Large pericardial effusion as an initial manifestation of Systemic lupus erythematosus (SLE)

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We present a rare case of cardiac tamponade from a large pericardial effusion requiring surgical intervention as an initial manifestation of SLE.

36-year-old African American female with a history of hypertension, bipolar disorder and recent pneumonia presented complaining of a sharp, nonradiating, nonexertional chest pain. Worse with laying flat and deep inspiration. Improved with sitting forward. She had dyspnea at rest and exertion for the past week. On further interview, she stated having joint pains and photosensitivity. Admission vital signs showed a blood pressure of 152/77, heart rate 126, temperature 102.0 degrees fahrenheit and respiratory rate 29. Physical examination revealed no rubs, no pulsus paradoxus, no jugular venous distention, distant heart sounds, decreased breath sounds in bilateral bases, no rashes or joint swelling. Pertinent laboratory values include anemia of chronic inflammation, TSH 0.721, ESR 86, CRP 28.500, positive ANA, Anti-Ro antibodies >8.0 AI, and Anti-DNA antibody 10 AI, RA latex turbid 30.2IU/ml. EKG showed normal sinus rhythm and no ST changes. Computed tomography showed a large pericardial effusion 3.2 cm in diameter. Transthoracic-echocardiogram showed moderate to severe circumferential pericardial effusion with evidence of early tamponade. She underwent an emergent pericardiocentesis with a total of 722ml of serosanguinous fluid drained. She was also started on high-dose indomethacin and hydroxychloroquine with improvement in her symptoms and no further radiological evidence of effusion.

The most common cardiac manifestation of SLE is pericarditis with a reported prevalence of 60%. Non-coronary cardiac manifestations include valvular disease, endocarditis, pericarditis, myocarditis and conduction abnormalities. Pericardial effusion occurs at some point in over one-half of patients, and pericarditis may precede the clinical signs of lupus. However, such large pericardial effusion causing cardiac tamponade is rare in SLE. Cardiac tamponade as the first presenting sign of SLE has an incidence of only 1-2.5%. Generally, the effusion is exudative and clear or serosanguinous in nature. In the absence of cardiac tamponade, non-steroidal anti-inflammatory drugs, but corticosteroids are more effective in symptomatic relief and eliminating pericardial effusion. If tamponade occurs, it should be drained emergently. Generally, medical management is very effective, and therefore, there is such a low incidence of tamponade despite high frequency of pericardial disease. Above, we present a rare case of cardiac tamponade from a large pericardial effusion requiring surgical intervention as an initial manifestation of SLE.

Biography

Charmi Patel has completed her MD at the age 21 from Avalon University School of Medicine and is currently a PGY-2 Internal Medicine resident at Baton Rouge General, an affiliate of Tulane University School of Medicine, in Baton Rouge, Louisiana.

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