



GIANT ESOPHAGEAL LEIOMYOMA-A CASE REPORT VIJAY ANAND M S

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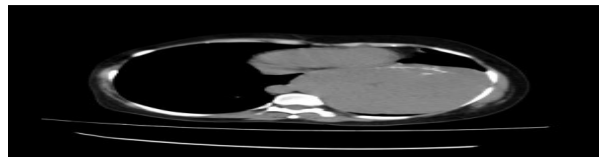
Abstract : Esophageal leiomyoma are rare benign mesenchymal neoplasm occurring most commonly in the distal third. Giant leiomyoma are rarely reported. Since usual enucleation cannot be done, it demands morbid surgical extirpative procedure.

Keyword : Esophageal, leiomyoma, giant, thoracotomy

A 47 years old lady presented to our department with complaints of insidious onset of expectorant cough and dyspnea on exertion associated with Grade II dysphagia and retrosternal intermittent pain for the past 2 months. She also complained of regurgitation of food and weight loss. She was operated for mediastinal mass 10 years back details of which are not available. She was afflicted with pulmonary tuberculosis 15 years back for which she completed the full course of antituberculous treatment. She also underwent hysterectomy 8 years back for uterine fibroids. On examination a left posterolateral thoracotomy scar was noted on 6th intercostal space. Barium swallow study revealed an irregular circumferential mass on distal esophagus displacing it to superior left and anterior with involvement of OG junction with dilatation of proximal esophagus with smooth mucosal surface and no filling defect. Ultrasound abdomen revealed a heterogeneous mass of size 11 * 8 cm occupying left perisplenic space. CT abdomen showed a large extrinsic hypodense minimally enhancing mass lesion arising from esophagus measuring 11.5 * 11.5cm with features suggestive of Leiomyoma/Sarcoma. OGD scopy demonstrated a dilated esophagus; eccentrically placed at 28cm with doubtful submucosal lesion seen from 28-32cm, no obvious mucosal lesion with scope not passed beyond as OG junction could not be visualized. CT guided biopsy revealed features suggestive of leiomyoma.

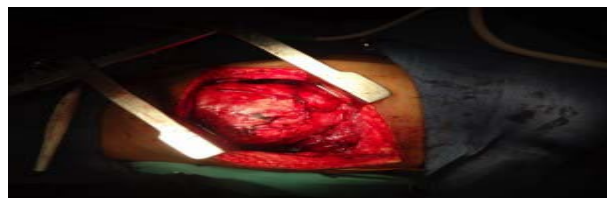


BARIUM SWALLOW

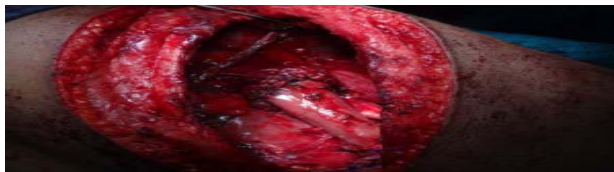


CHEST CT

After optimization, she was posted for surgery, approach through a 7th ICS left posterolateral thoracotomy which revealed a 25 x 25 x 20 cm irregular lobulated mass lesion occupying lower half of left hemithorax. The lesion was well encapsulated, soft fleshy and lobulated arising from distal esophagus extending upto OG junction obliterating the esophageal lumen with splaying of esophageal muscle fibres over the lesion. Esophagus proximal to lesion was thick walled & friable. Lesion was densely adherent to inferior lobe of left lung, parietal pleura, rib cage & previous incision site. Stomach was found to be normal. After carefully releasing the adhesions, en bloc resection of the esophageal mass with 4 cm clearance on either sides was done and an intrathoracic esophagogastric anastomosis was done after tubularising the gastric conduit. Decortication of left pleura was done and the diaphragm was repaired. Operation was completed with a left chest drainage and a feeding jejunostomy. The entire procedure was uneventful with 5 hours duration with blood loss of around 300 ml.



