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CASE REPORT

A 40 Years Old Man with Esophageal Leiomyoma - A Case Report Of Uncommon Tumor

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Absract :

Leiomyoma is the most prevalent benign tumor of esophagus. It is very rare, and the incidence in autopsy series is 0.006 to 0.1%. It is mostly observed in the mid 1/3 or lower parts of esophagus. Its characteristic feature is the proliferation of the smooth muscle layer, causing circumferential thickening localized on the esophagus wall. Frequently, it is observed as a single lesion. It can be hereditary or sporadic. Half of the patients are asymptomatic. Our case was 40 years old man presented with giant esophageal leiomyoma has been presented first time in Bangladesh very few case report was been published worldwide through rare diagnosis should be keep in mind as it is benign & curable by resection.

Keywords : *esophagus, leiomyoma, Thoracotomy, enucleation.*

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Introduction :

Benign esophageal tumors are relatively rare; they constitute 1% to 10% of all esophageal neoplasms[1]. Esophageal leiomyoma is the commonest benign esophageal tumor which arise from smooth muscle[2]. It usually affects patients between 20 and 50 years of age, with male to female ratio of 2 : 1. Giant esophageal leiomyoma is defined as tumor of more than 10 cm in diameter; its incidence has been reported in 17% of cases.[3,4] It can involve any part of esophagus but reportedly it affects distal third in 60%, middle third in 30%, and upper third of esophagus in 10% of the cases. This distribution parallels the relative amount of smooth muscle cells' presence along the esophagus. It is a slow growing intramural tumor which has got very limited malignant potential. Size of esophageal leiomyoma varies from 1 to 30 cm.[5] Histologically, leiomyomas comprise of bundles of interlacing smooth muscle cells, well-demarcated by adjacent tissue or by a definitive connective tissue capsule.

We describe this case report , a 40 years old man with giant oesophageal leiomyoma underwent total excision of tumor by right postero-lateral thoracotomy.

Case Report:

Mr. Amzad 40 years old man doptori of a government school came from Jamalgonj, Shonamgonj with H/O difficulty in swallowing and occational chest pain. His symptoms started from about 7 years back and initially he felt only a mild discomfort during swallowing solid and bullous of food,nothing else. Gradually that problem was more and felt always difficulty during swallowing specially solid and semi solid food. He could take liquid food only without difficulty. He also noticed occational central chest pain which was dull aching in nature, no radiation , persist for 2/3 days and relieved by some medications. He had no history of weight loss. Gave no h/o resp. distress, cough, heamoptysis, jaundice, heamatemesis, meleana, bone pain. His bowel and bladder habit was normal. For that he consulted with many specialist and also went to in Medical College Hospital few years back. Lastly, few days ago he admitted to a Gastro

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Liver Specialists of Hospital. For better treatment he was reffered to thoracic surgery dept. of NIDCH and admitted here on 15/12/20 (reg.— 5649/7). He had no co-morbidities. He had no past medical or surgical history. No significant family history. No allery to any specific food or medicine. He was non-smocker and non-alcoholic but betel-nut chewer. He was married and father of three sons. He came from low class family and was immunized according to EPI schedule.

On physical examination, we found, patient looked good health but only mildly anxious. All vitals were normal limit, had no any peripheral lymphadenopathy including neck gland. Chest and other systemic examination revealed normal findings. Chest X-ray P/A view revealed, a homogenous opacity in near the hium of rt. Lung field which marge with mediastinum like mediastinal mass.

