

Symptomatic isolated thoracic splenosis 11 years after abdominal trauma – Case report

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SUMMARY

Introduction Thoracic splenosis is defined as the autotransplantation of splenic tissue into thorax. It occurs due to splenic rupture in association with a diaphragmatic tear on the left side after a traumatic event. It is a rare disease that most commonly remains undiscovered as it is usually asymptomatic.

Case Outline We present a symptomatic case of thoracic splenosis in a 53-year-old smoker male patient with a medical history of abdominal surgery and splenectomy for a thoracoabdominal gunshot. Three years before the medical examination he was suffering from dyspnea, frequent coughing, left pleuritic chest pain and complained about faster fatigue. A chest radiograph obtained during a medical checkup showed a multinodular left pleura-based mass in the upper lobe. Established histopathological diagnosis after surgical removal of the nodule was splenosis. No evidence of malignancy was observed.

Conclusion Splenosis should be considered as a differential diagnosis by the undertaken workup of left pulmonary nodules or masses in patients with a history of trauma.

Keywords: symptomatic thoracic splenosis; splenectomy; thoracoabdominal gunshot

INTRODUCTION

Splenosis, a condition also known as ectopic spleen, is an extremely rare occurrence that is defined as autotransplantation of splenic tissue usually after splenic rupture due to trauma and in association with a subsequent splenectomy [1]. With splenosis, splenic tissue is most commonly seeded into the abdominal cavity or pelvis. Thoracic splenosis occurs less frequently than abdominal splenosis and may be found in 18% of patients after splenic rupture. The diagnosis of thoracic splenosis can be established noninvasively with several diagnostic modalities [2, 3]. Computed tomography (CT) or ultrasonographic imaging should be used to identify areas of possible ectopic tissue, although diagnosis is confirmed postoperatively by means of pathologic analysis. A minimally invasive approach for excision of such masses could be completed with minimal morbidity. Video-assisted thoracoscopic surgery is an option that can serve both diagnostic and therapeutic purposes [4]. Pathologic analysis can rule out such causes as pulmonary metastases, non-Hodgkin lymphoma, or mesothelioma. Some authors reported 57 cases of thoracic splenosis and four symptomatic cases in the English-language literature [5, 6]. Reviewing the MEDLINE database this is the first described case of intrathoracic splenosis in Bosnia and Herzegovina and the second symptomatic case in Europe.

CASE REPORT

A 53-year-old man was referred to our clinic because of dyspnea, frequent coughing, faster fatigue and left chest pain. He used to smoke four cigarette packs per day for 20 years and quit smoking three months before presentation. His surgical history included thoracoabdominal gunshot wound suffered 11 years previously which required an emergency splenectomy, without surgical opening of the chest. His medical history included tachycardia in the past five years. On admission, physical examination was unremarkable, and laboratory tests were normal. Chest radiographs showed oval homogeneous soft tissue opacity, measuring 4.5 × 4 cm in the left lung lobe, between first and second ribs (Figure 1). The chest CT scan revealed two well-circumscribed lobulated, nodular masses, measuring up to 2 cm in diameter in the back and the front of the left upper lobe. These nodules were not calcified. Also, a CT scan of the apical region showed subpleural fibrosis (Figure 2). In our case, technetium-99m (^{99m}Tc) scintigraphy was unavailable, so we achieved diagnosis with fine-needle aspiration, and pathohistological examination. After analysis of a sample of the biggest nodule, obtained by percutaneous aspiration biopsy and by immunochemistry analysis (vimentin+++, LCA+++, CD34-, S-100-, CK-), it was supposed that disease was connected to mesenchymal, cellular, predominantly lymphocytic well-vascularized, probably benign tumor, but no accurate pathologic diagnosis was made.

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