Original Research Paper

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General Medicine

A CASE OF UNUSUAL PRESENTATION OF CARDIAC TAMPONADE IN SLE

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ABSTRACT Cardiac manifestations of SLE include pericarditis, myocarditis, arteritis of the coronary arteries, endocarditis and conduction system abnormalities. Pericarditis is seen most often, occurring in upto 75% of the cases and is one of the diagnostic criteria for SLE. Cardiac tamponade is a medical emergency limiting cardiac inflow and leading to hemodynamic compromise. In this case report we present and discuss pericarditis leading to cardiac tamponade as the initial manifestation of SLE.

KEYWORDS :

Introduction:

A 34 year old female presented to Goa Medical College with complaints of chest pain, dyspnoea and fever for 2 days. The chest pain was described as "squeezing," and associated with palpitations. Both pain and shortness of breath were worse in supine position and relieved on leaning forward. She had no past medical history. However, over the last three months she was becoming increasingly fatigued and noticed significant weight loss, intermittent fevers and arthralgia affecting the wrist and elbow joints. She denied hair loss, oral ulcers, a rash or any medication use.

On examination, temperature was 39.2°C, heart rate of 122 beats/minute, blood pressure of 92/58 mmHg, respiratory rate of 24 breaths/minute, muffled heart sounds and jugular distention. The electrocardiogram showed sinus tachycardia and low voltage. The chest radiograph displayed enlarged cardiac silhouette with a left-sided pulmonary infiltrate. The echocardiography confirmed features of cardiac tamponade from a large circumferential pericardial effusion along with mobile intrapericardial fibrinous strands and the pleural effusion. Echocardiography guided pericardiocentesis was performed and 1000 mL was drained immediately bringing relief to the patient.

Investigations:

Laboratory investigations revealed a microcytic anaemia with hemoglobin 8.5 g/dl, normal total count and differential. Erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) was elevated. The coombs test was positive. Cardiac biomarkers, renal and liver function testing were normal. Urinalysis was normal and showed no proteinuria. HIV testing and Mantoux tuberculin skin test were negative. patient's serum tested strongly positive for antinuclear antibodies (ANA) with a coarse speckled pattern and was also positive for anti-dsDNA.

Test	result
Hemoglobin	8.5 g/dl
Total count	11,200/ul
ESR	46 mm/h
CRP	Positive
Coomb Test	Positive
Troponin I	Negative
Blood Urea/ Serum creatinine	14 /0.62
LDH	644 IU/L
Urine routine	Epithelial cells-1-2, Protein-traces.
ANA (IIF)	Strongly positive, speckled pattern
Anti- ds DNA	Positive (54.8)
Pericardial fluid cytology	Glucose- 138 mg/dL&protein-3.4 g/dL Cells- 1200/uL, N-70%, L-30% ADA- Negative CBNAAT- MTB not detected.

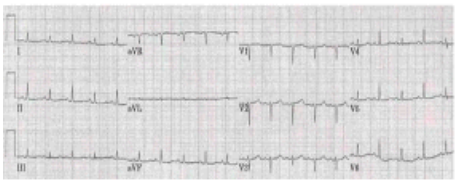

Fig 1: Echocardiogram showing low voltage complexes and electrical alterans

Fig 2: 2 D ECHO showing pericardial effusion

Fig 3: Chest Radiography showing pericardial effusion

Diagnosis:

The diagnosis of SLE was based on hemolytic anemia, serositis, arthralgia, positive ANA. The patient was started on by prednisone 60 mg by mouth daily with hydroxychloroquine. Patient showed a dramatic response in next 48-72 hours and then discharged on a steroid taper.

Conclusion:

Our patient had cardiac tamponade as the initial presentation of SLE. Pericardial effusion is one of the most prevalent manifestations of SLE found in about 50% of patients and generally tends to be small and hemodynamically insignificant. Cardiac tamponade is rare, estimated to occur in fewer than 1% of patients with SLE and the initial presentation of the disease is even rarer. To our knowledge, only isolated cases and small series on the subject have been related. In patients with known SLE, cardiac tamponade was found in females and patients with anaemia, renal disease, pleuritis, higher ESR values and lower C4 levels. In many cases, treatment consists of high doses of glucocorticoids and hydroxychloroquine after urgent pericardial fluid withdrawal. Generally, a favorable result was noted. The evolution to constriction is extremely rare.

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