

Case Report:

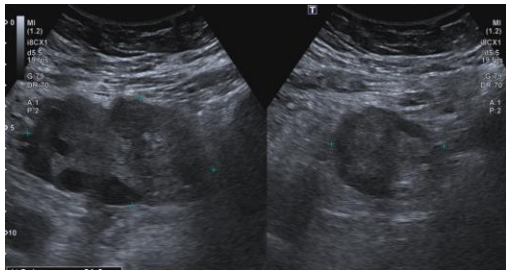
Transient Elevation of CA 125 and CA 19.9 in Ovarian Torsion

Background

Tumour markers such as CA 125 and CA 19.9 are primarily used in evaluating ovarian malignancies. However, they can also be elevated in benign gynaecological conditions.

Aims

We present a case of transiently elevated CA 125 and CA 19.9 in a patient with acute ovarian torsion.



Initial ultrasound reported as complex left ovarian mass ?neoplasm

Case

A 43-year-old premenopausal woman presented to the emergency department with severe left iliac fossa pain. She had a history of chronic pelvic pain post-endometrial ablation, five caesarean sections and previous LLETZ.

- Pelvic ultrasound: Enlarged uterus with fluid and debris in the endometrial cavity. A complex and cystic mass involving the left ovary suspicious for neoplasm.
- CT abdomen/pelvis: Bulky, heterogeneous uterus with an intrauterine collection ?hydrometra. No other abnormalities

Given her ongoing significant pain, decision was made for an exploratory laparoscopy that showed a left ovary and tube that appeared oedematous and necrotic, with active bleeding. A left sided salpingectomy and oophorectomy were performed, and the patient was discharged next day after an uncomplicated recovery. After discharge, her tumour markers returned as elevated and were monitored until normalised:

- Day 1: CA 125: 772 U/mL, CA 19.9: 570 U/mL
- Day 8: CA 125: 215 U/mL, CA 19.9: 82 U/mL
- Day 14: CA 125: 106 U/mL, CA 19.9: 32 U/mL

Histopathology showed haemorrhagic infarction of the left ovary and tube, no malignancy.

Results

Significant but transient elevation of CA 125 and CA 19.9.

No histopathological evidence of malignancy.

Discussion

This case highlights the inflammatory response associated with ovarian ischemia and infarction as a cause of elevated CA 125 and CA 19.9. While primarily used in malignancy identification and evaluation, these tumour markers can also rise in cases of ovarian torsion, endometriosis, PID, post-surgical inflammation.

CA 125 is known to rise in various gynaecological conditions such as ovarian torsion, though the biochemical mechanisms remain unclear. Limited case studies suggest that elevated CA 19.9 may correlate with the degree of ischemic injury. Perioperative assessment of tumour markers may aid in assessing the inflammatory processes associated with ovarian torsion. Further research is needed to better understand these associations.

CA 125 and CA 19.9 can be elevated in benign gynaecological conditions, including ovarian torsion.
Histopathology remains the gold standard for ruling out malignancy.