Annals of Clinical Case Reports

Case Report
Published: 19 Nov, 2022

A Case of a Fibrovascular Polyp of the Esophagus: A Case Report

Yankov G[1], Cherneva R[1], Ivanova S[2] and Vladimirov B[3]*

[1]Department of Pulmonary Disease, MBALBB "St. Sofia" - Medical university of Sofia, Bulgaria

[2]Department of Pathology, MBALBB "St. Sofia" - Medical university of Sofia, Bulgaria

[3]Department of Gastroenterology, UMBAL "Tzaritza. Joanna" - Medical university of Sofia, Bulgaria

Abstract

Fibrovascular polyps are submucosal tumors originating primarily from the cervical esophagus in the area of the pharyngo-esophageal junction. They are mostly benign but can cause asphyxia. We present a case of a 54-year-old man with dysphagia and shortness of breath, which appeared a few months ago. Computer tomography, magnetic resonance imaging and esophagoscopy were performed. A left-sided longitudinal cervicotomy, esophagotomy, and extirpation of an intraluminal tumor were performed. The histological finding confirmed it as a fibrovascular polyp, originating from the submucosa of the esophagus. Surgical treatment is the method of choice, especially for large polyps and those with thick stalk.

Keywords: Fibrovascular polyp; Imaging diagnosis; Esophagoscopy; Operative treatment

Introduction

Benign tumors of the esophagus are rare. They may be classified as intramural-extramucosal and intraluminal. Intramural-extramucosal were described by Schatzki and Hawes. The most common of them is leiomyoma, followed by neurofibroma, and both are intramural-extramucosal. Fibrovascular polyp is the most common intraluminal tumor, although its occurrence is rare. The fibrovascular polyp has been called fibroma, fibrolipoma, myxofibroma, polyp or pedunculated lipoma. It is a mixture of fibrovascular tissue, adipose cells, or stroma that originates from the mucosa or submucosa. The fibrous element varies from loose and myxoid to dense with thick collagenous fibers. The majority of fibrovascular polyps are solitary, but multiple cases are also depicted. Symptoms include progressive dysphagia, odynophagia, and respiratory symptoms but become present when the polyp has a large size. We report a case of an old man with esophageal fibrovascular polyp identified by Computed Tomographic (CT), endoscopy and specimen images. Our objective is to introduce the diagnosis and treatment of the giant esophageal fibrovascular polyp.

Case Presentation

We present a case of 54-year-old man who complained of dysphagia and shortness of breath that emerged in the last few months. Previous and concomitant comorbidities: Nephrectomy of the left kidney because of pyonephrosis in childhood; arterial hypertension.

Computed tomography: A heterodense intraluminal pedunculated tumor in the upper third of the esophagus on the level of Th2 could be seen. The lesion was 50 mm long and 20 mm wide in

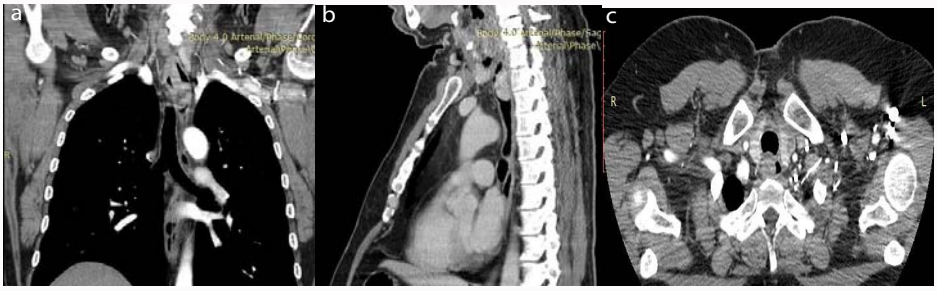

Figure 1(a,b,c): CT in coronary, sagittal and axial plane.

OPEN ACCESS

Correspondence:
Radostina V Cherneva, Department of Pulmonary Disease, MBALBB "St. Sofia" - Medical University of Sofia, Sofia, UMHAT St. Sophia, Han Presian 19, Bulgaria, Tel: 3598885129402; E-mail: cherneva_radost@yahoo.com

Received Date: *31 Oct 2022*
Accepted Date: *14 Nov 2022*
Published Date: *19 Nov 2022*

Citation:
Yankov G, Cherneva R, Ivanova S, Vladimirov B. A Case of a Fibrovascular Polyp of the Esophagus: A Case Report. Ann Clin Case Rep. 2022; 7: 2347.

