

## Case report

## Picture-story

**Tragically, massive ovarian oedema mimics malignancy**A D Tilakaratna<sup>1</sup>, M P Kumarasinghe<sup>2</sup> and C Randeniya<sup>3</sup>

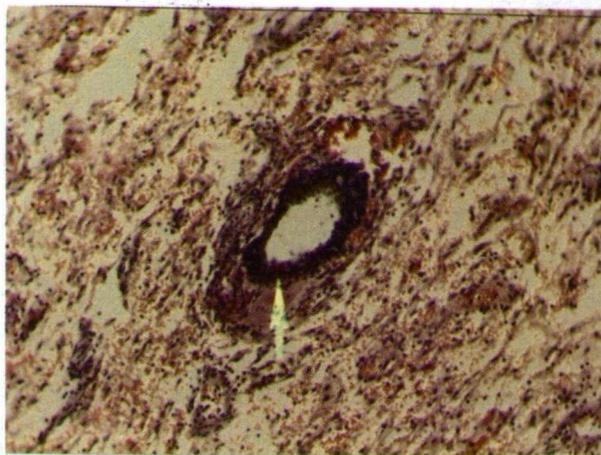
(Index words: Histology, macroscopic appearance)

An 11-year old girl, who had undergone left oophorectomy 2 years previously, was admitted to hospital with abdominal pain and fever of 2 days' duration. She had attained menarche 3 months previously. An abdominal mass with ascites detected on examination corresponded to a massive haemorrhagic right ovarian mass at surgery. Abdominal hysterectomy, right salpingo-oophorectomy and omentectomy were performed in keeping with the clinical impression of malignancy. The specimen comprised a haemorrhagic ovarian mass 150 × 55 × 60 mm (Figure 1), oedematous fallopian tube, normal uterus and omentum. Histology was of massive ovarian oedema (MOO), with diffuse stromal haemorrhage, oedema, congestion, focal infarction and an occasional normal follicular derivative (Figure 2). Review of the left ovarian lesion confirmed a haemorrhagic cyst 75 × 50 × 30 mm, consisting of haemorrhagic congested ovarian tissue.

MOO typically affects young women and girls (mean age 21; range 6 to 37), and is an uncommon non-neoplastic tumour-like enlargement of one, or occasionally, both ovaries due to oedema (1). Pathogenesis is thought to be intermittent torsion of the ovary on its pedicle causing partial obstruction of venous and lymphatic drainage (1).



**Figure 1.** Cut surface of the haemorrhagic ovarian mass.



**Figure 2.** A normal follicular derivative (arrow) amidst stromal oedema and haemorrhage (H and E × 100)

Ascites is rare (1,2). Diffuse involvement of the ovary, presence of follicular derivatives (1), and absence of pleomorphic or signet ring cells distinguishes it from neoplasia on histology. The haemorrhagic left ovarian cyst in this case may represent bilateral MOO.

Although most cases are mistaken for neoplasia and treated by oophorectomy, MOO should be managed conservatively, following intra-operative frozen section of a wedge biopsy, especially if the patient is young (1,3). Awareness of this entity may prevent unnecessary radical surgery.

**Acknowledgement**

We thank Dr Manella Joseph for providing the histology of previous surgery for review.

**References**

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