Congenital Hairy Polyp of Eustachian Tube in an Adult: An Unusual Case

Bir Erişkinde Östaki Tüpünün Konjenital Hairy Polibi: Nadir Bir Olgu

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Geliş Tarihi/*Received:* 06.11.2008
Kabul Tarihi/*Accepted:* 02.02.2009

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ABSTRACT Congenital hairy polyps (CHP) are rare benign congenital tumors that usually present as pedunculated masses in the oro-nasopharynx. They usually occur in neonates, although a few cases have been reported in older patients. The patient referred to our clinic with the complaints of difficulty in swallowing, pain in left ear, nasal blockage on the left side, dysphonia and tinnitus in the left ear. On endoscopic nasopharyngeal examination, a pedinculated, gray-white and 5.5 x 1.5 cm sized polyp mass was observed. This mass was originating from the left eustachian tube, blocking left side of nasopharynx and extending to the superior border of epiglottis. The mass was totally removed using endoscopic transnasal and oral approaches under local anesthesia. In this paper, a very rare case of CHP arising from the eustachian tube orifice in an adult patient was presented. The different symptomatology between neonates and adults, differential diagnosis and treatment were discussed.

Key Words: Nasopharynx; eustachian tube; nasopharyngeal neoplasms

ÖZET Konjenital hairy polipler genellikle oro-nazofarenkste pedikküllü bir kitle olarak görülen nadir benign konjenital tümörlerdir. Birkaç erişkin hastada rapor edilmesine rağmen çoğunlukla yenidoğanlarda oluşur. Hasta kliniğimize yutma güçlüğü, sol kulağında ağrı, burun sol tarafında tıkanıklık, sol kulakta tinnitus ve disfoni yakınmaları ile başvurdu. Endoskopik nazofarenks muayenesinde düzgün yüzeyli, pedikküllü, gri-beyaz renkte 5.5 x 1.5cm boyutunda polibe kitle izlendi. Bu kitle sol östaki tüp orifisinden kaynaklanıp, nazofarenksi sol tarafta tıkayıp, epiglot üst kenarına kadar uzanıyordu. Lokal anestezi altında, kitle endoskopik transnazal ve oral yaklaşımla total olarak çıkarıldı. Bu makalede, erişkin bir hastada sol östaki tüp orifisinden gelişen konjenital hairy polibin çok nadir bir olgusu sunulmuş ve yenidoğanlarla erişkinler arasındaki farklı semptomatolojisi, ayırıcı tanısı ve tedavisi tartışılmıştır.

Anahtar Kelimeler: Nazofarenks; östaki tüpü; nazofarengeal tümörler

Turkiye Klinikleri J Med Sci 2010;30(5):1742-4

Congenital hairy polyps (CHP) or dermoids are uncommon lesions of oro- and nasopharynx. These lesions are rare with an incidence of lower than 1:40.000 live births. Sixty percent of the hairy polyps develop on the lateral nasopharynx or the superior surface of the soft palate; the remainder mostly originate from tonsillar region or nasopharynx, and a few from eustachian tube or the middle ear.[1-3] The polyps are six fold common in females than in males. They are recognized most frequently in the neonatal period, but may occasionally be discovered in childhood and seldom in old age.[3] As far as we know, only three adult cases of hairy polyp ha-

ve been reported in English literature.[2,4] In this paper, a very rare case of CHP arising from the eustachian tube orifice in an adult patient was presented. Additionally, the different symptomatology in neonates and adults, differential diagnosis and treatment were discussed.

CASE REPORT

A 48-year-old male patient referred to our clinic with the complaints of difficulty in swallowing, pain in left ear, nasal blockage on the left side, dysphonia tinnitus and in left ear. The onset of complaints dated back to one year ago. In the examination of the oral cavity, a mass extending inferiorly from nasopharynx was observed (Figure 1A). In endoscopic nasopharyngeal examination, a pedinculated, gray-white and 5.5 x 1.5 cm sized polypoid mass was observed. This mass was originating from the left eustachian tube, blocking left side of nasopharynx and extending to the superior border of epiglottis. Bilateral otoscopic examinations were normal. Computerized tomography showed a mass with semisolid density and regular borders, extended from nasopharyngeal wall to lumen (Figure 1B).

