Supralevator Haematoma following Spontaneous Vaginal Delivery

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Background

- Supralevator haematomas following spontaneous vaginal delivery are rare, occurring in 1:20,000 births.
- Risk factors include **nulliparity**, **operative vaginal delivery**, **multiple gestation**, **prolonged second stage**, **fetal macrosomia**, **vulvar and pelvic varicosities**, **hereditary clotting deficiencies**
- In this case we demonstrate the use of arterial embolisation to treat an expanding supralevator haematoma.

Case

- **27-year-old Gravida 1, Para 0**, at **40+6** had an **uncomplicated spontaneous vaginal delivery** with an estimated blood loss of 150ml, with a small vaginal tear not actively bleeding, that was not repaired.
- One hour later, the patient was unable to pass urine and complained of severe pain.
- Examination under anaesthesia revealed a small non-expanding left-sided supralevator haematoma, which was conservatively managed, and a 3cm right labial haematoma which was incised and drained. Intraoperative blood loss was 150ml.
- Post-operatively, the patient appeared pale and complained of increasing abdominal and rectal pain.
- Examination revealed a deviated uterine fundus, oedematous vulva, with minimal per vaginal bleeding.
- Blood tests revealed a haemoglobin decrease from 157 to 118g/L.
- The patient underwent a triphasic computed tomography scan which revealed a **9x10x10cm pelvic haematoma with active haemorrhage** at the proximal vagina, and a moderately extensive retroperitoneal haematoma.
- The patient underwent **empiric embolisation** of the anterior branch vessels of the internal iliac arteries bilaterally and was transfused two units of packed red blood cells.
- The remainder of the clinical course was uneventful.
- At follow-up, four months later the haematoma has reduced to 5x4x4cm on ultrasound scan.

Take Home Messages

- Supralevator haematoma is an important differential for the acutely deteriorating postpartum patient, complaining of severe pain without obvious per vaginal bleeding.
- Arterial embolization is a safe alternative to surgical management
- Long term follow-up is required to ensure no complications from embolisation



Figure 1: Triphasic CT demonstrating 9x10x10cm supralevator haematoma

References

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