The Journal of Laryngology and Otology
February 1999, Vol. **113,** pp. 172–173

Pharyngo-oesophageal haemangioma with a positive cough impulse

L. J. Hollis, F.R.C.S., M. El-Alami, M.D., R. Pyke, M.A., F.R.C.S.

Abstract
Benign tumours of both the pharynx and oesophagus are rarely seen, cavernous haemangiomas even less so. We present a case in which a large lesion was the cause of non-specific symptoms but which only appeared intermittently on nasendoscopic examination of the pharynx.

Key words: Haemangioma; Pharynx; Oesophagus

Case report

A 69-year-old lady was initially referred to the chest physicians for investigation of a persistent, dry cough with an associated sensation of a foreign body in the throat. There were also accompanying symptoms of anorexia and weight loss. Bronchoscopy was arranged which demonstrated a whitish, highly mobile swelling apparently originating in the left pyriform fossa. Referral to the ENT-head and neck surgeons was then organized. Nasendoscopy was performed and the findings of the bronchoscopy were confirmed – the swelling appeared to be of a smooth, soft consistency and highly mobile – disappearing on swallowing and reappearing on coughing. The mass apparently originated from a peduncle deep within the pyriform fossa or oesophagus and almost encroached into the supraglottic larynx (Figures 1 and 2).

Computed tomography (CT) scan of the neck was organized which excluded an air-filled mass which would have been suggestive of an internal laryngocoele. A heterogeneous mass to the left and posterior to the trachea was seen although the exact nature of this could not be further elucidated.

Laryngopharyngoscopy was performed and the mass biopsied. Initial impressions were of some form of haemangioma which was confirmed by histology.

An unforeseen complication arose shortly afterward in the form of infective endocarditis. This was thought to have arisen as a result of a bacteraemia subsequent to the biopsy and damage to a pre-existing and undiagnosed mitral valve defect. The patient made a good recovery from this, so enabling formal excision of the mass to be planned under appropriate antibiotic cover.

The oesophagus was intubated with a nasogastric tube to aid its subsequent detection and the oesophagus and lower pharynx approached via a lateral pharyngotomy. After identification of the recurrent laryngeal nerve and lateral reflection of the inferior cornu of the thyroid cartilage, an incision was made into the cervical oesophagus through which a haemangiomatous mass herniated. This was only partially resected to avoid subsequent

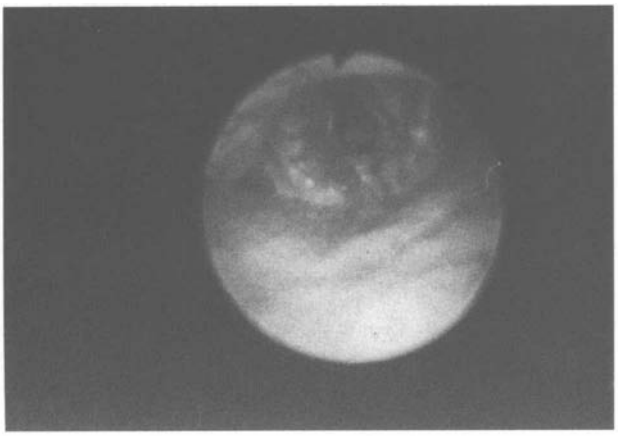

Fig. 1
Nasendoscopic view of normal glottis and laryngopharynx.

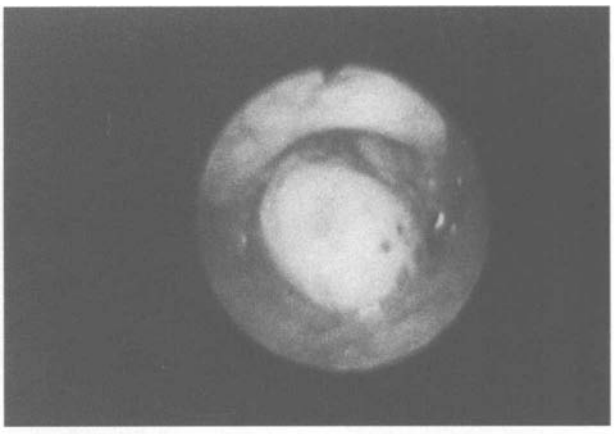

Fig. 2
Nasendoscopic view showing smooth pedunculated mass after patient coughed.