The mass was totally removed using endoscopic transnasal and oral approaches under local anesthesia (Figure 1C).

Histopathological examination showed a lesion surrounded by stratified squamous epithelium with proliferated congestioned vascular structures and patchy adipose tissue in the stroma (Figure 1D). The final diagnosis was hairy polyp.

No recurrence occurred in one year follow up.

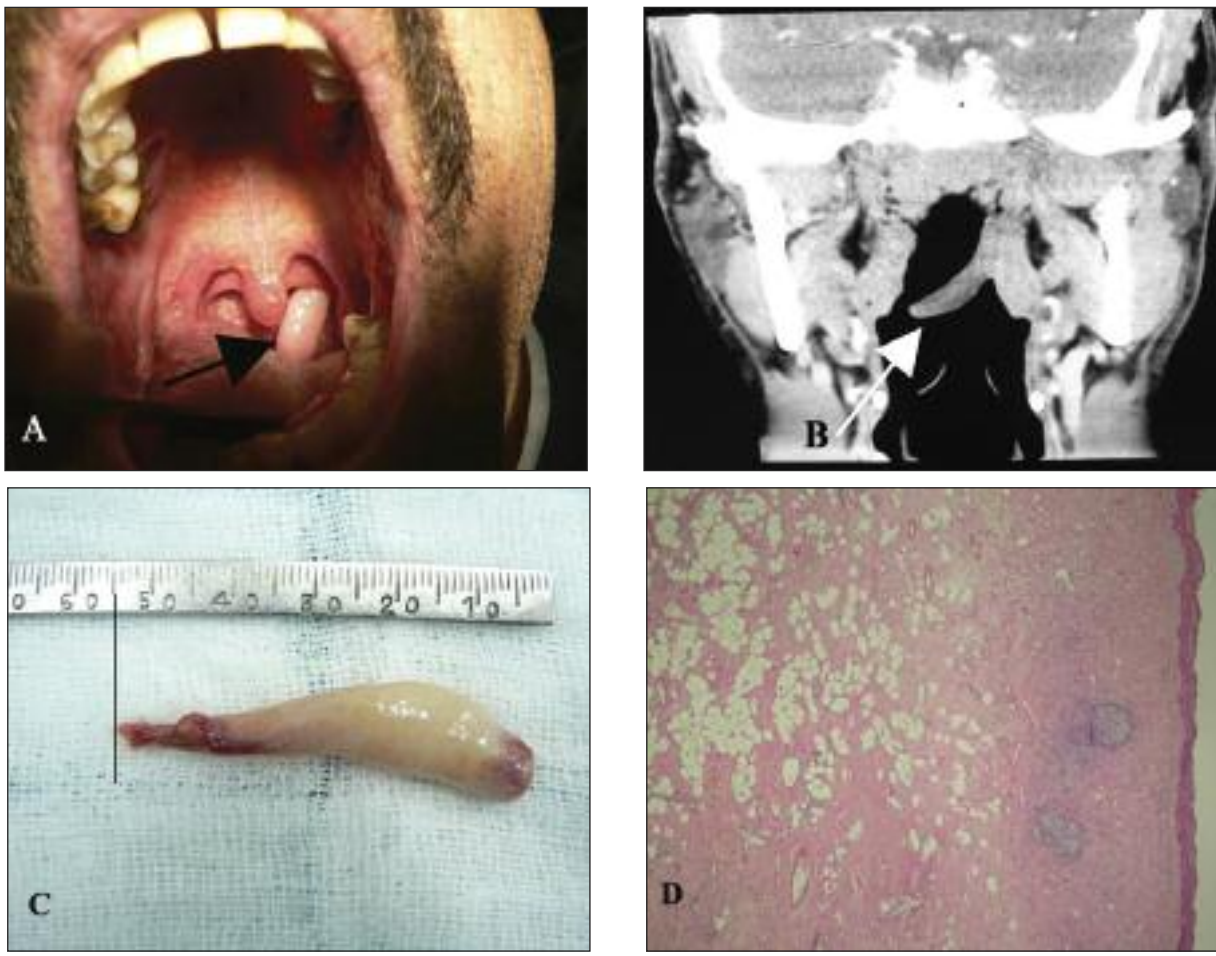

FIGURE 1: (A) Preoperative photograph of the patient. Appearance (black arrow) of polyp intraorally. **(B)** CT showed a polypoid mass with semisolid density, extending from nasopharyngeal wall to lumen. **(C)** The excised specimen. *(D)* Histopathological examination of subsequent parafin sections showed a lesion surrounded by stratified squamous epithelium with proliferated congestioned vascular structures and patchy adipose tissue in the stroma (HE, x125).

DISCUSSION

Hairy polyps or dermoids are extremely rare benign congenital tumors of the nasopharynx. They are not true neoplasms, rather arise as a result of a developmental abnormality of totipotential cells from two germinal layers, ectoderm and mesoderm. These embryonic cells may proliferate abnormally and differentiate into disorganized conglomerate of various tissues. The resulting pseudoneoplastic lesion is called dermoid or hairy polyp, when situated in nasopharynx.[3,4]

The lesions were originally classified by Arnold in 1870.[3] Arnold classified teratomatous lesions into the following four categories: teratoids, teratomas, epighnati and dermoids (hairy polyp). While the others contain all three germ layers (ectoderm, mesoderm, and endoderm), CHP, unlike them, contains only two germ layers, namely ectoderm and mesoderm.[3] Congenital nasopharyngeal hairy polyps most frequently appear after birth or during the first year of life. Although they are rare in adults, they have been reported in three adults so far in the English literature (a 24 year old woman and two men at the ages of 66 and 71).[2,4]

