CASE REPORT

AFB IN EXTRA-PULMONARY TUBERCULOSIS
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ABSTRACT: Detection of Acid Fast Bacilli in extra-pulmonary tuberculosis is rare. Diagnosis of tubercular pleural effusion is based on pleural fluid analysis: protein levels (high), LDH (high), cell type (predominant lymphocytes) and rarely AFB in Ziehl-Neelsen stain. Here we report a case of pleural effusion with plenty of Acid Fast Bacilli on Ziehl-Neelsen stain.

KEYWORDS: Pleural effusion, tuberculosis, Acid-fast bacilli, Ziehl-Neelsen stain.

INTRODUCTION: Tuberculosis being a common communicable disease in tropical country like India. Tubercular pleural effusion being most common exudative pleural effusion in India, in contrast to West where malignant pleural effusion is more common.

However, disease most often remain undiagnosed and even worse; untreated. The fact that extra pulmonary specimens yield very few bacilli and consequently are associated with low sensitivity Acid Fast Bacilli smear which makes the diagnosis even more difficult.

DESCRIPTION: A 30 year male patient presented with history of fever on and off since 6 months, right-sided pleuritic chest pain since 6 months and loss of weight since 6 months. No history of cough, breathlessness, abdominal pain, vomiting. No history suggestive of tuberculosis in past.

Physical examination poorly built and nourished. BMI- 14.8kg/m². Febrile on presentation. Pulse-86 beats/min. Blood pressure - 110/70 mm Hg. No lymph nodes.

Respiratory system- Right infra axillary, infrascapular region movements decreased. Stony dull note on percussion in same area. Vocal resonance- decreased.

Cardiovascular system- S1, S2 normal, no murmur.
Abdominal examination- soft, non-tender, no organomegaly.

Central nervous system- no focal neurological deficit.

INVESTIGATION: A postero-anterior Chest roentgenogram showed right sided moderate pleural effusion. Hb-13.4 gm%. ESR- 44mm at the end of one hour.

Diagnostic thoracocentesis: Pleural fluid analysis- Cell count- 1750/ mm³, Type- All lymphocytes. Acid Fast Bacilli positive on Ziehl-Neelsen stain. Gram stain is negative. Protein-5.7gm/dl. Sugar-87mg/dl. ADA-50.3 IU/L.

Tubercular pleural effusion diagnosed and started on Anti-Tubercular treatment.
Follow up examination revealed resolution of symptoms.
CONCLUSION: With careful examination of Ziehl-Neelsen stain of pleural fluid we can confirm the diagnosis of tubercular effusion and continue with treatment. Pleural biopsy examination along with pleural fluid analysis for AFB can yield more positive result.

Competing interests: none.
Patient consent: obtained.

REFERENCES:
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