Session/Poster# Presenter

A49 Sophie Eldred
College of Medicine Student

Advisor(s): Dr. Suzette Graham-Hill, Department of Cardiology

A Complicated Clinical Diagnosis of Hepatopulmonary Syndrome with Concomitant Hepatic Hydrothorax

Introduction: Hepatopulmonary syndrome (HPS) occurs in approximately 5-32% of patients with chronic liver disease, resulting in pulmonary vascular dilation and ventilation-perfusion mismatch. To our knowledge, there are no documented cases of HPS and hepatic hydrothorax (HH) occurring simultaneously. The following is the case of a patient diagnosed with HPS obscured by bilateral HH.
Patient Presentation: A 66-year-old African-American woman with a past medical history of untreated hepatitis C virus infection, hypertension, and diabetes mellitus underwent multiple orthopedic surgeries. Subsequent concern for sepsis resolved several days after. The patient developed subjective dyspnea with a respiratory rate of 20 and SpO2 94%. Concern for pulmonary embolism (PE) prompted a chest x-ray (CXR) with no significant findings. Her dyspnea persisted over several days, warranting computed tomography with angiography (CTA) that ruled out PE, but demonstrated thoracic anasarca and bilateral pleural effusions which, in tandem with a cirrhotic liver and significant ascites, was identified as hepatic hydrothorax (HH). Arterial blood gas (ABG) obtained on day 1 of subjective dyspnea, along with platypnea and orthodeoxia, significantly supported a diagnosis of HPS.
Discussion: HPS is a relatively uncommon diagnosis with insidious onset in liver disease. It occurs in Whites more than other ethnicities. HH is a potential complication in patients with chronic liver disease with lower incidence than HPS. Both pathologies occurring simultaneously is exceptionally rare. Healthcare providers should recognize a simultaneous occurrence is possible. Clinical and diagnostic distinction may be made between the two to determine the cause of a patient's dyspnea. Without properly identifying the root cause of dyspnea in a patient such as this, dire morbid or mortal outcomes may ensue.