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Bilateral hairy polyp of the oropharynx

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Abstract
Hairy polyp of the nasopharynx is an unusual but well-recognized entity, generally presenting as a single mass at birth or in the first year of life. We describe the clinico-pathological features of a previously unreported bilateral hairy polyp in an adult and briefly discuss the pathogenesis of this condition.

Key words: Oropharyngeal neoplasms; Hairy polyp

Introduction

Hairy polyps are rare malformative lesions of the nasopharynx and oropharynx, usually occurring at birth or in the first year of life with signs of obstruction (Morgan and Evans, 1990; Van Haesendonck *et al.*, 1990). Their occurrence in adults is also recognized (Resta *et al.*, 1984). The clinico-pathological features of the disorder are well-defined. They present as a single benign lesion with very limited growth potential and the consequent surgical removal is always curative although sporadic cases of recurrence have been reported (Frech and McAlister, 1969; Haddad *et al.*, 1990). CT scanning may be a pre-operative complementary diagnostic tool in differentiating them from other types of tumour (Senac and Segall, 1987).

The aetiopathogenesis is less clear. They are generally described as a primitive form of teratoma, derived from two germinal layers, ectoderm and mesoderm.

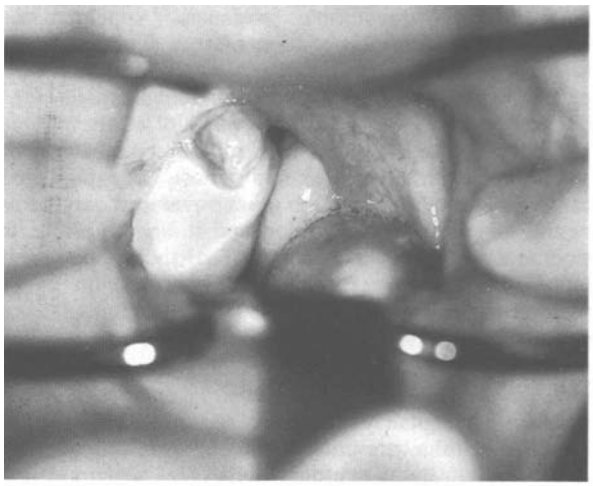
In this paper, we describe a previously unreported case of bilateral hairy polyp in an adult; this observation can widen the discussion about the origin of this condition.

Case report

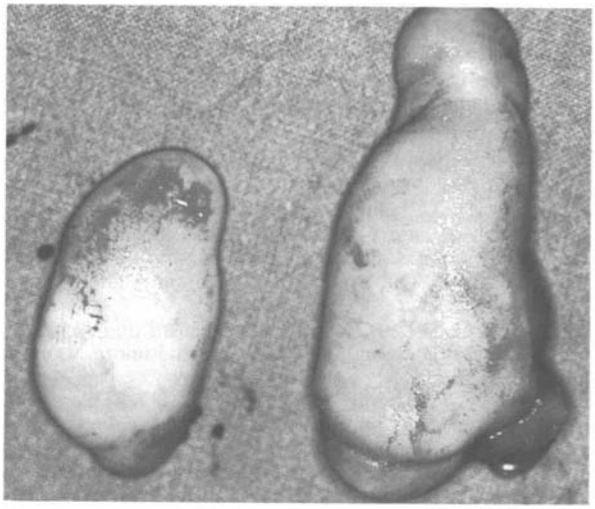
A 58-year-old female was referred to the 'Clinica Otorinolaringoiatrica' of the University of Palermo, because of feeding difficulties and mild dyspnoea. She had no relevant past medical history. Examination of her oral cavity showed two large, pedunculated masses, covered by pink-coloured mucosa, bilaterally located between the palatine arches and hanging down into the oropharynx (Figure 1). CT scan better defined the exact location of the swellings (Figure 2).

The masses were surgically removed under local anaesthesia. The post-operative course was uneventful. The patient is free of disease and without evidence of recurrence after 18 months. The gross appearance of the excised specimens was of two oval yellow fatty tissue masses, one measuring 5 × 2.5 × 1.5 cm and the other 3.5 × 2 × 1 cm, both had a smooth surface and areas of lobulation (Figure 1b).

Histologically they were both covered by a stratified squamous epithelium and consisted of fat tissue associated with smooth and striated muscle, skin appendages



(a)



(b)

Fig. 1
Macroscopic appearance of the hairy polyps before (1a) and after removal (1b).