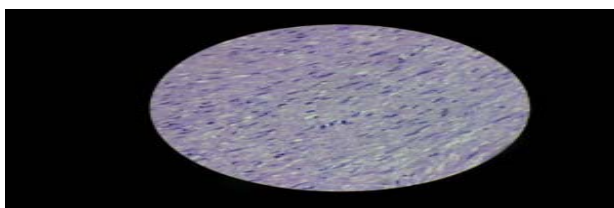
THORACOTOMY - TUMOUR IN SITU



RECONSTRUCTION AFTER RESECTION



RESECTED SPECIMEN



HPE REPORT

Postoperatively she had a smooth recovery with orals started after a negative gastrograffin study on 8 th POD. HPE revealed partially encapsulated neoplasm formed of proliferation of smooth muscle cells in large bands with abundant collagenous stroma and thin walled blood vessels in between, features consistent with esophageal leiomyoma.

Review of literature:

Leiomyoma of the esophagus is a rare entity arising from muscularis propria most commonly in the distal third of the esophagus, overall accounting for approximately two third of benign esophageal tumours. Males are more commonly affected in the ratio of 2:1 in their fourth to sixth decades of their life. They manifest either as extraluminal intramural tumours as the majority (72.4%) or as extraluminal mass (19%), polypoidal intraluminal mass (8.6%). The vast majority are less than 5 cm and if the tumour weighs 1000 mg it is termed as giant leiomyoma. They are firm rubbery and encapsulated, remaining solitary in their majority or may present as diffuse variant termed as leiomyomatosis.

Almost asymptomatic being identified incidentally on screening endoscopy, the remaining patients present with dysphagia in 47%, chest pain in 45% and other symptoms. Respiratory symptoms are noted in around 10% of patients. Segmental lesions are visualized on oral contrast studies demonstrating as focal contrast impingement with sharp margins with little obstruction to the contrast flow and intact mucosa. CT scans demonstrate eccentric focal wall thickening. They prove usefulness in larger tumours in planning operative strategy especially to assess the interface between tumour and mediastinum.

Endoscopy features are segmental luminal bulge, intact mucosa, non obstructing luminal narrowing and a mobile mass. With the advent of EUS, diagnostic accuracy of tumours improved particularly demonstrating the topographic localization of the tumours with leiomyoma identified more obviously in the fourth EUS layer. The utility is further enhanced by its ability to take a needle biopsy. Typical EUS pattern is homogenous hypoechoic well demarcated mass lesion with no demonstrable lymphadenopathy.

Tumours which are symptomatic, causing uncertainty in diagnosis, larger, progressive in size with mucosal erosions and regional lymphadenopathy necessitate resection. Location of the tumour dictates the mode of approach. Almost all are extirpated through an incision made on splayed out muscle layers and enucleating them. Minimal invasive techniques are reported recently to demonstrate safety and efficacy. Esophagectomy is preferred in diffuse leiomyomatosis and large tumours > 8 cm.

References:

- Lee LS, Singhal S, Brinster CJ, et al.: Current management of esophageal leiomyoma. *J Am Coll Surg.* 198;136 2004
- Griff LC, Cooper J: Leiomyoma of the esophagus presenting as a mediastinal mass. *Am J Roentgenol Radium Ther Nucl Med.* 101:472 1967
- Lewis B, Maxfield RG: Leiomyoma of the esophagus: Case report and review of the literature. *Int Abstr Surg.* 99:105 1954
- Rice TW: Benign esophageal tumors: Esophagoscopy and endoscopic esophageal ultrasound. *Semin Thorac Cardiovasc Surg.* 15:20 2003
- Samphire J, Nafteux P, Luketich J: Minimally invasive techniques for resection of benign esophageal tumors. *Semin Thorac Cardiovasc Surg.* 15:35 2003
- Aurea P, Grazia M, Petrella F, Bazzocchi R. Giant leiomyoma of the esophagus. *Eur J Cardiothorac Surg.* 2002;22:1008-1010.

