A Broken Heart: A Case of Stress Induced Cardiomyopathy Precipitated by Community Acquired Pneumonia

Adam Foglesong
Abdulla Kara Balla
A Neil Bilolikar

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Takotsubo cardiomyopathy or stress-induced cardiomyopathy is a syndrome characterized by a transient reduction of systolic cardiac function generally in response to emotional or physical stressors. Stress-induced catecholamine excess is believed to be the main factor driving myocyte dysfunction. Most patients are female and postmenopausal.

We present a case of a 62-year-old Caucasian male with a past medical history of hypertension who presented to the ED with the chief complaint of squeezing chest pain followed by multiple episodes of productive cough and epigastric discomfort. ECG showed sinus tachycardia with premature supraventricular complexes. Chest X-ray showed severe pulmonary vascular congestion. Labs showed elevated WBC to 26.8 bil/L, elevated troponins to 5.81 ng/ml, elevated Lactic acid to 4.6 mmol/L, elevated Procalcitonin to 9.8 ng/mL, and elevated serum creatinine to 2.58 mg/dL. 2D Echo showed EF of 15% with global wall akinesis. He was admitted to the medical Intensive care unit. He was started on broad-spectrum antibiotics, IV heparin. A central line was placed for hemodynamic support. His respiratory status has improved without the need for intubation. Two days later, continuous rhythm monitoring showed new onset Atrial Fibrillation. Labs showed down-trending WBC and serum creatinine with an appropriate response to antibiotics. One week later, a repeat 2D Echo showed a normal EF of 60% with no wall motion abnormalities. He underwent coronary CTA which showed non-obstructive coronary artery disease. The patient was discharged on Aspirin (81 mg once daily), Eliquis (5 mg twice daily), Coreg (6.125 mg once daily), Entresto (24-26 mg twice daily), and Atorvastatin (80 mg once daily).

Takotsubo cardiomyopathy is a reversible but potentially life-threatening condition that carries high morbidity and mortality. Treatment of the underlying cause improves outcomes, and generally conservative supportive care will lead to an improvement in cardiac function in due course.