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SURGICAL IMAGES

An esophageal tumor unlike others: The fibrovascular polyp



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Summary A fibrovascular polyp is a rare benign pseudotumor of the esophagus or the hypopharynx. It comes to light through dysphagia and can lead to death by asphyxiation. CT scan and MRI suggest this diagnosis by highlighting a lobed endoluminal tumor primarily composed of adipose tissue and pedicled on a vessel. Anatomic-pathological analysis of biopsies can exclude liposarcoma, the main differential diagnosis. Treatment consists in complete reconstruction by cervicotomy.

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A clinical case

A 23-year-old female patient consults due to progressive dysphagia and weight loss. Endoscopy reveals a mass occupying two-third of the esophageal lumen; it is not ulcerated, and extends 19 to 29 cm from the dental arch. Anatomic-pathological analysis of the biopsies reveals a moderately hyperplastic squamous epithelium, without signs of malignancy. Tomodensitometry (TDM) provides visualization of a 20-cm long endoluminal tissue process extending along the lower third of the esophagus, and heterogeneously highlighted after i.v. injection of a contrast agent, without extraparietal extension (Fig. 1a). Following ingestion of the water-soluble product, low absorption in the vicinity of the visualized endoluminal process is noted (Fig. 1a). In endoscope ultrasound, the mass seems avascular and

heterogeneous and it respects the muscularis. And then, magnetic resonance imagery (MRI) visualizes a lobed tumor highlighted after gadolinium injection (Fig. 1b and c). The lesion is surgically removed by left cervicotomy. The esophageal wall appears deformed, without any visible lesion (Fig. 2a). Longitudinal esophagostomy externalizes the tumor (Fig. 2a and b), and its pedicle is severed by mechanical stapling using endoGIA 80 mm (Fig. 2d). The esophagostomy is closed with a two-planed nasogastric tube. Anatomic-pathological analysis of the tumor confirms the diagnosis of fibrovascular polyp, highlighting a benign tumor covered by an even, somewhat ulcerated squamous epithelium and distributed in a conjunctivo-vascular axis. At two months post-surgery the patient presents no residual symptom.

Discussion

A fibrovascular tumor is a benign esophageal pseudotumor causing progressively aggravated dysphagia. The major

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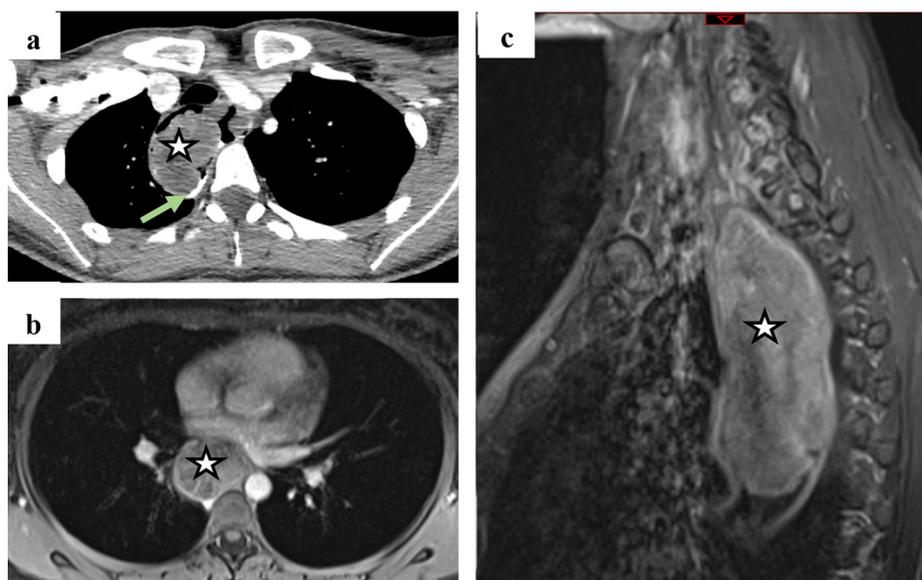


Figure 1. Imagery displaying a cervical esophageal tumor causing luminal obstruction: a: TDM, axial sections without injection of contrast agent, with injection of water-soluble products. The arrow indicates low absorption of the water-soluble product in the esophagus, around the polyp; b: IRM, axial section after gadolinium injection; c: IRM, sagittal section after gadolinium injection; ☆ designates the fibrovascular polyp after three imaging sections.

complication of this tumor is asphyxia syndrome during coughing effort through obstruction of the aero-digestive crossroads. This risk is particularly elevated for lesions exceeding 8 cm. As the entity is little known, it is difficult to diagnose. Frequently suggested diagnoses include lipoma, liposarcoma, hamartoma, hemangioma, GIST, schwannoma and epidermoid carcinoma [1]. Accurate preoperative diagnosis is of primordial importance in view of avoiding esophagectomy with gastroplasty or coloplasty.

Diagnosis is primarily determined by imaging (TDM and MRI) [1], which enables visualization of:

- an elongated "sausage-like" endoluminal tumor;
- a single vascular pedicle;
- localization at the level of the cervical esophagus (or the hypopharynx);
- dense adipose tissue;
- in MRI, heterogeneous hyperintensity on T2 sequences, isointensity to hypointensity in T1 sequences, moderately highlighted with gadolinium.

However, a biopsy must be carried out so as to exclude a main differential diagnosis of liposarcoma. Graham et al.