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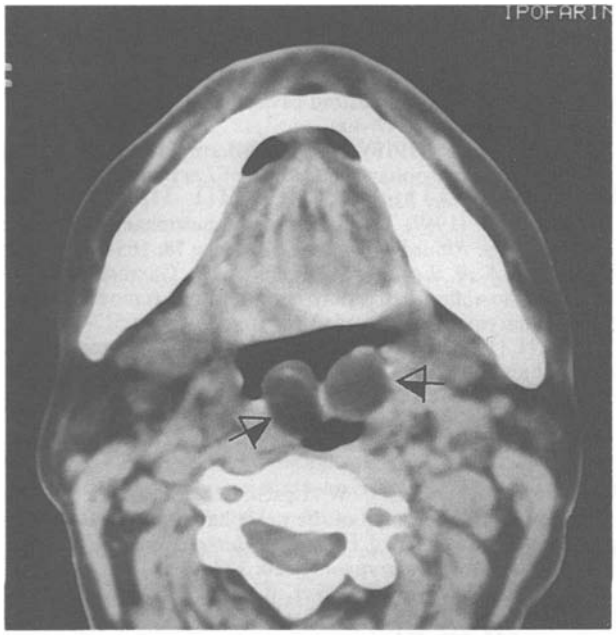

FIG. 2

CT scan image showing two bilateral, symmetrical swellings extending medially to oropharynx.

(sebaceous glands, hair follicles) and minor salivary glands (*Figures 3 and 4*).

Discussion

Hairy polyps or 'dermoids' are described as one of the four subclasses of teratomas which include also the true trigerminal teratomas forming organoid structures, the extremely rare epignathy and the teratoids whose structure is partially composed of immature tissues (Arnold, 1870). Their size and location influence the clinical picture they can give rise to and, by consequence, their more or less precocious detection (Calcaterra, 1969; Felder, 1975). Although hairy polyps are reported to occur singularly (McShane *et al.*, 1989) in our case they were symmetrically bilateral, located in the oropharynx close to the tonsillar fossa. Owing to this particular location they did not cause severe symptoms due to airway obstruction but a mechanical dysphagia which, once investigated, led to the diagnosis. Several theories have been proposed in order to understand the histogenesis of hairy polyps. A growth of pluripotential cells escaping the normal control in the early embryonic development (Holt *et al.*, 1979) or the inclusion of germ layers during the fusion of the lateral palatine processes (Chaudhry *et al.*, 1978) have been hypothesized. Their ectodermal constituent (skin with adnexal structures) is not indigenous to the area and therefore they cannot take place in the category of hamartomas, as previously claimed; true nasopharyngeal hamartomas have however been reported (Zarbo and McClatchey, 1983). Their presence in the pharynx was also considered as the consequence of a developmental error occurring before the fourth week of gestation (Brown-Kelly, 1918). Badrawy *et al.* (1973) relate hairy polyp to a remnant of the nasopharyngeal membrane, developing at the seventh week of gestation.

Schuring (1964) considers hairy polyps accessory auricles originating from the first branchial apparatus, because