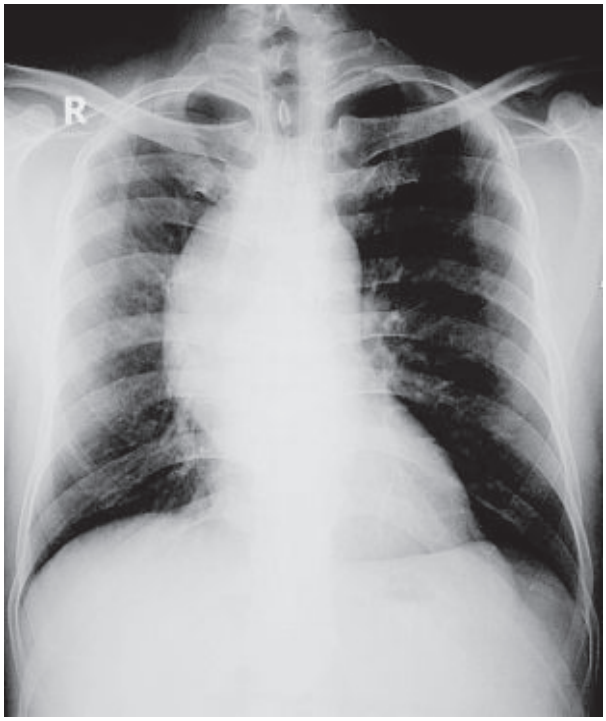

Fig.-1: *CXR P/A view of patient before operation*

Upper G.I endoscopy done on 2 times (30/11/20 & 06/12/20) found, there is an eccentric luminal narrowing of oesophagus from 20 cm to 25 cm from upper incisor teeth and no mucosal ulceration or growth. This narrowing probably due to external compression.

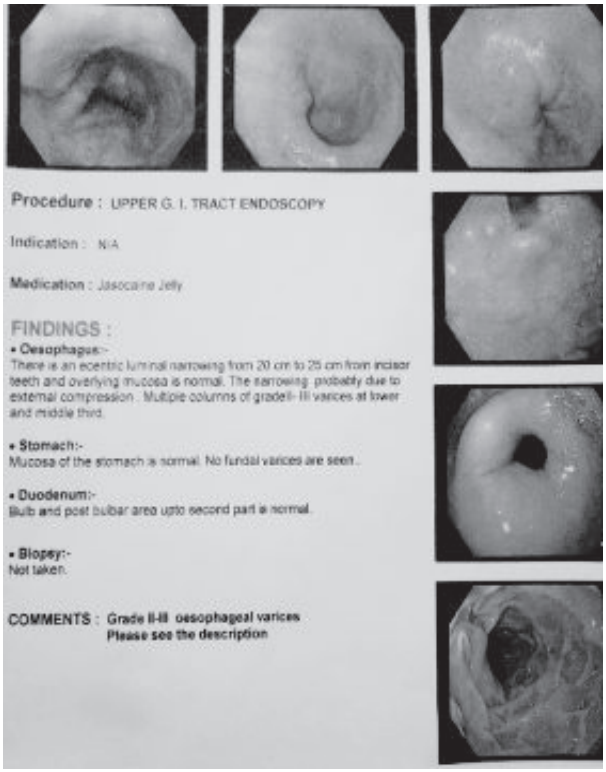

Fig.-2: *Endoscopic view of patient showing grade II OV.*

CT scan revealed a large oesophageal mass in mid part causing irregular narrowing of oesophagus.

All other routine investigations found within normal limit.

So we planned for total excision of tumor through Rt. Postero-lateral thoracotomy incision Under G/A with one lung ventilation. Patient underwent thorough pre anesthetic check up and surgery was performed. During procedure,there was no collection within thoracic cavity, adhesions were visualized between tumor with lung and chest wall . All adhesion were freed meticulously and then inspected all around . A large tumor found all around the thoracic part of oesophagus. At first arch of azygos vein ligated and cut. Tumor dissected intracapsulerly & extramucosal started from anterior part and gradually from all around of oesophagus. Then checked any injury/ leak of oesophagus and a NG tube kept upto stomach. Also saw lung expansion properly. After sequired haemostsis,a chest drain kept in situ and wound closed in layers.