[2] demonstrated by means of fluorescence in situ hybridization (FISH) aimed at MDM2 amplification (overexpression of MDM genes in liposarcomas) that only 5 out of 13 cases were actually fibrovascular polyps.

Treatment of this entity consists in its complete exeresis. Small lesions with a single pedicle can be endoscopically removed after ligation and electrocoagulation of the pedicle [1]. That much said and in order to avoid any recurrence, surgical resection with complete pedicle subtraction remains the benchmark treatment [1]. Given the high risk of recurrence (up to 50% reported in the literature), endoscopic surveillance once every three years is strongly recommended [3].

To conclude, while fibrovascular polyps of the esophagus are little known entities, they can lead to major symptoms eventually entailing asphyxiation. Surgical excision by cervicotomy is the standard treatment, with minimal morbidity and a high success rate. Risk of recurrence necessitates endoscopic surveillance.

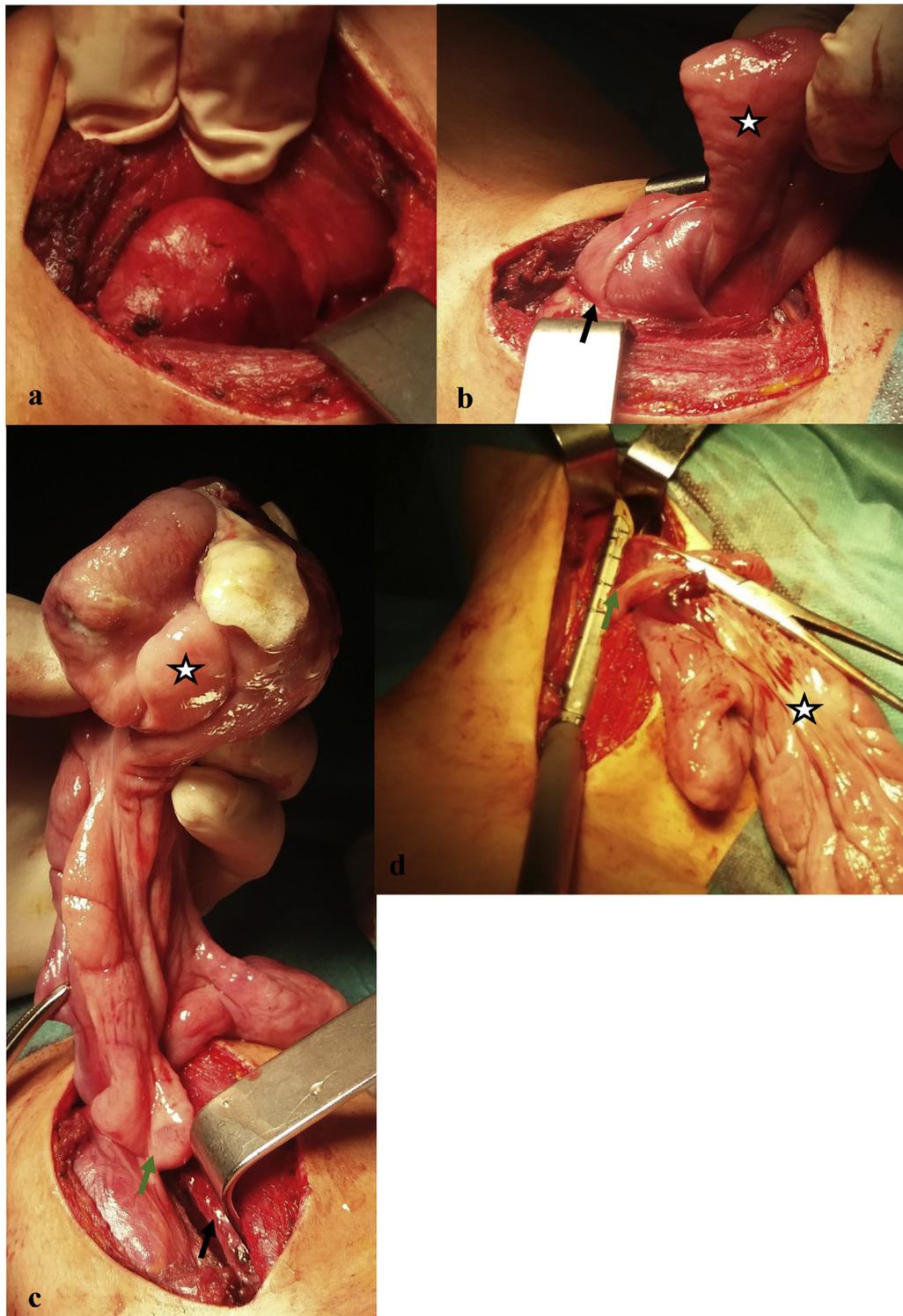


Figure 2. Intraoperative photographs: a: Left cervicotomy displaying a deformation of the esophageal wall, without extra-luminal lesion; b: Gentle traction of the endoluminal polyp after esophagostomy in order to have it totally externalized; c: Extraction of the whole polyp by esophagostomy; d: Severing of the pedicle of the polyp with mechanical clamp: designates the fibrovascular polyp, designates the esophagostomy, designates the base of the fibrovascular polyp.

Disclosure of interest

The authors declare that they have no competing interest.

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