

# Giant Cavernous Haemangioma of the Anterior Mediastinum

## *Anterior Mediastende Dev Kavernöz Hemanjiom*

Seyda Ors Kaya, Ozgur Samancılar, Ozan Usluer, Tuba Acar, Ali Galip Yener

Clinic of Thoracic Diseases and Surgery, Dr. Suat Seren Training and Research Hospital, İzmir, Turkey

### Abstract

Cavernous hemangiomas of the anterior mediastinum is rare. We present a case of a 56-year-old male patient with a giant cavernous hemangioma of the anterior mediastinum, 18 cm in diameters, approached by left posterolateral thoracotomy. To the best of our knowledge, such a unique case has not been previously presented in the literature.

**Keywords:** Mediastinal tumor, haemangioma, cavernous

### Özet

Anterior mediastende kavernöz hemanjiom nadirdir. Bu çalışmada, anterior mediastende yerleşmiş, 18 cm çaplı, sol posterolateral torakotomi ile opere edilmiş anterior mediastende yerleşmiş dev kavernöz hemanjiomlu 56 yaşındaki erkek olgu sunulmuştur. Bilgimize göre bu tip bir olgu daha önce literatürde bildirilmemiştir.

**Anahtar Kelimeler:** Mediasten tümörü, hemanjiom, kavernöz

### Introduction

Cavernous haemangioma is very rare benign tumour, presenting only in the 0.5% of all mediastinal masses [1]. It is generally located in the anterior mediastinum, and 75% of the cases are diagnosed before the age of 35. We present a case of a large sized cavernous haemangioma of the anterior mediastinum with radiological and operative findings.

### Case Report

A 56-year-old male patient presented with back pain for the last three weeks. He had no medical history of a remarkable pathology and was not under any regular medication. Chest auscultation revealed lowered breath sounds on the left side. Chest x-ray and computed tomographic scan showed a left paracardiac mass of 18 cm in diameter (Figure 1). The mass was thought to arise from the anterior mediastinum. It included a few millimetric calcifications. It was also displacing the heart towards the right hemithorax.

A left posterolateral thoracotomy was performed through the fifth intercostal space. The pulmonary adhesions with the mass were divided and a giant encapsulated tumour originating from the anterior mediastinum was excised with sharp and blunt dissection. The blood supply of the mass was

originating from the proximal part of the left internal mammary artery and ligated. The tumour was 18 cm in diameter (Figure 2). Pathological examination revealed a mass weighing of 1075 gr. Histological examination revealed a well circumscribed vascular proliferative lesion including large thick-walled vessels with prominent muscular wall and cavernous spaces. The final diagnosis was cavernous haemangioma. The patient was discharged home six days after surgery after an uneventful postoperative period.

### Discussion

Cavernous haemangioma of the anterior mediastinum is very rare with an incidence of less than 0.5% of all mediastinal masses [1]. Yamazaki et al. [2] reported that there were only 51 cases of mediastinal haemangioma reported in Japan in the last 50 years. To the best of our knowledge, this size of a mediastinal haemangioma has not been previously published in the literature. The most common symptoms are chest pain and dyspnoea and are generally caused by the pressure of the mass to the surrounding organs [1, 3, 4]. The only symptom in our case was the back pain for the last three weeks. Most tumours are encapsulated like in our case and 75% of the cases are diagnosed before the age of 35 [1]. Our patient was 56-years-old which might explain the large size of the tumour.

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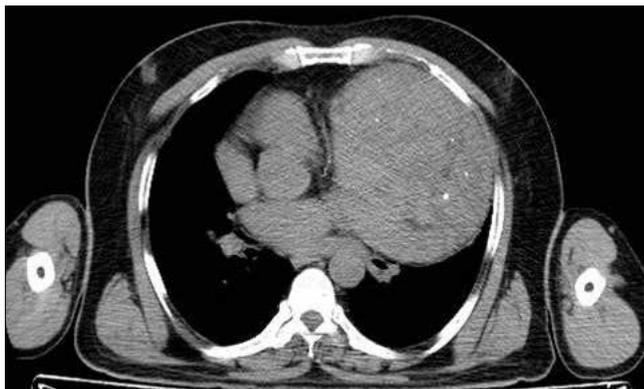
**Correspondence to:** Tuba Acar, Clinic of Thoracic Diseases and Surgery, Dr. Suat Seren Training and Research Hospital, İzmir, Turkey

Phone: +90 505 371 54 76 e-mail: drtubaacar@gmail.com

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**Figure 1.** Thorax CT scan showing a left paracardiac mass originating from the anterior mediastinum with a few calcifications.



**Figure 2.** A mass of 18 cm in diameters weighing 1075 gr.

Chest x-ray, thorax computed tomography (CT) scan and magnetic resonance imaging can be used for the diagnosis. Phlebolite is a specific finding which can be seen in chest x-ray and more commonly in CT scan which was not present in our case [5, 6]. Calcification is another finding of the CT scan, which was also detected in our patient. Haemangiomas are classified as capillary, cavernous or venous types, according to the size of their vascular spaces. Cavernous and

capillary haemangiomas are the most common types, but venous haemangiomas are extremely rare [4]. Our case was diagnosed as cavernous haemangioma after the final histopathological examination. Cavernous haemangiomas do not spontaneously regress, unlike the capillary type. Surgical interventions are often needed for cavernous haemangiomas as they could cause pressure on vital structures including the great vessels, major airways and lung. They can also cause thrombocytopenia, microangiopathic haemolytic anaemia and coagulopathy [4].

Open approaches are necessary for large sized tumour like in our case, where VATS can be used for the excision of smaller tumours [4].

In conclusion, cavernous haemangiomas are rare but must be evaluated in the differential diagnosis of the anterior mediastinal masses. Thoracotomy can be used to approach large sized tumours.

**Informed Consent:** Written informed consent was obtained from patient/patients who participated in this study.

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