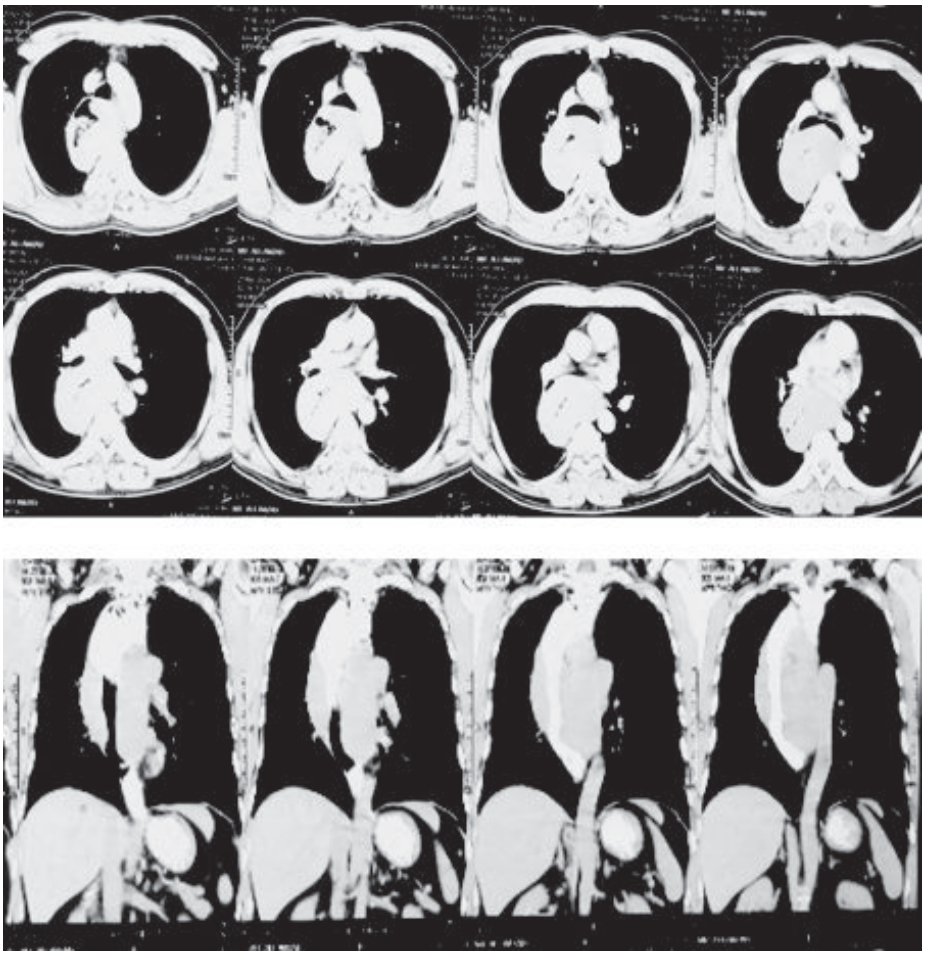

Fig.-3: CT scan of chest with contrast of the patient.

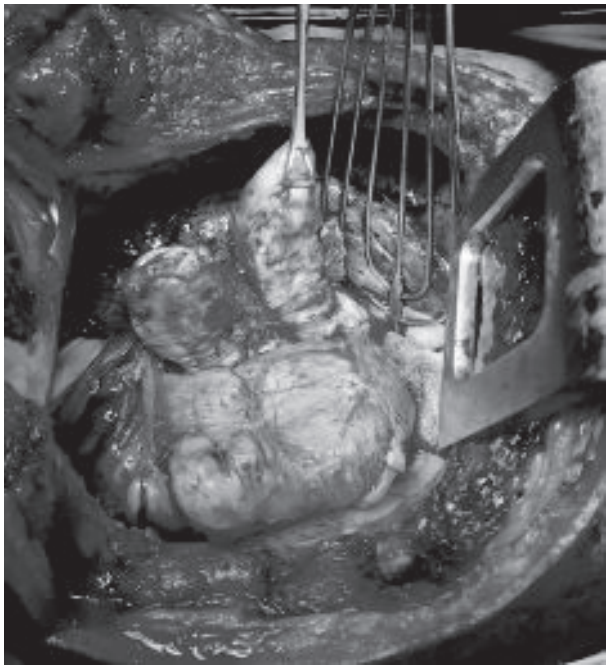

Fig.-4: Per-operative tumor

Fig.-5: *Esophagus after excision tumor*

Obtaining materials were send for histological analysis. Leiomyoma was confirmed histopathologically in our case. Post operative recovery was uneventful. On 7th POD contrast X-ray of oesophagus done which revealed no leak. Also gave orally Xension violet mixed water to checked any leak. On 8th POD NG tube removed and gave liquid diet. On 9th POD chest drain removed and then discharged later.

