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# Giant Leiomyoma of the Thoracic Esophagus: A Rare Cause of Mediastinal Tumor in an Observation

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### Abstract

Leiomyomas are the most common benign tumors of the esophagus, but they are rare, compared to all oesophageal tumors. It is an exceptional form of mediastinal tumor that poses a diagnostic and therapeutic problem. We report the case of a 25-year-old woman who complained of intermittent dysphagia associated with dyspnea in which biopsy of the mediastinal mass by video-thoracic surgery confirmed the diagnosis. Then a complete excision by right thoracotomy was made causing an oesophageal breach. Operative follow-up is marked by minimal leakage on the suture areas treated by a dietary diet and chest drainage.

Keywords: Leiomyomas, oesophageal, intermittent.

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#### **INTRODUCTION**

Leiomyoma is a benign tumor that originates from the muscle cells of the esophagus wall and develops as single or multiple nodes. Arriving at a certain size it causes troubles of the swallowing or the compression of the neighboring organs. Its frequency is estimated between 0.005% and 7.9% of the population [1]. It is a slow-developing tumor frequently diagnosed between the ages of 30 to 59, often fortuitously or during the exploration of dysphagia[1,2]. We report through this observation our first case of oesophageal leiomyoma diagnosed in a young patient.

## **R**EMARKS

24-year-old patient with no specific antecedents for thoracic surgery for the management of a compressive mediastinal mass. The symptomatology evolved since 6 months, marked by an intermittent dysphagia in a context of progressive slimming.

X-ray of the thorax showed a homogeneous dense opacity with an internal limit confounded with the mediastinum and with a clear external limit Figure 1.

In TOGD, there was extrinsic compression of the esophagus Figure 2. Chest CT showed a posterior mediastinal mass exerting a mass effect on neighboring structures with a significant reduction in esophageal lumen Figure 3. She underwent a right videothoracoscopic biopsy, which revealed a pearly white, firm and hard mass on the exploration of the esophagus above and under the azygos Figure 4.

Histological examination of the biopsy returned to favor a leiomyoma. Posterior thoracotomy of the right posterolateral thoracotomy mass is performed, with a posterior, posterior, white, pearly, multi-lobed mediastinal mass, based on the right lateral aspect of the thoracic esophagus, estimated at 6 cm x 12 cm in length. This mass sits between the mucosa and the esophageal muscularis in addition and under azygos. The excision was in monobloc enucleation (Figure 5) causing 3 oesophageal breccias that were sutured.

The operative course was marked by the occurrence of an uncomplicated oesophageal leak with TOGD extravasation of the contrast medium at T2 level. A dietary diet was observed, as well as the making of a feeding jejunostomy.



Fig-1: Chest X-ray



Fig-2: Oesogastro-duodenal transit



Fig-3: CT appearance of posterior mediastinal mass

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Fig-4: intraoperative view of the tumor mass via thoracoscopy



**Fig-5: Surgical specimen** 

## DISCUSSION

Leiomyoma develops by narrowing of the esophagus, most often in its lower third. It is rarely located in the upper part of the esophagus as our case [1]. It is reported in literature that the location of this pathology in the middle 1/3 of the esophagus is 47.6%and the 1/3 distal 37.1% [1]. The main symptom is dysphagia and some authors report a correlation between the presence of symptoms and the size of the tumor [2, 3]. And confirms the absence of symptomatology for tumors less than 0.4 cm in diameter. Moreover, after resection, the diameters of the pieces ranging from 0.1 cm to 29 cm [4] are found. The diagnosis of leiomyoma is based on the imaging and histology of the tumor biopsy. Most often, digestive fibroscopy does not find any lesion on the esophageal mucosa apart from extrinsic compression, but it allows excluding a malignant process [5]. The thoracic CT scan makes it possible to objectify a posterior tissue mediastinal mass in the esophagus pathway.

The ideal treatment for oesophageal leiomyoma is complete surgical resection of the lesion, most often performed by enucleation. The surgical indication depends on the size, location of the lesion and clinical symptomatology. For small lesions, which are usually diagnosed incidentally and do not cause clinical symptoms, some authors recommend only biannual imaging surveillance. There are no clear recommendations for the management of small lesions. Because cases of malignant transformation of leiomyoma have been reported in the literature [6]. The basic surgery of the treatment, can be performed with a minimally invasive method or thoracotomy.

## Features

Esophageal leiomyoma is a benign tumor of the esophagus, manifested by dysphagia or signs of compression of the mediastinum organs. Surgical treatment remains the best option for symptomatic forms

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