From the Department of Otolaryngology, Northampton General Hospital, Northampton, UK.
Accepted for publication: 9 December 1998

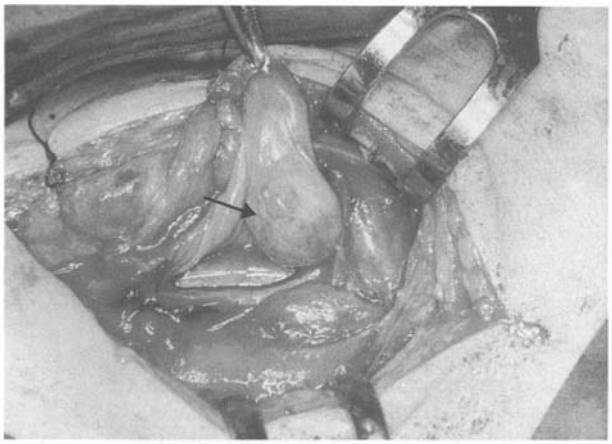

FIG. 3

View of open oesophagus demonstrating haemangioma (shown with arrow).

oesophageal stenosis. The pharynx was opened just above the cricopharyngeus and a further pedunculated haemangiomatous mass was seen originating from the medial surface of the pyriform fossa (Figure 3) and appeared to be continuous with the oesophageal mass. This mass was also resected, with fortunately little bleeding, and closure performed in two layers. Finally a temporary tracheostomy was performed.

Histological analysis confirmed the lesion to be a cavernous haemangioma. The patient subsequently made a full recovery although is now under the care of the cardiologists for consideration for a prosthetic heart valve.

Discussion

Benign tumours of the oesophagus are uncommon and are generally submucosal and of smooth muscle origin. Haemangiomas are a relative rarity, comprising two to three per cent of benign oesophageal tumours (Dumbleton *et al.*, 1997). In a combined series of 13 460 autopsies, only three oesophageal haemangiomas were identified (Gilbert *et al.*, 1990).

Microscopically, cavernous haemangiomas are composed of large, dilated blood-filled vessels arranged in a lobular or diffuse pattern. These vessels are lined by flattened endothelium. The walls are occasionally thickened by an adventitial fibrosis and inflammatory cells may be scattered throughout the stroma. Phlebolith formation, amorphous or curvilinear calcification may be present and are the results of dystrophic calcification within organizing thrombi. Cavernous haemangiomas resemble engorged capillary haemangiomas, however, they are usually larger and less circumscribed and more frequently involve a deep structure. They show no tendency to regress and may be locally destructive by virtue of pressure exerted on neighbouring structures. Thrombocytopenic purpura may complicate these giant haemangiomas (Mineo *et al.*, 1995).

CT scanning is a useful investigation in that it may demonstrate an enhancing lesion with calcific phleboliths, although they were not shown in this case (Dumbleton *et al*, 1997).

A useful classification of vascular abnormalities is shown in Table I (Atin *et al.*, 1993).

TABLE I

CLASSIFICATION OF VASCULAR ABNORMALITIES

Arteriovenous malformation
Angiodysplasia
Congenital malformation

Haemangioma
Capillary
Cavernous
small: single or multiple
expansive and diffuse: single or multiple
specific syndromes: Peutz-Jeghers
Blue rubber bleb naevus
Klippel-Trenaunay-Weber
Mixed capillary-cavernous

Telangectasia
Hereditary haemorrhagic (Osler-Weber-Rendu)
Calcinosis-Raynaud's-sclerodactyly (CRST)

Disorders of connective tissue
Pseudoxanthoma elasticum
Ehlers-Danlos syndrome

References

Atin, V., Sabas, J. A., Cotano, J. R., Madariaga, M., Galan, D. (1993) Familial varices of the colon and small bowel. *International Journal of Colorectal Diseases* **8:** 4–8.

Dumbleton, S. A., Warshauer, D. M., Koruda, M. J., Woosley, J. T. (1997) Haemangioma of the oesophagus: CT demonstration. *Australian Radiology* **41:** 65–66.

Gilbert, H. W., Weston, M. J., Thompson, M. H. (1990) Cavernous haemangioma of the oesophagus. *British Journal of Surgery* **77:** 106.

Mineo, T. C., Biancari, F., Cristino, B., D'Andrea, V. (1995) Benign vascular tumours or the mediastinum: presentation of three cases and review of the literature. *Thoracic and Cardiovascular Surgery* **43:** 361–364.

Address for correspondence:
Mr L. J. Hollis,
65 Eastern Cottages,
Bishopstone,
Aylesbury,
Bucks HP17 8SH.

https://doi.org/10.1017/S002221510014349X Published online by Cambridge University Press