

Category: Clinical Case Study

Title: AIDS Associated Cardiac Burkitt's Lymphoma Presenting Complete Heart Block with Heart Failure

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Abstract: Primary cardiac Burkitt's lymphoma is extremely rare, with only a handful of reported cases. Here we present a case of a 56-year-old man who presented with one month of unintentional weight loss, worsening dyspnea, orthopnea, paroxysmal nocturnal dyspnea, and lower extremity edema. He was found to have a third-degree atrioventricular block. Transthoracic echocardiogram and subsequent cardiac magnetic resonance imaging revealed an infiltrative cardiomyopathy with a reduced ejection fraction of 35%, diastolic dysfunction, and non-obstructive left and right atrial masses, concerning of lymphoma. Endomyocardial biopsy, as well as ascitic and pleural cytology revealed a high grade B cell lymphoma with Fluorescence in situ Hybridization revealing a t(8:14), most consistent with Burkitt's lymphoma. A leadless atrioventricular pacemaker was placed in the right ventricle. Furosemide and dobutamine infusion were started to improve hypervolemia while enhancing cardiac inotropism. Patient was also found to have AIDS and started on antiretroviral therapy and opportunistic prophylaxis. He received one cycle of R-CVP (Rituximab, Cyclophosphamide, Vincristine, Prednisone); however, he subsequently developed septic shock in setting of neutropenic fever, requiring vasopressor support. Staging of cancer is ongoing. To our knowledge, primary cardiac Burkitt's lymphoma has only been reported in only a handful of cases, with a high propensity of association with HIV. Our case highlights cardiac Burkitt's lymphoma causing conduction disease and heart failure.