A CASE OF PULMONARY LANGERHANS CELL HISTIOCYTOSIS PRESENTING WITH SPONTANEOUS PNEUMOTHORAX

Abstract

Background; Pulmonary Langerhans cell histiocytosis (PLCH) is a rare cause of diffuse interstitial lung disease in young adult smokers characterized by multiple cystic spaces in the parenchyma. Patients with PLCH commonly present with nonproductive cough and dyspnea; although rupture of the pulmonary cysts may result in a spontaneous pneumothorax. The occurrence of recurrent secondary spontaneous pneumothorax in PLCH is well recognized thus early intervention is necessary to prevent the recurrences following the first episode.

Case summary; A 33-year old heavy smoker presenting with sudden onset severe pleuritic type chest pain with severe respiratory distress found to have a left sided tension pneumothorax. She had a background of non-productive cough and exertional dyspnea which led to further evaluation of this secondary spontaneous pneumothorax. She was diagnosed with a rare disease; Langerhans cell histiocytosis with no other organ involvement. After VATS guided talc pleurodesis and abstinence from smoking she remained stable with no recurrences up to date.

Conclusion; Pneumothorax is an important differential diagnosis to consider on evaluation of a sudden onset chest pain in an otherwise healthy young patient. Thorough evaluation for an underlying cause is necessary in order to prevent the recurrences thus associated morbidity and mortality.

***Key words**; Pulmonary Langerhans Cell Histiocytosis, Pneumothorax, Smoker*