

Extrapulmonary Tuberculosis Mimicking Ovarian Malignancy: A Diagnostic Challenge

Dr. Shenendhra Selvaraj

Post Graduate, Department of obstetrics and gynaecology, Sri Ramachandra medical college, Chennai.
shenendhraselvaraj98@gmail.com

ABSTRACT

Tuberculosis is a significant global health issue, affecting around 133 per 1 lakh people (2022). The global incidence rate increased by 3.6% from 2020 to 2021, reversing a previous trend of about 2% annual reduction over the last two decades. Genital TB usually arises from lymphohematogenous dissemination from pelvic lymph nodes, initially involving the outer surface of the ovaries. Isolated primary ovarian TB is a very rare form of GTB.

Ovarian cancer, frequently referred to as the “silent killer,” is among the leading causes of gynecological cancer-related deaths globally, due to subtle and non-specific symptoms that can mimic abdominal TB..

KEYWORDS: Case Presentation, Diagnostic Workup.

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INTRODUCTION

Tuberculosis is a significant global health issue, affecting around 133 per 1 lakh people (2022). The global incidence rate increased by 3.6% from 2020 to 2021, reversing a previous trend of about 2% annual reduction over the last two decades. Genital TB usually arises from lymphohematogenous dissemination from pelvic lymph nodes, initially involving the outer surface of the ovaries. Isolated primary ovarian TB is a very rare form of GTB.

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CASE PRESENTATION

A 46-year-old woman, para 3 live 3, postmenopausal for 3 years, presented with abdominal distension for 10 days and alternating constipation and loose stools for 1 week.

Symptoms included progressive abdominal distension, shortness of breath (NYHA II), with no weight loss, appetite loss, or fever. Past history: No known comorbidities.

Examination: Distended, tense abdomen with ascites; pelvic exams unremarkable.

DIAGNOSTIC WORKUP

Ultrasound revealed a multiloculated right adnexal cyst measuring $14.5 \times 13.6 \times 15.4$ cm.

Ascitic fluid cytology: negative for malignant cells; showed chronic inflammatory features.

Omental biopsy: necrotizing granulomatous inflammation; AFB, GeneXpert, fungal stains negative.

Axillary lymph node FNAC: granulomatous lymphadenitis.

Serum ACE normal (62 U/L), ruling out sarcoidosis.

With clinicopathological correlation supporting extrapulmonary TB, four-drug ATT was initiated.

CA-125 decreased to 225 U/mL after 2 months, indicating clinical response.

DISCUSSION

Extrapulmonary TB can closely resemble ovarian malignancy in clinical and radiologic appearance. Genitourinary TB is the second most common EPTB form.

Isolated ovarian TB is rare but must be considered in differential diagnosis, especially in TB-endemic regions. CA-125 may be elevated in ovarian TB and declines with treatment.

Differential diagnoses: PID, ectopic pregnancy, endometriosis, ovarian malignancy, colorectal malignancy, diverticulitis.

Treatment follows pulmonary TB protocols: 2 months HRZE + 4 months HRE.

Drug-resistant TB requires longer regimens (9–20 months).

CONCLUSION

Primary ovarian TB, though uncommon, can mimic ovarian malignancy. Strong clinical suspicion, histopathological confirmation, and timely ATT can prevent unnecessary radical surgery.

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