

Hemothorax Due to Aneurysm of the Left Pulmonary Vein in a Pregnant Patient. Case Report

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ABSTRACT

Pulmonary venous aneurysm often presents as a mediastinal mass, in most cases patients are asymptomatic and surgical treatment is not required unless there are complications. We present the case of a 34-year-old woman, with a normal evolutionary pregnancy of 36 weeks of gestation, with dyspnea on small to medium efforts, to which was added pleuritic pain in the left hemithorax, evidence of left pleural effusion greater than 80%, with drainage of 700 ml of hematic fluid. The gynecology and obstetrics service identified anhydramnios, deciding to terminate the pregnancy through the abdomen. A simple and contrastenhanced chest tomography was performed, as well as Papanicolaou staining of pleural fluid with a negative report for malignancy. The angiotomography reported an aneurysm of the left lobar vein with a fistulous tract, so cardiothoracic surgery performed resection of the saccular aneurysm by thoracotomy without complications. Pulmonary vein aneurysms are such rare lesions that there are no data in the literature to predict their natural history or pathogenesis. During pregnancy, cardiovascular causes of mortality predominate; on this spectrum, hemothorax could be a true surgical emergency.

KEYWORDS: pulmonary aneurysms, pulmonary vein, hemothorax, pregnancy

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INTRODUCTION

Pulmonary venous aneurysm (PVA) is rare, often presenting as a mediastinal mass. The etiology has been described mostly of congenital origin¹. However, reports of aneurysmal dilatation of the thoracic veins have not been extensive in the existing literature².

In most cases, patients are asymptomatic and surgical treatment is not required unless there are complications^{3,4}. We describe a case of pulmonary venous aneurysm that presented as a hemothorax in a pregnant patient.

CLINICAL CASE

A 34-year-old woman, with a normal evolutionary pregnancy of 36 weeks of gestation (SDG), with no known pathological history. She presented dyspnea of small to medium efforts, to which was added pleuritic pain in the left hemithorax, for which she was admitted to a second-level hospital where left pleural effusion greater than 80% was evidenced, placing an endopleural tube with drainage of 700 ml of fluid haematic.

On her part, the obstetrics service identified anhydramnios, deciding to terminate the pregnancy through the abdomen, obtaining a female product of 37 SDG in capurro score, weight of 2,270 grams and apgar score of 8-9 without complications.

A simple and contrast-enhanced chest tomography was performed (Fig. 1A) where a mass was observed in the left hemithorax with well-defined borders, hyperenhanced with contrast medium, for which reason it was referred to a third hospital level, tumor markers were requested (alpha-fetoprotein 94 ng/mL, CA-125 98.5 U/mL, CA-19.9 46.5 U/mL, carcinoembryonic antigen 1.73 ng/mL) and Papanicolaou staining of pleural fluid was performed with a negative report for malignancy. The angiotomography reported an aneurysm of the left lobar vein with a fistulous tract. The cardiothoracic surgery department performed resection of the saccular aneurysm by thoracotomy (Fig. 1B) without complications, with remission of symptoms.

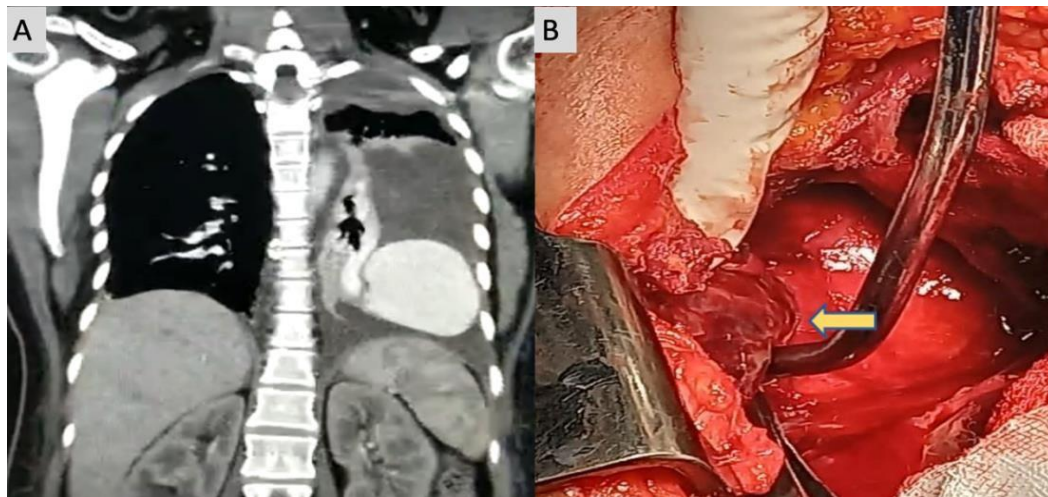


Figure 1. (A) Contrast tomography showing the presence of a well-defined saccular lesion which presents contrast enhancement in the arterial phase in the left lung, (B) Thoracotomy shows a saccular aneurysm measuring approximately 6 x 7 cm without parenchymal involvement (Arrow).

DISCUSSION

Pulmonary vein aneurysms are such rare lesions that there are no data in the literature to predict their natural history⁵. During pregnancy, cardiovascular causes of mortality predominate; In this spectrum, hemothorax could be a true surgical emergency⁶.

The rupture of the vascular lesion causes intense bleeding that can lead to shock or death, where Doppler ultrasound and tomography are the two most important diagnostic modalities⁷.

In this case, however, the pregnant patient presented normal vital signs, but with a high risk of instability due to worsening and progression to hemorrhagic shock. For this reason, it was decided to carry out an intentional search for the etiology using imaging techniques and samples of pleural fluid, ruling out a neoplastic process. In addition, in collaboration with the obstetrics service, fetal status was assessed by echocardiography, which allowed timely termination of the pregnancy and subsequent use of contrast media. Thus, improving the diagnostic protocol and early surgical treatment⁸.

CONCLUSIONS

Hemothorax as an initial presentation in thoracic pathology in a previously healthy patient requires an intentional search for differential diagnoses from infectious to neoplastic etiologies, however, vascular lesions that may increase mortality must be ruled out.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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