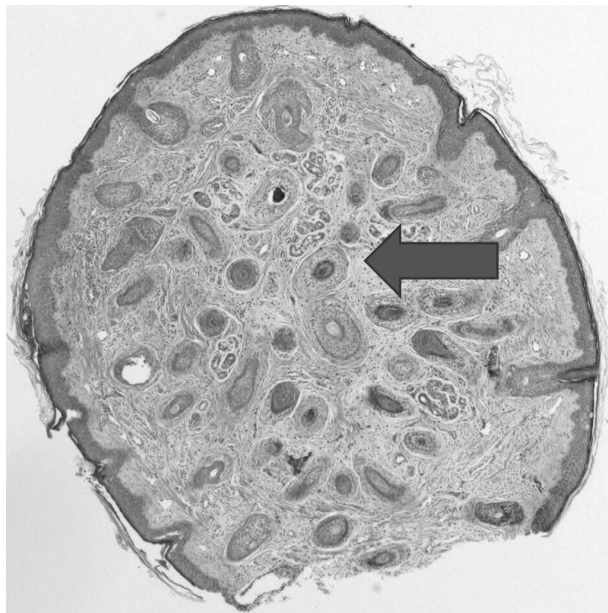
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**Fig. 1.** Endoscopic findings of nasal vestibule. A 0.5-cm sausage-shaped mass was observed in the left nasal vestibule. This mass was gray, pedunculated, rubbery and covered with skin.



**Fig. 2.** Histopathological findings consistent with a hairy polyp. H&E stain shows the polypoid lesion was lined by benign squamous epithelium ( $\times 40$ ). It contains skin adnexa including hair follicles (arrow head).

three germ cell layers, are commonly associated with developmental deformities of the skull. Teratoids are similar to teratomas but are composed of poorly differentiated tissue derived from all three germ cell layers. The ectodermal lining of dermoids(hairy polyps) consists of stratified squamous epithelium, which contributes to the purplish white color, while the mesodermal core is composed of fibroadipose tissue and may include muscle, cartilage, bone, hair follicles, exocrine glands, apocrine glands, fat and, in

rare cases, meningotheelial elements.<sup>4)</sup> The differential diagnosis of hairy polyps must include teratomas. Teratomas occur equally in males and females; however, hairy polyps are six times more common in females. Our case occurred in a female patient, which is consistent with the reports in the literature.<sup>4)</sup> Brown-Kelly *et al.*, reported 49 other cases from various worldwide sources, and noted a 10 percent association with cleft palate, as well as associations with various branchial arch malformations including absence of the uvula and external ears, ankyloglossia, and facial hemihypotrophy.<sup>1)</sup> Moreover, teratomas may recur after surgical removal, exhibit a pattern of progressive growth, and may undergo malignant transformation. In addition, they are associated with anomalies of the skull base.<sup>1)</sup>

The symptoms of hairy polyps are airway obstruction, recurrent cough, snoring and epistaxis when they occur in the nasopharynx and oropharynx, which are the most common locations of hairy polyps.<sup>4)</sup> In this case, patient had nasal obstructions similar to other anterior nasal cavity hairy polyp which arise from anterior nasal septum.<sup>5)</sup> Unfortunately, radiological study may helpful in delineating the location and size of the tumor, cannot differentiate between other tumors.<sup>2)</sup>

To our knowledge, this is the first report of nasal obstruction and nose-picking as the symptoms in a case of a nasal vestibular hairy polyp. The treatment of choice for hairy polyps is complete surgical excision at the base of the stalk.<sup>2)</sup> To date, recurrence and malignant transformation have not been reported. Although hairy polyps are rare and not malignant, the specimen should be examined by histology to confirm the clinical diagnosis. Nasal vestibule where is an uncommon location, should also be considered a site for hairy polyps.

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