

# Ovarian Torsion: A Blessing in Disguise

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## Teaching Points

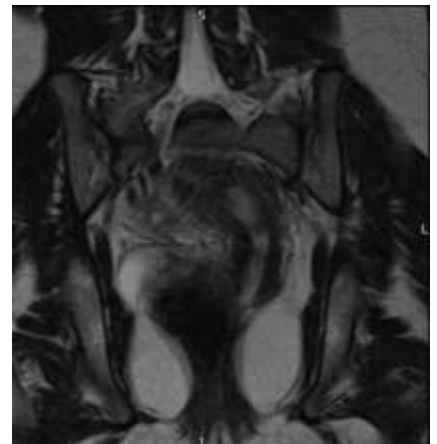
- The estimated incidence of ovarian torsion in children is 4.9 in 100,000 (1). The rate of malignancy in patients with ovarian torsion is only 1.8% (2).
- Our case is unique for being a child presented with left ovarian torsion which was found to harbour a mixed germ cell tumour.
- Our case also offers a chance to increase the awareness of the less-known features of adnexal torsion.

## Case outline

- A 13-year-old girl presented to the A&E with acute lower abdominal pain and tenderness (?appendicitis)
- Pelvic US revealed a large heterogenous mass, likely adnexal
- Pregnancy test was positive
- WBC: 13.4, CRP: 12, Na: 130

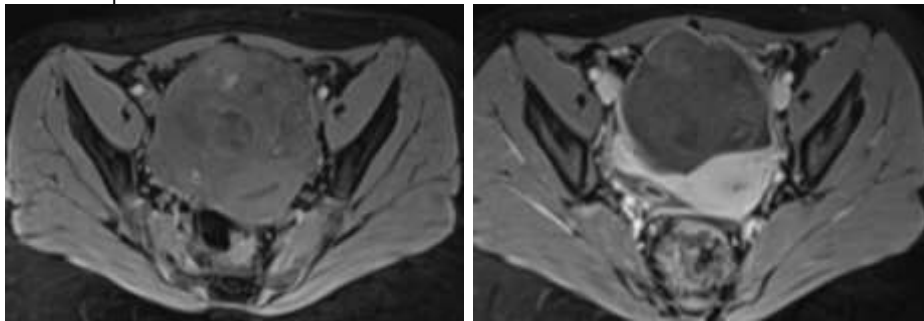
MRI was done. Uncommon signs raised the concern of left ovarian torsion:

- A large **'strikingly' non-enhancing** centrally located left ovary with internal **foci of subacute haemorrhage**
- **left-ward uterine deviation**
- **A beak-like protrusion** projecting from the corresponding side of the ovarian mass



However, the commonly reported MRI features of torsion were absent in this case (3):

- The classic 'string of pearls' sign couldn't be depicted due to distorted parenchyma
- The well-known specific 'whirlpool' sign was absent
- No pelvic collection



- Laparotomy and left oophorectomy were performed. Adnexal torsion was confirmed intraoperatively.
- Histopathological examination showed necrotic mixed germ cell tumour on background of choriocarcinoma. No vascular or lymphatic invasion nor distal metastasis, staged 1A.

In our case ovarian torsion was a blessing; it killed the tumour and triggered the investigations. Had it not occurred, the patient would have been diagnosed later, may be after metastasis.

1. Guthrie, B.D., Adler, M.D. and Powell, E.C. (2010). Incidence and Trends of Pediatric Ovarian Torsion Hospitalizations in the United States, 2000-2006. *PEDIATRICS*, 125(3), pp.532–538.
2. Oltmann, S.C., Fischer, A., Barber, R., Huang, R., Hicks, B. and Garcia, N. (2010). Pediatric ovarian malignancy presenting as ovarian torsion: incidence and relevance. *Journal of Pediatric Surgery*, 45(1), pp.135–139.
3. Dawood, M.T., Naik, M., Bharwani, N., Sudderuddin, S.A., Rockall, A.G. and Stewart, V.R. (2021). Adnexal Torsion: Review of Radiologic Appearances. *Radiographics: A Review Publication of the Radiological Society of North America, Inc.* [online] 41(2), pp.609–624.