CHP leads to acute symptoms such as respiratory distress, cyanosis, blood-tinged vomiting, continous cough and difficulty in feeding in infants depending its size and location, whereas it causes various chronic symptoms in adults such as blocked nose, epistaxis, rhinorrhea, tinnitus, dysphonia, dysphagia, otalgia and sleep apnea.[2-4] Therefore, CHP presents as a pathology requiring immediate intervention in neonates. In adults, as in our case, they usually present with choronic complaints and are treated under elective conditions.

While congenital lesions such as teratoma, hamartoma, neuroblastoma, hemangioma, glioma, meningoencephalocel, thymic and thyroglossal cysts are consideredin the differential diagnosis in neonates, nasopaharygeal tumors and lesions such as antrocoanal polyps are predominantly considered in adults.[5]

Microscopically, hairy polyp is covered by stratified squamous epithelium with epidermal appendages. The stroma consists of fibro-fatty material and may contain elements of cartilage, bone, nerves, minor salivary glands and muscle.[3,4]

Nasopharyngeal CHPs are benign lesions with limited growth potential and can be cured by surgical excision.[6] There are no reported cases of malignant transformation. A few recurrences have been reported in literature, which were probably due to incomplete removal.[6] A good exposure is necessary in order to be able to see the origin of the CHPs, especially those originating from the eustachian tube orifice, and to excise the mass totally and to prevent any recurrence. Carrying out the operation under endoscopic guidance makes localization of the polyp and its complete excision with combined transnasal and transoral approach easier. It may also help to avoid undesirable complications as well as to excise the lesions situated close to eustachian tube opening.[1,6]

In conclusion, CHPs should be kept in mind in the differential dignosis of nasopharyngeal masses even though they occur rarely in adults.

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