ISSN: 2474-1655.

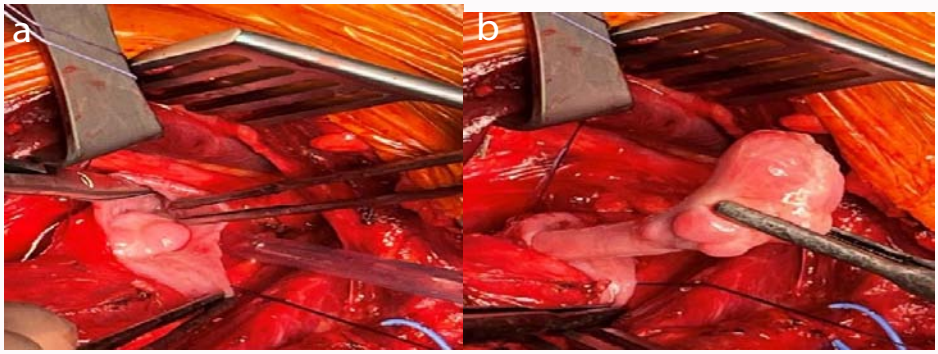

Figure 2(a,b): Intraoperative view after esophagotomy and polyp extirpation.

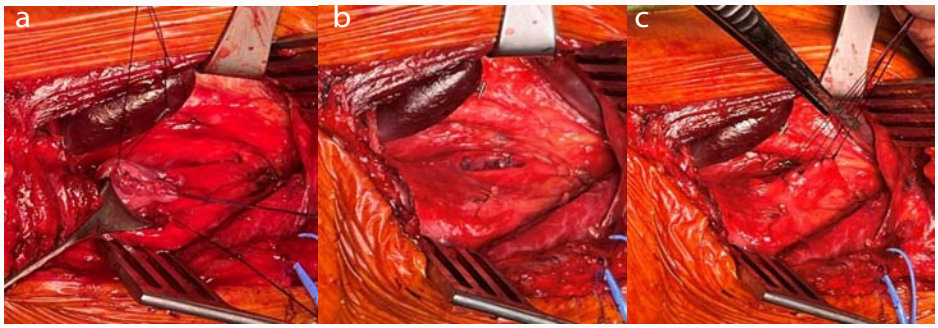

Figure 3(a,b,c): Intraoperative view after removal of the polyp and suture of the esophageal wall in two stages.

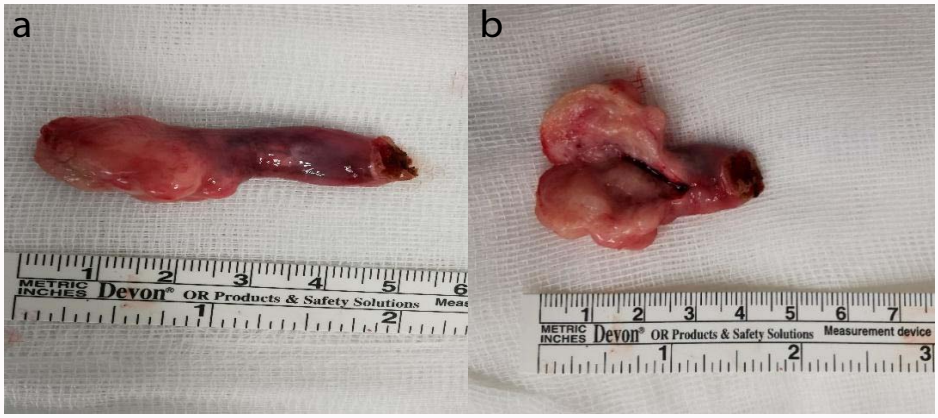

Figure 4(a,b): Macroscopic view of the fibrovascular polyp.

its largest dimensions and protruded into the lumen of the esophagus almost entirely Figures 1a-1c. The trachea, bronchi, mediastinum and the lungs were in normal ranges.

Fibreoptic esophagoscopy: A polypoid mass under the level of the upper esophageal sphincter with wide stalk (above 15 mm) could be observed. It prominated in depth, reaching a length of 5 cm and occluded more than a third of the lumen of the esophagus. Histology: Submucosal granulation tissue with chronic inflammatory reaction.

Rigid esophagoscopy: Tumor formation in the esophagus that was biopsied. The histology showed papillomatous changes of the squamous epithelium.

