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CASE REPORT

A rare case of multi-lobed lipoma in upper esophagus

Ihsan Ullah, Mahnoor Asim

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Author Information

From: Department of ENT, Rehman Medical Institute, Peshawar, Khyber Pakhtunkhwa, Pakistan

Dr Ihsan Ullah
Consultant ENT Surgeon

Dr Mahnoor Asim
House Officer
(Corresponding Author)
Email: mahnoor.asim-16@rmi.edu.pk

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ABSTRACT

Lipomas are benign, slow growing tumors of adipocytes. They present as soft and painless masses. They can be present anywhere in the body. Esophageal lipomas are very rare. If present, they are usually small and are located in the cervical region of esophagus. We present and discuss a case of a 47 years old male patient diagnosed with bilobed lipoma of upper esophagus, its radiological and operative findings. Surgical resection of the lipoma was performed. No recurrence occurred during the one year of follow up. Timely diagnosis and treatment play a crucial role in management of surgical patients.

The authors declared no conflict of interest. All authors contributed substantially to the planning of research, data collection, data analysis, and write-up of the article, and agreed to be accountable for all aspects of the work.

INTRODUCTION

Lipomas are benign tumors of adipocytes. They are commonly present on the trunk and upper extremity but can occur anywhere on the body.[1,2] Esophageal lipomas are very rare, accounting only 0.4% of all digestive tract benign tumors.[3] Most of these lesions are clinically silent as a result of their small size, however, the majority of lesions over 4 cm have been reported to cause dysphagia, regurgitation and epigastralgia.[4] They generally become symptomatic only when they are large enough to cause dysphagia, at which time they merit surgical excision.[5] If left untreated the patient may develop polyp aspiration complicated by fatal asphyxiation.[6]

CASE PRESENTATION

A 47 years old man from Mardan Pakistan, presented to the outpatient department on May 24, 2022, with complaints of progressive dysphagia and heaviness in the chest for the past two years. He was also a known case of type II Diabetes. A chest X-ray was done initially which showed a bilobed mass in the upper esophagus. In order to further delineate the anatomy, a barium swallow was carried out which showed difficult flow of contrast through the esophagus into the stomach and a filling defect in the upper thoracic esophagus. (Figure 1).

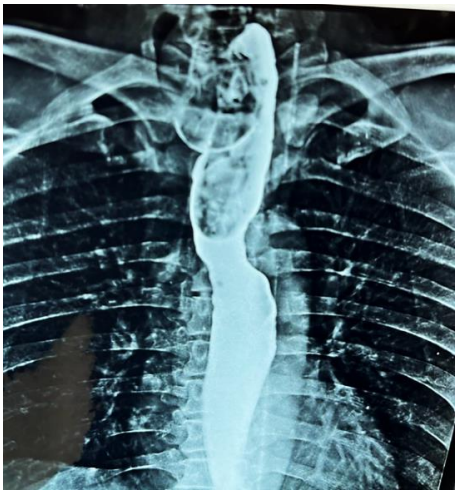


Figure 1: Barium swallow X-ray of patient.

A CT chest then followed that showed large fat density in the hypopharynx, oropharynx and upper mid esophagus. Marked narrowing of oropharyngeal air way and esophageal lumen were also seen. These findings were suggestive of lipoma (Figure 2).