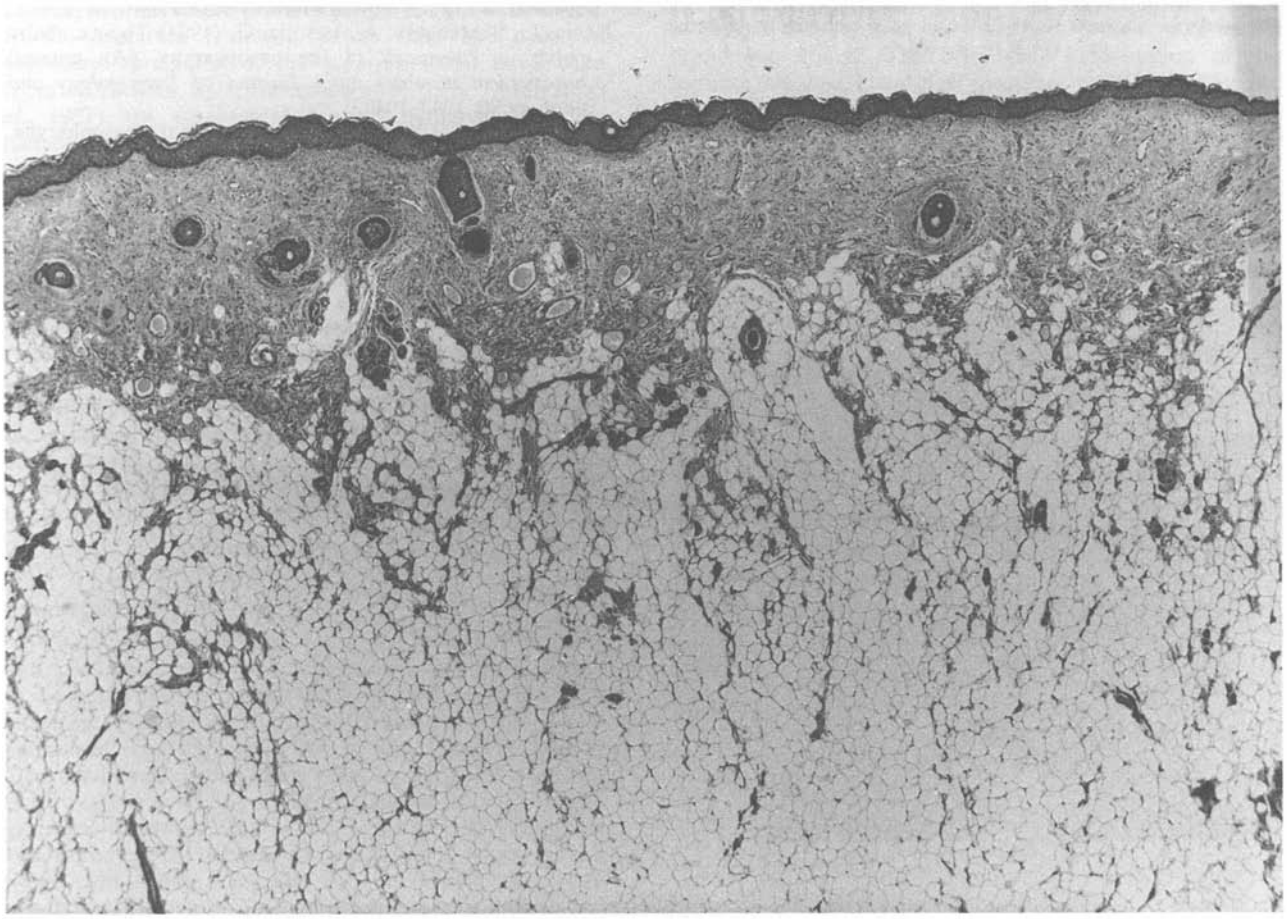

FIG. 3

Histological aspect of the hairy polyp showing fibrous and adipose tissue covered by squamous epithelium (H & E; ×40).

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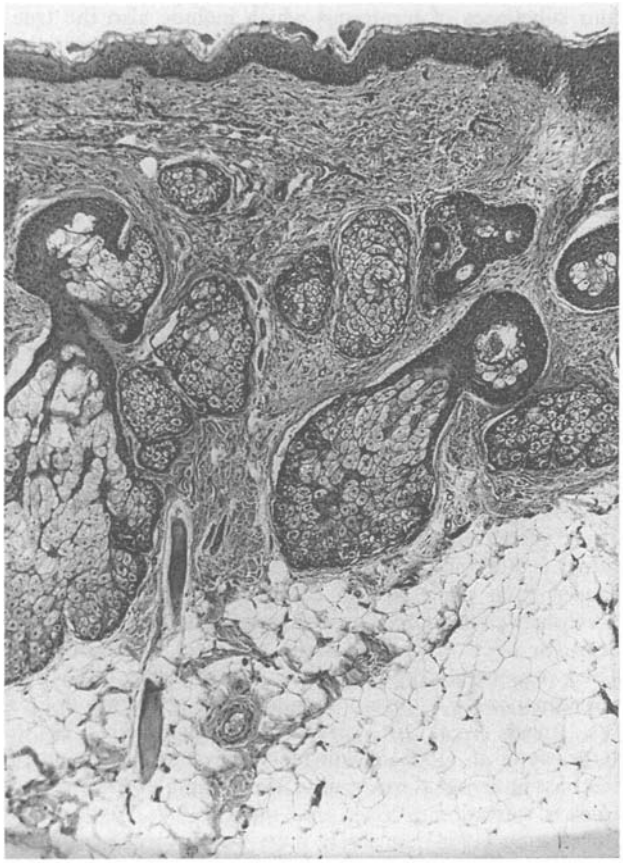