Fibreoptic bronchoscopy: A compression of pars membranacea of the trachea, in the subglottic area, at the level of the first - third cartilaginous ring may be observed. The compression area is seemingly unaltered and moves with the episodes of cough. The rest of the trachea and bronchi are unaltered.

The patient was operated on. A left longitudinal cervicotomy was performed along musculus sternocleidomastoids. After reaching the pharyngo-esophageal junction, a longitudinal incision of the esophagus was performed under m. cricopharyngeus (Figure 3). A lobulated tumor mass, approximately 5 cm long, pedunculated on a stalk of 15 mm long was visualized. It was cut in its basis. A suture of the arterial blood vessel that was going into the tumor mass was done. The mucosa in the region of the excision was also sutured. A suture in the wall of the esophagus was performed in two levels by means of interrupted 0000 sutures.

Histological result: Macroscopic characteristic: Grey-whitish pedunculated polyp (Figure 4). Microscopic characteristic: Fibrovascular epithelial polyp, covered by multilayer squamous

epithelium without dysplasia.

Discussion

Fibrovascular polyps are rare submucosal tumors, that originate predominantly form the cervical part of the esophagus, at the level of the pharyngo-esophageal junction. They are histologically benign, but often cause asphyxia. The risk of aspiration and asphyxia may be caused by the fact that the vocal cords are unable to perform a complete adduction. This may be a reason for a life-threatening asphyxia, as the entrance of the larynx may be blocked [1]. The fibrovascular polyps are often pedunculated on thick stalks, that are well vascularized. Their surface is often undistinguished from the nearby intact mucosa and may, thus, be missed during the esophagoscopy. It is seldom that the mucosa of the polyps becomes malignant, or the polyps grow to gigantic sizes, reaching the level of the stomach [2,3]. Dysphagia, vomiting, loss of weight and respiratory symptoms are among the commonest complaints [4]. Multiple synchronous fibrovascular polyps of the hypopharynx are also described [5].

In the clinical case that we presented, two esophagoscopies have been performed – rigid and flexible. None of them however, gave a clear histological verification of the tumor. In addition, because of the large and well vascularized stalk of the polyp it was decided that the endoscopic procedure carries a risk of hemorrhage. Thus, a cervicotomy and esophagotomy was performed for its extirpation. The removal of fibrovascular polyps is obligatory because of the risk of fatal asphyxia due to laryngeal obstruction. Small polyps - under 2 cm to 3 cm, polyps with thin stalk may be endoscopically removed. Though rarely, large fibrovascular polyps may also be endoscopically managed by means of ultrasound scissors [6]. Large polyps, especially those above 5 cm and those with thick vascularized stalk are strongly recommended for a surgical procedure – esophagotomy and excision. Polyps that are located in the cervical part of the esophagus and in the pharyngo-esophageal junction are removed by a vertical cervicotomy either on the left or right side. In case of a gigantic fibro-vascular polyp a simultaneous transcervical and transabdominal approach for extirpation is possible [7].

Conclusion

The clinical imaging and esophagoscopy are the basic steps in the diagnosis of intraluminal lesions of the esophagus. Intraluminal fibrovascular polyps of the esophagus, that are inappropriate for endoscopical removal should be managed by surgical treatment.

References

1. Dutta R, Kumar A, Handa KK, Dinda AK. Large pedunculated fibrovascular polyp of oesophagus in a young woman. Interact Cardiovasc Thorac Surg. 2009;9(2):352-3.
2. Kanaan S, DeMeester TR. Fibrovascular polyp of the esophagus requiring esophagectomy. Dis Esophagus. 2007;20:4534.
3. Rees CJ, Belafsky PC. Giant fibrovascular polyp of the esophagus. Ear Nose Throat J. 2007;86:606.
4. Chourmouzi D, Drevelegas A. Giant fibrovascular polyp of the esophagus: A case report and review of literature. J Med Case Rep. 2008;2:237.
5. Nuyens MR, Bhatti NI, Flint P. Multiple synchronous fibrovascular polyps of the hypopharynx. ORL J Otorhinolaryngol Relat Spec. 2004;66(6):341-4.
6. Lobo N, Hall A, Weir J, Mace A. Endoscopic resection of a giant fibrovascular polyp of the esophagus with the assistance of ultrasonic shears. BMJ Case Rep. 2016;2016.
7. Hoseok I, Kim JS, Shim YM. Giant fibrovascular polyp of the hypopharynx: Surgical treatment with biapproach. Korean Med Sci. 2006;21(4):749-51.