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Nontyphoidal Salmonella Bacteraemia Presenting with Respiratory Failure, Pulmonary Embolism and Mediastinal Lymphadenopathy in a Patient with Post-Tuberculosis Bronchiectasis

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INTRODUCTION

- Non typhoidal salmonella (NTS) bacteraemia¹ usually present in immunocompromised patients.
- **Pulmonary involvement is rare**, and most often reported as lung abscesses^{2,3}.
- We report a case of NTS bacteraemia in a **post-TB bronchiectasis** patient without GI symptoms.

CASE PRESENTATION

Background: 65M, treated pulmonary TB 20 years ago → post-TB bronchiectasis

Symptoms: Cough and dyspnea × 2 days

Examination: Not cachexic, no palpable nodes, no hepatosplenomegaly

ABG: Type 2 respiratory failure

Initial Management: Non-invasive ventilation + oxygen support → weaned off ventilation but remained oxygen dependent

INVESTIGATION/IMAGING

- Blood culture: **NTS positive** (sensitive to ampicillin, ceftriaxone, cotrimoxazole)
- Stool, TB, viral screening: negative
- USG abdomen: No collection
- Imaging showed bilateral fibrotic lung changes (Fig 1), pericardial effusion (Fig 2), and pulmonary embolism with mediastinal lymphadenopathy (Fig 3–4).

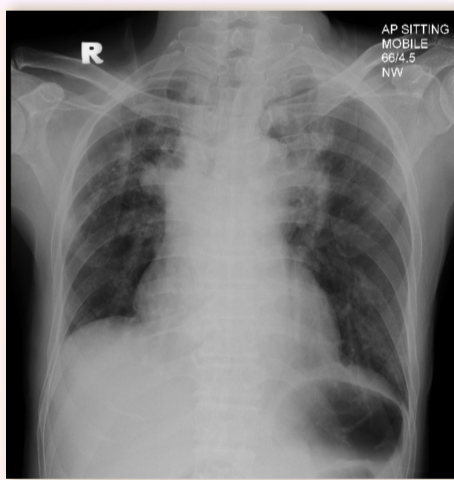


Figure 1. Bilateral upper zone fibrotic changes with patchy infiltrates.



Figure 2. Loculated pericardial effusion (0.9cm) over left ventricle inferior wall



Figure 3. Bilateral pulmonary embolism in the segmental and subsegmental pulmonary arteries (circled)



Figure 4. Right upper middle mediastinal soft tissue lesions measuring 2.6 x 2.4 x 2.9cm (circled)

MANAGEMENT

Blood culture: NTS positive

Intravenous ceftriaxone x 14 days

Oral amoxicillin x 3 months

Persistent hypoxia → CTPA

Pulmonary embolism detected → anticoagulation

Mediastinal nodes non-biopsiable → CT reassessment

Multidisciplinary team (MDT) approach

DISCUSSION

- Unusual presentation:** NTS bacteraemia can manifest without gastrointestinal symptoms.
- Diagnostic challenge:** Mimics tuberculosis or malignancy in endemic regions.
- Management challenge:** Limited diagnostics, prolonged therapy.
- Teaching point:** Always consider NTS in patients with structural lung disease; MDT approach is essential.

CONCLUSION

- NTS bacteraemia may present as pulmonary disease without GI symptoms.
- In TB-endemic areas, early recognition, prolonged antibiotics, anticoagulation, and multidisciplinary care are essential.

REFERENCES

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“NTS bacteraemia may present with rare pulmonary complications in TB-endemic regions — early recognition and coordinated management are crucial.”