

## Abstract

Pericardial effusion is characterized by abnormal collection of fluid within the pericardial space. It can be classified as mild, moderate and massive depending on the extent of fluid accumulation and depending on the speed of fluid collection it may give rise to symptoms relevant to pericardial effusion. Thus, massive pericardial effusion may give rise to cardiac tamponade in the acute setting. Commonest causes for massive pericardial effusion are malignancy, lymphoma, infections like tuberculosis and idiopathic cases where cause is unknown.

Although pericardial involvement is a serious complication in advanced solid organ malignancies, lymphoma presenting as a massive pericardial effusion is rare. Patients presenting with massive pericardial effusions always warrant thorough investigation with minimal delay in diagnosis.

This is a case of massive pericardial effusion manifesting as the initial presentation of lympho-plasmacytoid lymphoma in a Sri-Lankan female.

A 66-year-old previously healthy female, presented with sudden onset of rapidly progressive shortness of breath with associated tightening type retrosternal chest pain. On examination she was an averagely built female, who was dyspneic with a respiratory rate of 30/min and an on-air saturation of 93%. She was hemodynamically stable with a blood pressure of 100/60 mmHg, but was tachycardic with a heart rate of 120 bpm. Her jugular venous pressure was elevated and heart sounds were muffled, there were no murmurs and the lung fields were clear. Her ECG showed small volume complexes with poor R wave progression. Therefore, an urgent 2D echocardiogram was performed which revealed a 25 mm width massive pericardial effusion with encasement of all 4 chambers, but pericardial wall thickening was not seen. Urgent pericardiocentesis was performed and 450 cc volume of pericardial fluid volume was removed in 2 occasions. Her pericardial fluid full report was supportive of an exudate and the cytology, pericardial fluid culture and TB screening were negative.

Her basic investigations revealed anemia with significant leukocytosis with lymphocyte predominance and elevated inflammatory markers. She had significant albumin to globulin ratio reversal and her blood picture revealed multiple plasmacytoid lymphocytes with anemia probably secondary to iron deficiency. Her serum protein electrophoresis revealed an abnormal monoclonal band seen in the gamma region and the bone marrow biopsy was supportive of a lympho-plasmacytoid lymphoma. Flow cytometry findings were consistent with a mature B cell lymphoproliferative disorder: in keeping with Lymphoplasmacytoid lymphoma. Immunofixation was positive for a monoclonal band in the IgG kappa region. Autoimmune hemolytic anemia and possibility of amyloidosis was excluded. She underwent chemotherapy after the diagnosis of lympho-plasmacytoid lymphoma was made. During the course of chemotherapy, she passed away following an opportunistic infection.