



Subacute Cardiac Tamponade in a Patient with Malignancy

Zohra R. Malik^{1*} and Zareen Razaq²

¹Corresponding Author, Department of Internal Medicine, Saint John's Episcopal Hospital, New York, USA

²Lahore Medical and Dental College, Lahore, Pakistan

ARTICLE HISTORY

Received Mar 22, 2021

Published Mar 30, 2021

ABSTRACT

We hereby present a 57-year-old woman with a history of asthma and hypertension who presented to the emergency department with shortness of breath, syncope and loss of consciousness. Patient complained of decreased appetite, constipation and 20lbs weight loss over one month. Patient denied fever, chills, chest pain, nausea, vomiting, headache, pain or swelling in lower extremity, trauma, hemoptysis. Vitals at presentation: temperature 99.8 F, pulse 124 bpm, BP 135/93 mm Hg, respiratory rate 18 pm, oxygen saturation 96% on room air. Non-contrast CT scan of the brain was unremarkable. Cervical spine CT did not show any acute bony fracture or subluxation or central canal stenosis. Chest xray showed right upper lung infiltrate and very small right pleural effusion. Chest CT showed: small pulmonary emboli involving right lower lobe and left upper lobe sub segmental pulmonary arteries, large pericardial effusion, right upper lobe ground glass pulmonary infiltrates, right upper lobe pulmonary mass with multiple bilateral pulmonary nodules concerning for metastatic process, small right-sided pleural effusion, bilateral hilar and mediastinal lymphadenopathy concerning for metastatic disease, multiple ill-defined hepatic lesions. EKG showed sinus tachycardia without electrical alternans. Echocardiogram showed: left ventricular ejection fraction 50-55%, grade 1 diastolic dysfunction consistent with impaired relaxation and normal filling pressures. There is a large circumferential pericardial effusion and right ventricular diastolic collapse suggesting tamponade physiology evident on echocardiogram. Pericardiocentesis was done, about 700 cc of fluid was removed and the patient's symptoms improved. This patient had pericardial effusion most likely due to malignancy. Pericardial fluid buildup and subsequent tamponade in a malignancy is usually subacute. In malignancy, fluid accumulates slowly, pericardium stretches with time allowing ample fluid to be accumulated vs in an acute tamponade as there is very rapid, large pericardial effusion, pericardium does not have time to stretch and may present with more alarming signs and symptoms. Sub-acute tamponade as is seen in malignancy presents with less alarming signs and symptoms and might be missed. Patients with subacute tamponade may be asymptomatic or complain of fatigability, chest discomfort, dyspnea caused by decreased cardiac output and increased filling pressures.