ABCD Arq Bras Cir Dig 2013;26(1):71-73

GIANT FIBROVASCULAR POLYP OF THE ESOPHAGUS: A DIAGNOSTIC CHALLENGE

Pólipo fibrovascular gigante do esôfago: desafio diagnóstico

Filipe P. MADEIRA, Jonatan William R. JUSTO, Cacio R. WIETZYCOSKI, Lucas M. BURTTET, Cleber Dario Pinto KRUEL, André Pereira da ROSA

From the Department of Digestive Surgery, Hospital de Clinicas de Porto Alegre, Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil.

Correspondence:

Cleber Dario Pinto Kruel, e-mail: cdkruel@yahoo.com.br

Financial source: none Conflicts of interest: none

Received for publication: 01/02/2012 Accepted for publication: 11/12/2012

INTRODUCTION

ibrovascular polyps of the esophagus are rare benign tumors, with just over 100 cases reported in the literature. Are pedunculated, intraluminal, covered by normal mucosa and composed of vascular, adipose and fibrous tissue³. It originates usually on the proximal third of the esophagus and can reach large dimensions. The symptoms only appear when the polyp becomes large. There are reports of sudden death from asphyxiation after regurgitation of the tumor¹¹. The incidence is higher in men, 50 to 60 years^{3,10}. In view of the debilitating symptoms and the risk, resection is indicated and usually performed by cervical esophagotomy³. Endoscopic surgery is reserved for cases of small polyps.

CASE REPORT

Data were collected from medical records of the patient after written consent and approval by the Ethics Committee of the Hospital de Clínicas de Porto Alegre (HCPA).

Man of 47 years came to the clinic of Digestive Tract Surgery of HCPA complaining of dysphagia for solids and liquids, regurgitation and odynophagia in about six months. Endoscopy showed extensive dilatation, without injury or luminal stenosis. Contrast radiography of esophagus, stomach and duodenum showed dilation of the thoracic esophagus without signs of stenosis of the lower esophagus or hiatal hernia. Chagas serology and esophageal manometry were requested to investigate chagasic

megaesophagus and achalasia. He returned with worsening of the dysphagia, frequent regurgitation with loss of 18 kg in a few months. The Chagas serology was negative and manometry was normal to lower esophageal sphincter with incomplete relaxation; the esophageal body had aperistalsis. PH monitoring was also performed which revealed no pathologic reflux. Upon diagnosis of achalasia was performed Heller esophagomyotomy and Dor fundoplication by laparoscopy. The patient progressed well, but remained feeding only liquids, with partial relief of dysphagia, requiring nasoenteric probe for proper nutrition.

New endoscopy (Figure 1) after five months showed important bulging, not allowing the adequate distension of the organ, extending about 3 cm of the esophagogastric junction. The conclusion was suggestive of esophageal intramural hematoma, or extrinsic compression. Radiographic study showed megaesophagus and suggestive tumoral image on the distal esophagus. New endoscopy after seven months visualized tumoral image just below the upper esophageal sphincter, whose biopsy in ulcerated surface at 25 cm of the upper dental arch showed spindle mesenchymal cell neoplasm. Chest tomography scan showed distended esophagus, heterogeneous to the cardia and compressing the adjacent structures. Due to the presence of advanced esophageal disease, and no improvement after esophagomyotomy, was suspected the existence of mesenchymal neoplasm (GIST); was indicated esophagectomy with gastric replacement. The operation was performed by transthoracic approach, without complications. specimen visualized intraluminal pedunculated polyp (Figure 2), originated near the upper esophageal sphincter and protruded through the esophageal body about 23 cm in length and up to 9 cm in diameter (Figure 3). Pathological examination showed fibrovascular polyp of the esophagus.

On the 3rd postoperative day the patient developed pneumothorax and atelectasis. He underwent bronchoscopy and chest drainage. On the 7th day was done contrast radiography, which showed good transit and absence of contrast

extravasation. He was discharged on the 15th day with good acceptance of diet. In follow-up of three months was asymptomatic recovering 11 kg.

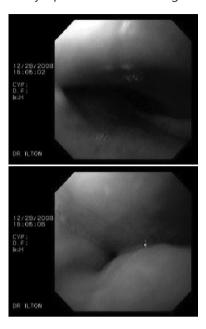


FIGURE 1 - Endoscopy after esophagomyotomy and fundoplication, showing bulging of the esophageal mucosa

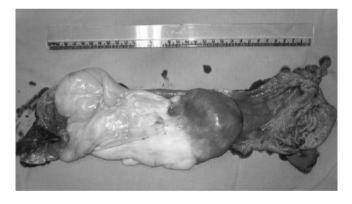


FIGURE 2 - Macroscopic esophageal lesion after esophagectomy with 23 cm long and 9 cm in diameter

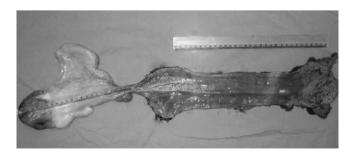


FIGURE 3 - Macroscopic appearance after putting the tumor down out the esophagus, showing normal aspect of the esophageal mucosa and origin of polyps in the proximal esophagus

DISCUSSION

Benign tumors of the esophagus are relatively rare. Among them, only 1-2% are giant fibrovascular polyps ^{3,11}. According to their location, benign esophageal tumors are divided into intramural, extramural and intraluminal. Among the intraluminal, fibrovascular polyps are the most common. It consists of a network of lipomas in conjunction with loose or dense connective tissue, interspersed by a network of vessels and covered by squamous epithelium^{2,9}.