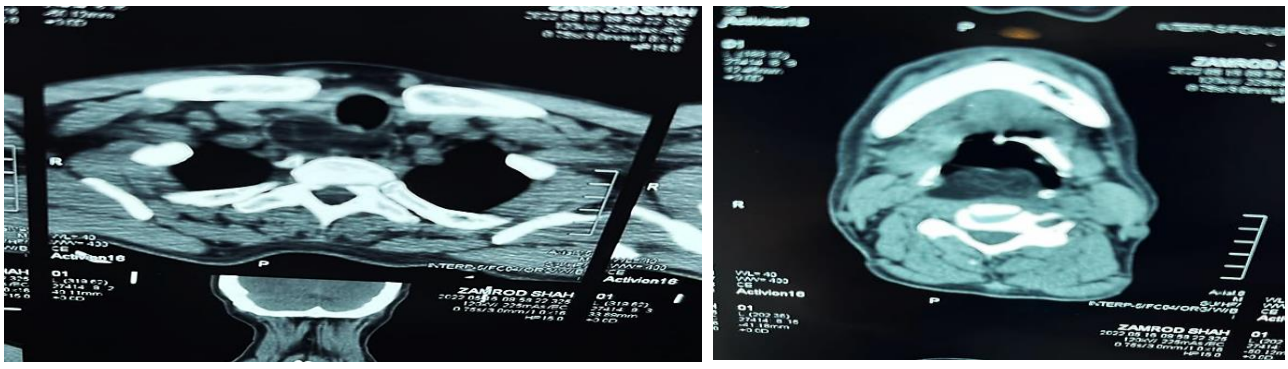
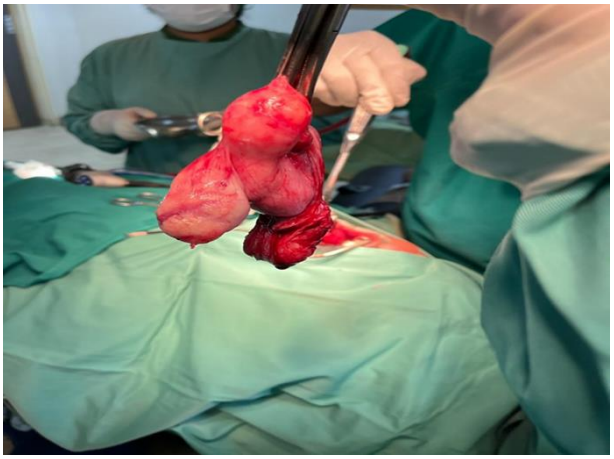


Figure 2: CT Thorax Findings show a bulging opaque mass.

It was decided by the primary team to surgically resect the lipoma as it was interfering with his daily life. Patient was admitted on May 25, 2022. A multilobed lipoma was resected (Figure 3) and the specimen was sent for histopathology which confirmed it to be a lipoma. The patient was subsequently sent to the ward and discharged the following day. He was reviewed back in the outpatients setting in one year time and did not show any signs of recurrence and was doing very well, tolerating his food and drink.



3a

3b

Figure 3a & b: Resected Specimen

DISCUSSION

The exact etiology of lipomas is uncertain, however, one theory suggests an association between previous trauma and subsequent lipoma formation.[7] Lipomas are found in all areas of the Gastro-Intestinal (GI) tract, most commonly in the colon, followed by the small intestine. Less common locations include the stomach and esophagus.[8]

Esophageal lipomas are rare benign esophageal tumors. Pathologically, these tumors are composed of adipose tissue.[9,10] The majority of these are located in the cervical part; only very few are located in the lower third of the esophagus.[11] Lipomas of the esophagus commonly present with dysphagia when they grow in size. There may be other symptoms, including odynophagia, substernal fullness, and regurgitation of undigested food, epigastralgia, and weight loss, difficulty in swallowing, gastroesophageal reflux and melena.[12]

The correct diagnosis of esophageal lipoma depends on careful consideration of the patient's history, radiographic examinations of the thorax, and inspection with endoscopy of the upper gastrointestinal system.[13]

The multi-lobed lipoma mentioned in this case was resected by endoscopic resection. Various surgical techniques are used for resection of esophageal lipomas such as thoracotomy, cervicotomy and esophagostomy. Esophagostomy is rarely recommended;[6,14] however, the most effective and minimally invasive technique is endoscopic enucleation.[15]

Gastrointestinal lipomas are more common in females, whereas esophageal lipomas are more common in men with a reported ratio of 27:13.[16,17] Esophageal lipomas have been reported in patients between the ages of 4 and 80 years old, with a mean age of 50 years.[18]

Radiographically, lipomas present as intraluminal filling defects. Useful signs to differentiate lipomas from other benign or malignant lesions include a smooth surface and "squeeze" sign manifested by changes in contour and configuration as a result of peristalsis.[19] On upper GI endoscopy, Lipoma is a lesion of yellow color, pliable, and with a smooth surface.[5] Esophageal lipomas appear as smooth and well-defined hyperechoic lesions on endoscopic ultrasound.[20] On MRI, lipomas can be identified by following fat signal as T1-weighted hyperintensity that becomes hypointense on fat-suppressed images.[7] On the contrary, liposarcomas appear heterogeneous with high signal intensity on T1 and T2 weighted images and leiomyomas are iso-intense on T2 -weighted images.[21] Hence, it is crucial to differentiate esophageal lipomas from malignant masses and to relieve the symptomatology of patient.

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