FIG. 4

The dermis contains hair follicles and sebaceous glands (H & E; × 100).

of their histological identity to an auricle. Kanzaki *et al.* (1988), reporting a case of hairy polyp resembling an auricle grossly and histologically, strongly supports Schuring's hypothesis. Furthermore, Boedts *et al.* (1992) have described a hairy polyp located in the middle ear and mastoid cavity. Our observation, either owing to the histological aspect or especially to the bilaterality, seems to be in accordance with Schuring's hypothesis and supports a malformative rather than teratomatous origin of the hairy polyp. It is clear that only further reports on a wider number of observations can better define the histogenesis of this curious pathological condition.

References

Arnold, J. (1870) Ein Fall von congenitalem zusammengesetztem Lipom der Zunge und der Pharynx mit perforation in die Schaedelhoehle. *Virchows Archiv fur pathologische Anatomie und Phisiologie und fur klinische Medizin* **50:** 482–516.

Badrawy, R., Fahmy, S. A., Taha, A. M. (1973) Teratoid tumours of the nasopharynx. *Journal of Laryngology and Otology* **87:** 795–799.

Boedts, D., Moerman, M., Marquet, J. (1992) A hairy polyp of the middle ear and mastoid cavity. *Acta Otorhinolaryngologica Belgica* **46:** 397–400.

Brown-Kelly, A. (1918) Hairy or dermoid polyp of the pharynx and nasopharynx. *Journal of Laryngology, Rhinology and Otology* **33:** 65–70.

Calcaterra, T. (1969) Teratomas of the nasopharynx. *Annals of Otology, Rhinology and Laryngology* **78:** 165–171.

Chaudhry, A. P., Lore, J. M., Fisher, J. E., Gambrino, A. G. (1978) So-called hairy polyps or teratoid tumours of the nasopharynx. *Archives of Otolaryngology* **104:** 517–525.

Felder, H. (1975) Benign congenital neoplasm: Dermoids and teratomas. *Archives of Otolaryngology* **101:** 333–334.

Frech, R. S., McAlister, W. H. (1969) Teratoma of the nasopharynx producing depression of the posterior hard palate. *Journal of Canadian Association of Radiology* **20:** 204–205.

Haddad, J. Jr., Senders, C. W., Leach, C. S., Stool, S. E. (1990) Congenital hairy polyp of the nasopharynx associated with cleft palate: report of two cases. *International Journal of Pediatric Otorhinolaryngology* **20:** 127–135.

Holt, G. R., Holt, J. E., Weaver, R. G. (1979) Dermoids and teratomas of the head and neck. *Ear, Nose and Throat Journal* **58:** 520–531.

Kanzaki, S., Yamada, K., Fujimoto, M., Arata, A., Miyake, M., Ohbayashi, K. (1988) So-called hairy polyp resembling an auricle. *Otolaryngology – Head and Neck Surgery* **99:** 424–426.

McShane, D., El Sherif, I., Doyle-Kelly, W., Fennell, G., Walsh, M. (1989) Dermoids ('hairy polyps') of the oronasopharynx. *Journal of Laryngology and Otology* **103:** 612–615.

Morgan, D. W., Evans, J. N. G. (1990) Developmental nasal anomalies. *Journal of Laryngology and Otology* **104:** 394–403.

Resta, L., Santangelo, A., Lastilla, G. (1984) The s.c. 'hairy polyp' or 'dermoid' of the nasopharynx. (An unusual observation in older age.) *Journal of Laryngology and Otology* **98:** 1043–1046.

Schuring, A. G. (1964) Accessory auricle in the nasopharynx. *Laryngoscope* **74:** 111–114.

Senac, M. O., Segall, H. D. (1987) CT diagnosis of an atypical nasopharyngeal hairy polyp in the newborn. *American Journal of Neuroradiology* **8:** 710–712.

Van Haesendonck, J., van de Heyning, P. H., Claes, J., Goovaerts, G., Van Reempst, P., De Schepper, A., Marquet, J. F. (1990) A pharyngeal hairy polyp causing neonatal airway obstruction: a case study. *International Journal of Pediatric Otorhinolaryngology* **19:** 175–180.

Zarbo, R. J., McClatchey, K. D. (1983) Nasopharyngeal hamartoma: report of a case and review of the literature. *Laryngoscope* **93:** 494–496.

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