Non-Hodgkin lymphoma of the heart

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Case report: We present a case report of an 82-year-old male patient with known valvular and ischemic heart disease and a history of paroxysmal atrial fibrillation, iatrogenic hypothyroidism and rheumatoid arthritis who was admitted to our Department in August 2018 due to chest pain. Routine echocardiography revealed a large pericardial effusion and pericardiocentesis was performed with instillation of bleomycin. Cytology of the pericardial effusion showed elements of peripheral blood, but there was no evidence of malignant disease. Ten months later he was admitted again due to non-ST elevation myocardial infarction with clinical symptoms and signs of heart failure. Coronary angiogram revealed atherosclerotic disease of left and right coronary artery with significant stenosis of the left main, left anterior descending, left circumflex and right coronary artery. Echocardiography revealed an enlarged right atrium and ventricle with severely thickened interventricular septum and anterolateral wall of the right ventricle which was akinetic and seemed infiltrated as well as adjacent pericardium. A small pericardial effusion was also noted. There were no regional wall abnormalities of the left ventricle, and its ejection fraction was preserved. Additionally, severe aortic stenosis was determined. Magnetic resonance imaging of the heart was performed which showed diffuse myocardial and pericardial infiltrative mass along the right ventricular free wall, right ventricular apex, interventricular septum, and right ventricle papillary muscles. Morphological features were indicative of a cardiac lymphoma. Endomyocardial biopsy was performed. Histopathological analysis of right ventricle samples obtained at endomyocardial biopsy confirmed the presence of a diffuse large B-cell lymphoma. Chemotherapy was initiated with R-mini-CHOP protocol. After the seventh cycle the patient developed febrile neutropenia with signs of heart failure. Echocardiographic findings showed thinner myocardial walls and global hypokinesia with reduced left ventricular ejection fraction. Patient died 7 months after the diagnosis.

Conclusion: Primary or secondary lymphomas are rare malignancies of the heart, often presenting with atypical symptoms and signs[1,2]. Imaging includes echocardiography, computed tomography and magnetic resonance imaging with final diagnosis that is based upon histopathological analysis of the heart tissue obtained on endomyocardial biopsy. The prognosis is poor, and diagnosis is often obtained post mortem[1,2].

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LITERATURE

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