

Case Report

Leiomyoma an uncommon benign esophageal tumor

Ambreen Abid*, Tanveer Ahmad, Misauq Mazcuri, Nazish Sikander

Department of Thoracic Surgery, Jinnah Postgraduate Medical Centre, Karachi, Pakistan

Received: 09 May 2021

Accepted: 05 June 2021

***Correspondence:**

Ambreen Abid,

E-mail: ambreenabid1234@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Leiomyoma are rare esophageal masses. Majority remain asymptomatic but may present with dysphagia when more than five centimeters in size. Barium swallow is the initial diagnostic investigation. Small lesion can be observed. Symptomatic and large lesion should undergo prompt surgical enucleation. Here we presented a case of a 35 year old female presenting with progressive dysphagia and gradual weight loss for 5 years along with regurgitation for one year. Clinical examination was unremarkable. Barium study was suggestive of smooth intramural defect with normal mucosa. Computed tomography showed well defined homogenous opacity located intramurally at the level of junction of middle and distal third of esophagus with normal surrounding structures. Surgical enucleation was done through a right posterolateral thoracotomy. Muscle defect was repaired and checked for possible leaks. Liquid diet was commenced on 5th postoperative day. Patient was discharged on semisolid diet for two weeks with progression to solid meal.

Keywords: Leiomyoma, Esophageal masses, Enucleation

INTRODUCTION

Benign esophageal tumors are uncommon and responsible for <1% of esophageal tumors.¹ Leiomyoma are responsible for 70 to 75% of benign esophageal tumors.^{1,2} They originate from mesenchymal cells which mostly involve muscularis propria.¹⁻³ More than half of them remain asymptomatic.^{2,3} Larger leiomyoma may present with symptoms such as dysphagia and chest pain.^{1,3} We wished to present a case of leiomyoma presenting with history of dysphagia, weight loss and regurgitation.

CASE REPORT

A 35 year old female presented to outpatient department with history of dysphagia, weight loss and regurgitation. According to her she had dysphagia for 5 years initially for liquids which then progressed over years for semisolid also. She also complained of weight loss over the same period of time with on and off regurgitation of

meals for one year. Clinical examination was unremarkable. Barium esophagogram showed a smooth well defined intramural filling defect with regular mucosa above the carina (Figure 1).

Computed tomography revealed a well-defined homogenous opacity located intramurally at the level of junction of middle and distal third of esophagus with normal surrounding structures. Patient was counselled and after optimum preparation right posterolateral thoracotomy was performed with single lung ventilation. Intraoperative finding included a well-defined, pale looking mass inside esophageal wall in posterior mediastinum just below azygous vein. Azygous vein was mobilized and myotomy was performed over the mass with blunt dissection. Mass was dissected free from mucosa around 5×2 cm in size (Figure 2). Nasogastric tube was secured. Any esophageal leak was ruled out. Esophageal muscle was repaired in two layers.

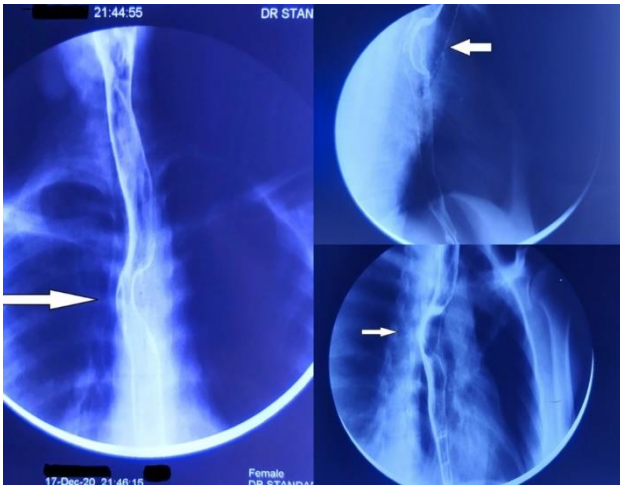


Figure 1: Barium study with arrows showing intramural defect.

Patient was managed post operatively in ward with nil per mouth and feeding via nasogastric tube and parenterally. Oral feed was commenced on 5th postoperative day after esophagogram was found to be normal. Patient was discharged on semi solid diet for two weeks followed by solid diet.

