

Tuberculous Pleuritis- A Mimicker of Postoperative Chest Pain in Puerperium

Rugaatwa EN

St. Francis Hospital Nsambya, Kampala, Uganda. Email: eliasndibarema@gmail.com

Abstract

Background: Tuberculosis (TB) is still one of the leading causes of morbidity and mortality globally. In 2022 alone 10.6 million people were infected with TB and 1.3 million died. Tuberculous pleuritis or pleurisy (TBP) is the second most common form of extra-pulmonary tuberculosis. It affects the pleura, in both immunocompetent and immunocompromised persons in as high as 25% of TB. Isolation of mycobacterium tuberculosis (MTB) in TBP is a challenge due to lack of thoracoscopy services, paucibacillary nature of effusion and lack of sputum (since the cough is usually non-productive). Adenosine Deaminase (ADA) test on pleural fluid has become famous in diagnosis of TBP, more so in patients with exudative and lymphocytic pleural effusion in high TB endemic areas.

Case report: We received a 28-year-old woman, HIV-seronegative with persistent right sided pleuritic chest pain for 2 months postpartum. She was managed as "post caesarean-section pain" without improvement. The pain was progressive, associated with evening fevers, lost appetite, and occasional difficulty in breathing while lying down and/or sleeping.

Chest exam: Stony dullness and reduced air entry in the right subscapular and basal lung zones. A diagnosis of right pleural effusion confirmed on chest radiography was made. Diagnostic thoracentesis and fluid ZN stain, Gene expert, Gram-stain, culture were negative for MTB. Fluid cytology revealed scattered lymphocytes and polymorphs on a serous background. Pleural fluid ADA test result was 58.6 U/L (Biological Reference Interval 0-40). TB chemotherapy was given for 6 months with complete clinical and radiological recovery. A differential of TBP should be considered and investigated in puerperium in mothers with persistent pleuritic chest pain. Pleural fluid ADA test can be employed in the diagnostic pathway especially in resource limited settings with no thoracoscopy/pleuroscopy services.

Conclusion: More research on disease burden and diagnostic accuracy of ADA test in this patient population is recommended.

Key words: Tuberculous pleuritis, Chest pain, Puerperium