

An Unusual Presentation of Tuberculous Pericardial Effusion

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Abstract

Tuberculosis accounts for upto 4% of acute pericarditis and 7% cases of cardiac tamponade. 19% of women with tuberculosis can present with menorrhagia. Prompt treatment can be life saving but requires accurate diagnosis. We report a case of 25-year-old women who presented with severe bleeding per vaginum for four days. She was in shock. Echocardiography showed moderate pericardial effusion with features of cardiac tamponade. ADA was positive in aspirated pericardial fluid. The patient responded well to antitubercular treatment.

Keywords: Tuberculosis, pericardial effusion, menorrhagia.

INTRODUCTION

India accounts for nearly 30% of the global tuberculosis cases.¹ Tuberculosis accounts for upto 4% of acute pericarditis and 7% cases of cardiac tamponade² 19% of women with tuberculosis can present with menorrhagia and 43 to 74% women can be infertile.³ We report an unusual case of tuberculous pericardial effusion presenting as menorrhagia.

CASE REPORT

A 25 years old nulligravida, married for six years came to our out patient department on 8/5/09 with complaints of severe bleeding per vaginum for four days. There was no history of fever, breathlessness, cough with expectoration. Her previous menstrual cycles were also heavy. On examination, she was in shock, P/R-110/minute, BP(systolic)-80 mm Hg, R/R-20/minute pallor-severe, anemic. On systemic examination, chest-bilateral clear, CVS-muffled heart sound, cardiac apex not localized. On abdominal examination there was no organomegaly. On per speculum examination-cervix and vagina healthy, heavy bleeding through os was present. On vaginal examination-uterus was normal in size, Both lateral fornices were clear. Injection tranexamic acid (hemostatic) 500 mg IV \times 6 hourly was given for 24 hours, dopamine infusion was started at 10 μ gm/kg/minute. Two units of blood were transfused. Laboratory

investigation - Chest X-ray (PA view)- massive cardiomegaly with normal lung field (Fig. 1). ECG- normal axis with diffuse low voltage complexes (Fig. 2). Echocardiography showed moderate pericardial effusion with features of cardiac tamponade (Fig. 3). Immediate pericardiocentesis was performed and around 300 ml

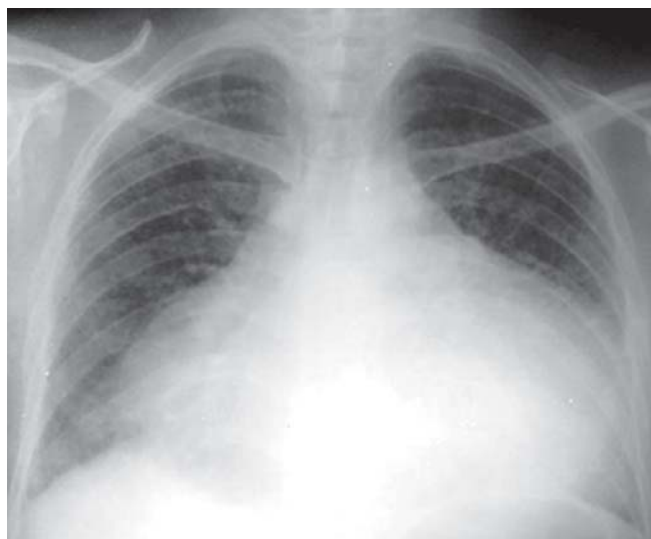


Fig. 1: X-ray chest (PA view) – Massive cardiomegaly with normal lung field



Fig. 2: ECG – Normal axis with diffuse low voltage complexes

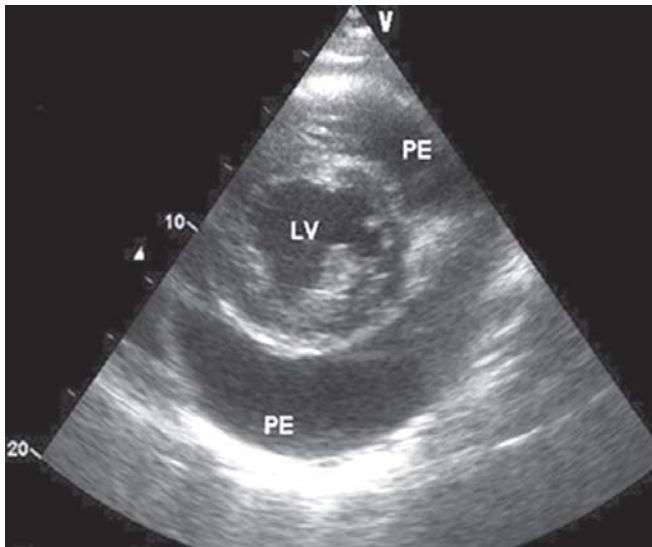


Fig. 3: Echocardiography – Moderate pericardial effusion with features of cardiac tamponade

of fluid was drained and sent for biochemical and cytological examination. Pericardial fluid examination showed, protein-2.5 gm/dl, TLC -250 cells/cmm, lymphocytes-75%, polymorphs-25%, gram and acid fast staining - negative, ADA(adenosine

deaminase)- positive. On basis of these findings, ATT was started. Patient responded well to therapy and was discharged in good condition.

DISCUSSION

Tuberculous pericarditis is the most common cause of pericarditis in Africa and other countries where tuberculosis remains a major problem.⁴ The incidence of tuberculous pericarditis is increasing with the advent of AIDS pandemic. The mortality of tuberculosis still ranges from 14-40%. Tuberculous pericarditis is potentially a lethal condition. Diagnosis of tuberculous pericardial disease is often very difficult.⁵ A definitive diagnosis is made by isolating the organism from pericardial fluid or biopsy. Measurement of ADA, an enzyme produced by white blood cells in pericardial fluid, was the first modern test to markedly improve the accuracy and speed of diagnosis of tuberculous pericarditis with sensitivity and specificity more than 90%.⁴⁻⁶ Cardiac tamponade may present as a complication of pericardial effusion.⁴ Prompt diagnosis and treatment is the key to survival with cardiac tamponade. Pericardiocentesis is life saving procedure.

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