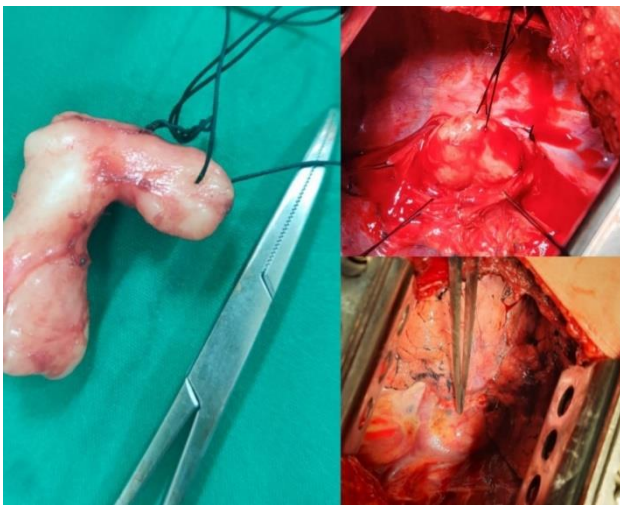


Figure 2: Intraoperative finding and resected mass.

DISCUSSION

Leiomyoma are benign tumor originating from mesenchymal cells of smooth muscle of esophagus.³ Other benign lesions include cyst, polyp, lipoma. Male predominance is seen and mostly present between 3rd-6th decade of life.¹⁻⁷

They are solitary and grow in transmural plane both inside and outside direction.^{1,6} They are mostly found in distal esophagus (70%) followed by middle (30%).¹⁻⁷ Most of the patient remain asymptomatic. Lesion equal to or more than 5 cm present with symptoms of dysphagia, chest pain and weight loss.¹⁻⁸

Barium study is the most common initial investigation performed and is suggestive of smooth filling defect with normal mucosa.^{1,4,7,8} Computed tomography (CT) holds great importance in defining the lesion and its relation to surrounding structures.^{1,4,5} Few authors recommend utilization of combination investigations for accurate diagnosis including esophagogram, CT and endoscopic ultrasound.^{3,5,6}

There are different approaches for treatment. Few authors recommend observation for smaller lesions and surgery for large symptomatic lesion, while others because of its propensity to increase in size and malignant transformation, favour surgery irrespective of size.¹⁻⁶ Preoperative biopsy only is required for highly suspected malignant cases necessitating neoadjuvant therapy.^{5,8}

Surgical enucleation remains the procedure of choice.^{2,3,5} It can be performed via thoracotomy, laparotomy or thoracoscopic approach.^{2-4,7} Right sided approach is preferred for all lesions other than those near gastroesophageal junction.² Basic principles include myotomy with blunt dissection while preserving mucosa and repair of mucosal injury and muscle wall.^{2,4,8} Larger tumors may require buttressing the muscle repair.^{4,8} Patient is kept nil per oral for few days to avoid diverticulum or fistula formation.⁴

CONCLUSION

Dysphagia is a symptom which should always be investigated. In a small percentage the symptom is due to esophageal leiomyoma which should be confirmed with investigations and excised to prevent worsening of symptoms and avoid malignant change.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Rao M, Meng Q, Gao P. Large leiomyoma of lower esophagus diagnosed by endoscopic ultrasonography–fine needle aspiration: a case report. *World J Clinic Cases.* 2020;8(22):5809-15.
2. Yalçinkaya İ. Clinical outcomes in the surgical treatment of esophageal leiomyoma: a retrospective evaluation of 13 cases. *Turkish J Thoracic Cardiovascul Surg.* 2020;28(3):505-13.
3. Yankov G, Mekov E, Getsov P, Churchev S, Golemanov B, Kovacheva-Slavova M, et al. Diagnosis And surgical treatment of esophageal leiomyoma. *Int J Med Sci Clinic Invent.* 2020;7(6):4837-40.
4. Sun X, Wang J, Yang G. Surgical treatment of esophageal leiomyoma larger than 5 cm in diameter: a case report and review of the literature. *J Thoracic Dis.* 2012;4(3):323-6.

5. Zhou S, Li S, Guo N, Zhang W. A case of surgical enucleation of a giant esophageal leiomyoma. *Transl Surg* 2017;2:19-21.
6. Aurea P. Giant leiomyoma of the esophagus. *Euro J Cardio Thoracic Surg.* 2002;22(6):1008-10.
7. Mathew G, Osueni A, Carter YM. Esophageal leiomyoma. Treasure Island (FL): StatPearls Publishing; 2021.
8. Asteriou C, Konstantinou D, Lalountas M, Kleontas A, Setzis K, Zafiriou G, et al. Nine years' experience in surgical approach of leiomyomatosis of esophagus. *World J Surg Oncol.* 2009;7(1):102.

Cite this article as: Abid A, Ahmad T, Mazcuri M, Sikander N. Leiomyoma an uncommon benign esophageal tumor. *Int Surg J* 2021;8:2166-8.