



UNVEILING THE SILENT INVADER: A CASE OF ABDOMINAL TUBERCULOSIS IN A MALNOURISHED MALE

Dr. B. Santhi

DGOMS, Director, Institute Of General Surgery

Dr. Seethalakshmy. S

Post Graduate (Final Year) MS General Surgery

ABSTRACT

Abdominal tuberculosis is a rare extrapulmonary manifestation often challenging to diagnose. We present a 50-year-old malnourished male with progressive abdominal distension, weight loss, and fever. Imaging and ascitic fluid analysis suggested tuberculosis but were inconclusive. Diagnostic laparotomy revealed peritoneal tubercles and omental thickening, confirmed as tuberculosis by histopathology. The patient was treated with anti-tubercular therapy and nutritional support, leading to recovery. This case emphasizes the importance of early suspicion, surgical intervention, and timely treatment for favorable outcomes.

KEYWORDS :

CASE REPORT

Abdominal Tuberculosis in a 50-Year-Old Male

Patient Demographics:

A 50-year-old male, thin and malnourished, presented with complaints of progressive abdominal distension. He had a significant history of chronic smoking, alcohol use, and prior pulmonary tuberculosis treated with anti-tubercular therapy (ATT).

Chief Complaints:

- Abdominal distension for 2 months.
- Significant weight loss (~8 kg over 6 months) and loss of appetite.
- Low-grade fever, intermittent in nature.

Past Medical History:

- Chronic cough for 6 months, diagnosed as pulmonary tuberculosis 8 months ago.
- Completed a full 6-month course of ATT.

Social History:

- Smoker (20 pack-years).
- Chronic alcoholic for over 20 years.
- General Examination:
- Thin and malnourished with visible temporal wasting.
- Pallor present; no jaundice or peripheral lymphadenopathy.
- Abdominal Examination:
- Abdominal distension with visible veins and shifting dullness, suggestive of ascites.
- Mild tenderness diffusely; no guarding or rigidity.
- No organomegaly.

Laboratory Findings:

- Hemoglobin: 8.6 g/dL.
- ESR: 50 mm/hr.
- Serum albumin: 2.5 g/dL.
- Ascitic fluid analysis:
- Exudative fluid with high protein (>2.5 g/dL).
- Lymphocytic predominance (>80%).
- Adenosine deaminase (ADA): Elevated (>40 IU/L) [1].
- Acid-fast bacilli (AFB) smear: Negative.

Imaging Studies:

Ultrasound Abdomen:

- Moderate ascites with thickened peritoneum.
- Omental thickening and mesenteric lymphadenopathy.

CT Abdomen and Pelvis:

- Peritoneal thickening with multiple nodules.

- Omental caking and mesenteric lymphadenopathy with necrotic centers.
- Thickened ileocaecal junction.



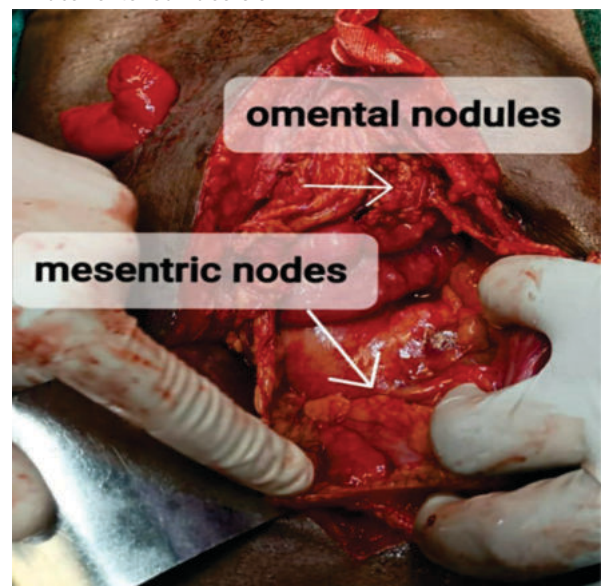
Surgical Intervention:

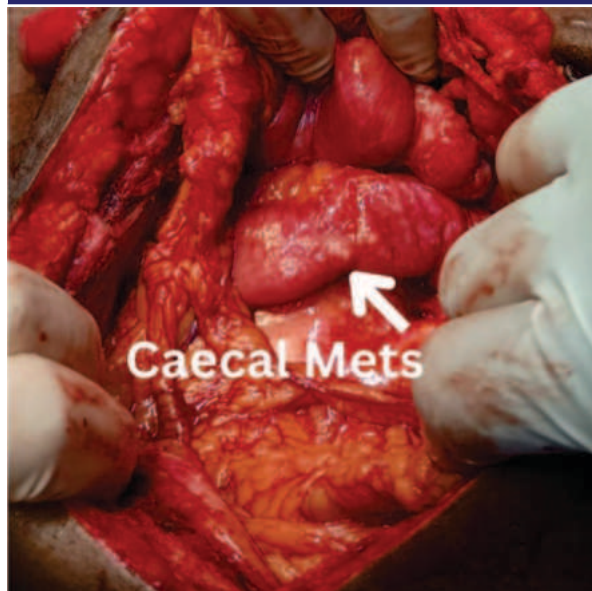
Procedure:

A diagnostic laparotomy was performed due to persistent symptoms and inconclusive non-invasive investigations.

Intraoperative Findings:

Diffuse Peritoneal Tubercle





Enlarged omental and mesenteric lymph nodes.
Thickened omentum and ascites.

Surgical Steps:

1. Peritoneal Tubercles: Biopsied.
2. Omental and Mesenteric Nodes: Excised and sent for histopathological examination (HPE).
3. Abdominal cavity was irrigated, and the incision was closed.

Postoperative Course:

Recovery was uneventful.

ATT re-initiated with a standard four-drug regimen (Rifampicin, Isoniazid, Pyrazinamide, Ethambutol).

Nutritional supplementation initiated to address malnourishment.

Histopathological Findings

- Caseating granulomas with epithelioid cells and Langhans giant cells, confirming tubercular etiology [2].
- No evidence of malignancy.

Diagnosis

Abdominal Tuberculosis involving the peritoneum, omentum, and mesenteric lymph nodes.

DISCUSSION

Abdominal tuberculosis is a common extrapulmonary manifestation of tuberculosis, particularly in endemic regions and high-risk populations like malnourished or immunosuppressed individuals [3].

Pathophysiology:

It occurs due to hematogenous spread, lymphatic dissemination, or direct extension from pulmonary TB.

Diagnostic Challenges:

- Ascitic fluid analysis and ADA levels are suggestive but not confirmatory.
- Laparoscopy or laparotomy remains the gold standard for diagnosis in complex cases [4].

Management

A full course of ATT is the cornerstone of treatment.

Surgery is reserved for diagnostic uncertainty, complications (obstruction or perforation), or lack of response to medical therapy [5].

CONCLUSION

This case underscores the importance of early suspicion and surgical intervention in diagnosing and managing abdominal tuberculosis. With timely initiation of ATT and nutritional rehabilitation, the prognosis is favorable.

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