Adolescent haematopyocolpos simulating appendicular abscess

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DESCRIPTION

A 13-year-old girl presented with 4 days of lower abdominal pain, vomiting and fever. On examination, she had a tender mass in the lower abdomen and normal secondary sex characteristics. She had not started menstruation. Perineal examination by mother, nurse or female doctor was refused. White cell count was $20.3 \times 10^9/L$, neutrophils $17.1 \times 10^9/L$ and C reactive protein 287 mg/L. She was diagnosed acute appendicitis with pelvic abscess and was booked for laparoscopic appendectomy. On her way to operation theatre she had transabdominal ultrasonography which revealed an echogenic mass in the pelvis with vaginal gross dilation measuring about 11.5×6.5 cm (figure 1). Examination under anaesthesia and pelvic ultrasound diagnosed a flat non-bulging imperforate hymen (4 mm thickness) with haematopyocolpos. Aspiration revealed pus with old blood. The hymenoplasty was performed surgically and a large quantity of pus mixed with old menstrual blood was drained from the vagina and uterus. Postoperative recovery was uneventful. Pus grew *Escherichia coli*. She had regular menstruation at 6-month follow-up. An imperforate hymen occurs in 0.05% of women.¹ First presentation with haematopyocolpos is very rare. It is important to be aware of this while examining a female adolescent presenting with acute abdomen and primary amenorrhoea. Late discovery of an imperforate hymen may lead to pain, infections, urinary retention, hydronephrosis and endometriosis with subfertility as a possible consequence.^{2,3} If an adolescent girl refuses perineal examination, an ultrasound scan

must be considered as an extended clinical examination before any anaesthetic or interventional procedures are carried out.

Learning points

- ▶ Imperforate hymen with haematopyocolpos is a rare complication of a congenital anomaly.
- ▶ Menarche and menstrual history and perineal examination are key clinical indicators.
- ▶ Pelvic ultrasound should be considered as an extended clinical examination if patient refuses clinical examination.

Contributors All authors have actively participated in patient management and in preparation, collection, analysis and interpretation of the data and manuscript.

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Longitudinal Midline View

Transverse View

Figure 1 (A and B) Pelvic ultrasound longitudinal and transverse scan views showing dilated vagina filled with echogenic blood and pus.

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