Usually these polyps arise from the cervical esophagus, inferiorly to the cricopharyngeal muscle, the triangle of Laimer^{3,8,12,13}. Redundant mucous folds of the region result in a polypoid formation. The peristaltic activity from the esophagus through constant traction over the years, leads to the growth of this lesion¹¹. Is believed to have low capacity for malignant transformation³.

Polyps are fibrovascular indolent behavior, so that, with their slow growth rate, these lesions may reach masses of large volume, but without developing symptoms for many years. When they appear, they tend to be nonspecific^{2,4,6,7,8,11,13,14}. However, the most characteristic symptom is tumoral regurgitation to the oral cavity^{9,10,11}. It is infrequent and feared, because can obstruct the larynx and suffocate the patient¹¹.

For purposes of diagnostic investigation, barium studies are commonly used^{2,4,5,11,15}. However, it should be noted that they have low sensitivity to demonstrate the pedicle of the lesion⁵. In this case, the x-ray showed no tumor, however, suggested a foreign body obstruction in the distal esophagus. Endoscopy visualizes polypoid mass, elongated, emerging from the upper esophagus^{1,7,8,13,15}, however due to the squamous epithelium covering the lesion it can be false negative or inconclusive 6,12,14 The endoscopic ultrasound may be useful as adjunct imaging examination, since it provides information about the size and origin of the lesion on the vascularization of polyps¹³. It was not performed in this case due it is not available on the service. Tomography and resonance are more accurate in evaluating these lesions^{2,4,5,7,12}. This is considered adjunct tool which may be useful both for diagnosis and for surgical planning^{3,15}.

Despite benign polyps resection is usually recommended¹¹. There are two options: surgery or endoscopic resection, based on lesion size and vessels that nourish it. Usually polyps less than 2 cm in diameter with thin pedicles may be removed by endoscopic pedicle ligation and electrocautery¹⁰. Surgical resection is preferred in larger sizes for cervical esophagotomy. In this case, the lesion had more than 20 cm, practically eliminates any possibility of endoscopic resection.¹. Thoracotomy is considered to more caudal lesion or larger lesions,

thus obtaining the best possible management of intraoperative bleeding^{4,8,15}. Esophagectomy can be used in bulky tumor⁶ or in doubt about benign behavior¹². In thiscase, was opted esophagectomy because the patient already had advanced disease, esophageal dilation and aperistalsis, associated with suspected mesenchymal neoplasm.

REFERENCES

- Ascenti G, Racchiusa S, Mazziotti S, Bottari M, Scribano E. Giant fibrovascular polyp of the esophagus: CT and MR findings. Abdom Imaging. 1999 Mar-Apr;24(2):109-10.
- Blacha MM, Sloots CE, Van Munster IP, Wobbes T. Dysphagia caused by a fibrovascular polyp: a case report. Cases J. 2008 Nov 19;1(1):334.
- 3. Caceres M, Steeb G, Wilks SM, Garrett HE Jr. Large pedunculated polyps originating in the esophagus and hypopharynx. Ann Thorac Surg. 2006 Jan;81(1):393-6.
- Chourmouzi D, Drevelegas A. Giant fibrovascular polyp of the oesophagus: a case report and review of the literature. J Med Case Rep. 2008 Oct 28;2:337.
- 5. Jang KM, Lee KS, Lee SJ, Kim EA, Kim TS, Han D, Shim YM. The spectrum of benign esophageal lesions: imaging findings. Korean J Radiol. 2002 Jul-Sep;3(3):199-210.

- 6. Kanaan S, DeMeester TR. Fibrovascular polyp of the esophagus requiring esophagectomy. Dis Esophagus. 2007;20(5):453-4..
- Kim TS, Song SY, Han J, Shim YM, Jeong HS. Giant fibrovascular polyp of the esophagus: CT findings. Abdom Imaging. 2005 Nov-Dec;30(6):653-5...
- 8. Lee SY, Chan WH, Sivanandan R, Lim DT, Wong WK. Recurrent giant fibrovascular polyp of the esophagus. World J Gastroenterol. 2009 Aug 7;15(29):3697-700.
- 9. Paczona R, Ivan L, Jori J, Ivanyi B. Peroral endoscopic removal of a regurgitated giant polisegmented fibrovascular polyp of the esophagus. Diagn Ther Endosc. 2001;7(3-4):197-201.
- 10. Paik HC, Han JW, Jung EK, Bae KM, Lee YH. Fibrovascular polyp of the esophagus in infant. Yonsei Med J. 2001 Apr;42(2):264-6.
- 11. Sargent RL, Hood IC. Asphyxiation caused by giant fibrovascular polyp of the esophagus. Arch Pathol Lab Med. 2006 May;130(5):725-7.
- 12. Schuhmacher C, Becker K, Dittler HJ, Höfler H, Siewert JR, Stein HJ. Fibrovascular esophageal polyp as a diagnostic challenge. Dis Esophagus. 2000;13(4):324-7.
- 13. Solerio D, Gasparri G, Ruffini E, Camandona M, De Angelis C, Raggio E, Dei Poli M. Giant fibrovascular polyp of the esophagus. Dis Esophagus. 2005;18(6):410-2.
- 14. Somani BK, Sivalingam S, Sreenivasan L, Collins FJ. Giant fibrovascular polyp of the oesophagus. Eur J Cardiothorac Surg. 2005 Oct;28(4):643.
- 15. Yannopoulos P, Manes K. Giant fibrovascular polyp of the esophagus imaging techniques can localize, preoperatively, the origin of the stalk and designate the way of surgical approach: a case report. Cases J. 2009 Jun 26;2:6854.