



SWYER-JAMES SYNDROME: A CASE REPORT

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Objective: Introduction

Swyer-James syndrome (SJS) is a rare cause of unilateral hyperlucent lung. It was first described in 1953 by Paul R. Swyer and George C.W. James. It's thought to be a result of post-infective bronchiolitis obliterans in childhood. Hyperlucency is visible in one or more lobes due to air being trapped in obstructed bronchioles. Other characteristic radiographic findings include decreased bronchovascular markings, a small hilar shadow and slight displacement of the mediastinum to the affected side. SJS is visible on chest radiography and computed tomography (CT) as early as 9 months after infection and is therefore mostly diagnosed during childhood. Patient usually has a rich history of childhood infections and is asymptomatic. If not asymptomatic they can present with productive cough, dyspnea on exertion, hemoptysis, decreased exercise tolerance and recurrent pulmonary infections.

Case report

A 71-year old Caucasian male patient presents to the office with dyspnea on exertion and occasional pain in the right thorax. Patient's medical history includes frequent childhood respiratory infections, and hypertension, dyslipidemia and prostate hyperplasia occurring later in life. He was diagnosed with SJS in 1975 and was asymptomatic until now. Multiple members of his family have cardiovascular diseases. Patient's mother died from colorectal cancer at age 74. Pulmonary auscultation revealed severely decreased breath sounds at the left lung base. The remainder of his physical examination was normal. The patient reports a history of heavy cigarette smoking (40 pack years) and no alcohol abuse.

The patient underwent spirometry which showed a significant restrictive pattern (FVC 56%, FEV1 48% FEV1/FVC 0.69) and multi-slice computed tomography (MSCT) showed an apical lesion of the right lung surrounded by



destruction of normal parenchyma of the lung and hyperinflation of the upper left pulmonary lobe with emphysema and cysts and reduced volume of the lower left pulmonary lobe accompanied by bronchiectasis. MSCT also showed a few enlarged mediastinal lymph nodes. The described lesion of the left lung is consistent with SJS, while the right lung lesion is still without a confirmed etiology.

Discussion

Diagnosis is made radiographically. Differential diagnosis includes pneumothorax, asymmetric emphysema, congenital lobar emphysema, pulmonary artery hypoplasia, gastrointestinal herniation, bronchial compression, mastectomy, mediastinal fibrosis and Poland syndrome. Treatment of SJS is usually conservative but in severe cases pneumectomy can be considered. One must be mindful of many possible diagnoses of a unilateral hyperlucent lung, because incorrect diagnosis leads to inappropriate therapy.