A clinical case of biventricular heart failure as a result of eosinophilic myocarditis

Sahar Taqui
Oregon Health and Science University, USA

Case Presentation: A 34 year old male was presented with nausea and abdominal pain for two weeks. He also endorsed a month of bilateral lower extremity edema, orthopnea and right lower extremity numbness. Two years prior, he developed dry cough and dyspnea which was diagnosed as asthma. His initial work included an upper and lower gastrointestinal endoscopy, showing marked inflammation and scattered ulcers with biopsies demonstrating active inflammation. CT abdomen showed hepatic congestion and an incidental finding of low density material adherent to the apex of both right and left ventricle. On examination, he appeared thin and chronically ill. His lungs were clear and cardiac exam demonstrated tachycardia with normal S1 and S2 and presence of S3. His jugular vein was distended 3-4 cm above clavicle sitting upright. There was bilateral lower extremity edema with grossly normal neuro exam. Labs showed normal chemistry panel and a complete blood count with differential eosinophil counts elevated to 2.73x10^3 (28%), IgE level 1854 (RR 0-120), ESR and CRP elevated at 62 and 105 respectively. Electrocardiogram showed non-specific changes. Chest x-ray demonstrated cardiomegaly and scattered left upper lobe infiltrates. Echocardiogram showed severely decreased bi-ventricular function with filling defects at the left and right ventricular apex. Right heart biopsy showed inflammatory cells with abundant eosinophilia. Bone marrow biopsy showed marrow eosinophilia (~11%). Right sural nerve biopsy demonstrated no evidence of vasculitis. Patient was diagnosed with eosinophilic myocarditis related to possible ANCA negative eosinophilic granulomatosis with polyangitis (EGPA). He was started on anti-coagulation and steroids treatment with eventual recovery of both ventricular functions.

Conclusion: Eosinophilic myocarditis can be a major cause of morbidity and mortality in EGPA. The initial treatment is steroids and concurrent management of other complications including heart failure and thrombus formation.

sahartaqui@gmail.com