Fig.-6: *Tumor specimen after operation.*

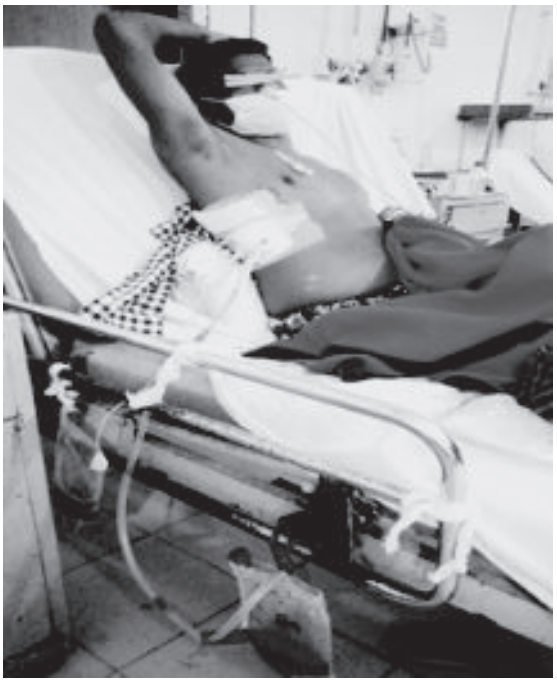

Fig.-7: *Patient post-operative period.*

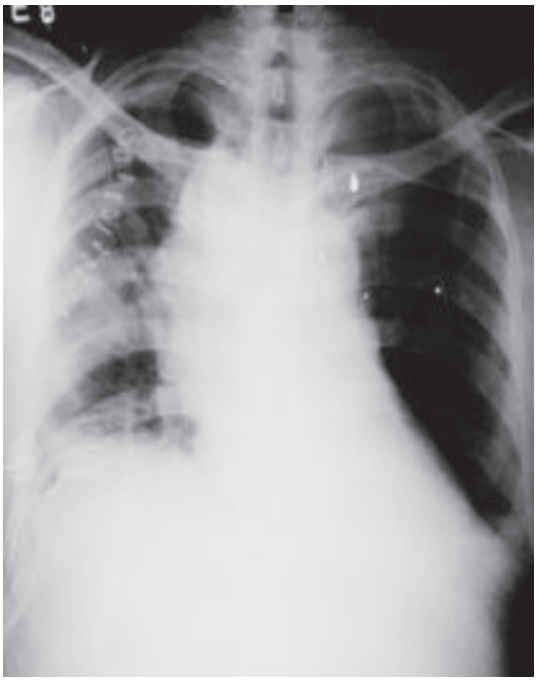

Fig.-8: *Post-operative CXR P/A view.*

Discussion :

Esophageal leiomyomas are multiple in approximately 5% of patients.[6] They rarely cause symptoms when they are smaller than 5 cm in diameter. Large tumors can cause dysphagia, vague retrosternal discomfort, chest pain, esophageal obstruction, and regurgitation. Rarely, they can cause gastrointestinal bleeding, with erosion through the mucosa. Other than the nonspecific symptoms associated with esophageal leiomyomas, very few physical findings are usually noted. In extremely rare cases where severe esophageal obstruction is caused by a leiomyoma, weight loss and muscle wasting may be observed.[7]

Preoperative diagnosis of esophageal leiomyoma is often a challenge. Incidentally, radiologically (CXR) found as a mediastinal mass like feature. Esophagoscopy will show normal mucosa and submucosal lesion. Barium swallow is the most common imaging study advised for esophageal lesions; it will show smooth filling defect in esophageal lumen without mucosal abnormality. Computed tomography (CT) and endoscopic ultrasound (EUS) are very valuable in making diagnosis, they will delineate the intramural nature of tumor without any mediastinal lymphadenopathy. Preoperative biopsy of tumor

is a controversial issue. In our case, we have avoided preoperative biopsy as imaging studies were diagnostic. Disadvantages in doing preoperative biopsy as it would cause scarring at the biopsy site, which would hamper definitive extramucosal resection at surgery and inconclusive biopsy are often due to inadequate material.[8]

Surgical excision is recommended for symptomatic leiomyomas and those greater than 5 cm. Although a formal esophageal resection is not mandatory for leiomyomas. Tumors of the middle third of the esophagus may be approached using a right thoracotomy. Tumors in the distal third of the esophagus may be resected through a left thoracoabdominal approach, transhiatally or by a left thoracotomy. For extramucosal excision or enucleation, the outer esophageal muscle is incised longitudinally. Careful dissection is done to separate and remove the leiomyoma from the underlying submucosa. Segmental esophageal resection (esophagogastrectomy) may be indicated for giant leiomyomas of the cardia. Intraoperative esophagoscopy combined with video-assisted thoracoscopic approach is the method used for easing the process and shortening the length of hospitalization.[9,10]

Our patient had giant leiomyoma at the mid part of oesophagus and done extramucosal excision or enucleation of tumor by right postero-lateral thoracotomy successfully with symptomatic improvement of the patient.

Conclusion :

When esophageal leiomyoma is identified, lesion has to be removed even if the patient is asymptomatic. If the treatment is delayed or failed, the symptoms would probably develop and it will be hard to differentiate it from malignancy though usually can undergo cystic degeneration; however, progression to malignancy is rare. Surgery provides relief in all symptomatic patients.

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