

# A wolf in sheep's clothing: Pelvic tuberculosis masquerading as ovarian malignancy

**Mazlina Manaf, Sharlinirosha Sugumaran, Nurul Ain Roslan, Pang Suk Chin**

Department of Obstetrics and Gynaecology, Hospital Kulim, Kedah

## **ABSTRACT**

**Introduction:** Miliary tuberculosis (TB) is a rare form of disseminated TB that can present with nonspecific symptoms. Extra-pulmonary TB involving the female pelvis is uncommon but may closely mimic ovarian malignancy, especially when associated with complex cystic masses and elevated tumour markers like CA-125. **Case Description:** A 27-year-old woman, Para 0+1, presented with one week of per vaginal (PV) staining. Abdominal examination revealed no palpable masses. Trans-vaginal ultrasound (TVS) showed a normal-sized uterus (5.8 × 4.3 cm) with a thin endometrial lining. A large, multiloculated cystic mass with solid areas and ground-glass appearance was seen in the pouch of Douglas, measuring 10 × 5.3 cm. Tumour markers revealed CEA 1.9 ng/mL, CA-125 markedly elevated at 738.3 U/mL, and CA 19-9 at 25.3 U/mL. Due to suspicion of ovarian malignancy, contrast-enhanced CT (CECT) of the thorax, abdomen, and pelvis was performed. It revealed findings consistent with miliary TB: pulmonary involvement, cervical and abdominopelvic lymphadenopathy, TB peritonitis, hepatic lesions, and a tubo-ovarian abscess. The patient was referred to the chest medical team and commenced on anti-TB therapy. Follow-up imaging after one month showed a reduction in the pelvic mass size to 4.2 × 5.3 cm. **Discussion:** This case highlights the diagnostic challenge of pelvic TB mimicking ovarian cancer. Elevated CA-125 and complex cystic masses may mislead clinicians. Early imaging and multidisciplinary collaboration are essential for accurate diagnosis and management.