PV bleeding in early pregnancy

Jun 8, 2015 | 0 | o&g,onthepods

James talks to Dr Neil Campbell about PV bleeding in early pregnancy.

Summary Writer: Jessica Tong

Editor: James Edwards

Interviewee: Neil Campbell

About Dr Neil Campbell

Neil is a part-time Staff Specialist at Royal Prince Alfred Hospital and Visiting Medical Officer at the Mater hospital and North Shore Private Hospital in Sydney. He practices both Obstetrics and Gynaecology but completed a two-year additional Fellowship in minimally invasive Gynaecological surgery. Neil is involved with a number of clinics at Royal Prince Alfred Hospital including the Early Pregnancy service and also runs the Abnormal Uterine Bleeding clinic specialising in the management of menstrual disorders and fibroids.

Per vaginal (PV) bleeding in early pregnancy

With Dr Neil Campbell, Staff Specialist in Obstetrics & Gynaecology at Royal Prince Alfred Hospital, New South Wales, Australia.

Case

A 30-year-old woman presents to the ED 6 weeks gestation with PV bleeding.

1. As a junior doctor, what is your initial approach?

If haemodynamically unstable, move the patient to the resuscitation bay, stabilise and implement resuscitative measures. Get IV access and order bloods including group & hold ± cross-match, FBC, β-hCG, progesterone.
If haemodynamically stable, take a thorough history and perform a clinical examination, before ordering relevant investigations and contacting the appropriate personnel.

2. What are the differential diagnoses for PV bleeding in early pregnancy?

- Threatened miscarriage (acute, minimal bleeding, no pain)
- Inevitable miscarriage

- Incomplete miscarriage (heavy bleeding, cramping)
- Missed miscarriage
- Ectopic pregnancy
- Ovarian pathology – cyst rupture, torsion
- Appendicitis

3. Assuming the patient is stable, what would your approach be?

- **History**
    - Ask about the following:
        - Severity of pain
        - Amount and duration of bleeding
        - Risk factors for ectopic pregnancy – previous ectopic, pelvic inflammatory disease, endometriosis
- **Examination**
    - Vitals
    - General cardiovascular + respiratory examination
    - Abdominal palpation – lookingfor signs of unilateral peritonism ± shoulder tip pain secondary to diaphragmatic irritation
    - Clinical inspection of vulva and vagina – quantify bleeding, and check for any products of conception (POC)
    - Speculum examination – quantify bleeding, check cervical os status (open or closed) and the presence of POC near the os, or in the vagina
    - Bimanual examination – estimate the size of uterus, and localize area of tenderness

*If uncertain with performing a speculum examination, it would be advisable to ask a more senior medical officer to supervise.

- **Investigations**
    - FBC
    - Progesterone – a helpful marker when history and clinical examination yield an uncertain diagnosis. Two examples:
        - Low β-hCG, progesterone < 10 and empty uterus on ultrasound, indicates complete miscarriage. The patient can be discharged and followed up in a few days in the Early Pregnancy clinic.
        - β-hCG 800-1000, progesterone 20-60, indicates that an ectopic is more likely
    - Group & hold ± cross-match
        - Rhesus blood group must be collected in any scenario of PV bleeding
        - 20-30% of women are Rhesus-negative and require anti-D injections to prevent sensitization upon exposure to

Rhesus-positive fetal cells in the maternal circulation.

- If POC are obtained from the speculum examination, place in formalin and send to pathology. Rare risk of a partial or complete molar pregnancy.

4. Ultrasounds – when should you do it, and what is the difference between the transabdominal and transvaginal approach?

Ultrasound is a good initial screening tool when combined with a β-hCG level and clinical suspicion for an ectopic pregnancy.

- Transvaginal ultrasound is more sensitive for picking up a gestational sac, which should be visible if β-hCG> 1000.
- Transabdominal ultrasound can detect an 8-week embryo and fetal heartbeat.

5. Results return. The β-hCG is positive, but there is no gestational sac on transvaginal ultrasound. What are your differentials?

- **Complete miscarriage**
- Early pregnancy of uncertain viability
- Ectopic pregnancy, yet to be determined

6. What is your management?

- Complete miscarriage
  - Discharge and follow up β-hCGlevels in Early Pregnancy Clinic
- Early pregnancy of uncertain viability (stable), the options are:
  - If β-hCG< 1000,discharge and follow up in Early Pregnancy Clinic
  - Give Mifepristone for 48 hrs before commencing oral/buccal Misoprostol
  - Wait and see, with serial β-hCGlevels
- Early pregnancy of uncertain viability (unstable)
  - If β-hCG< 1000 and symptomatic with risk factors, contact O&G team for emergency dilatation & curettage
- If Rhesus-negative, give anti-D IMI 250U (< 12 weeks gestation) or 625U (> 12 weeks gestation)

- Counselling available in Early Pregnancy Clinic, liaise with midwives and social workers

Take home messages

- Always consider ectopic pregnancy!
- In any amount of PV bleeding in pregnancy, check the Rhesus-group.
- If uncertain about discharging a patient, escalate care.

Reference

- NSW Health Policy Directive. Maternity – Management of Early Pregnancy Complications. May, 2012.

Related Blogs

- A night in the life of an O&G registrar

Related Podcasts

- PV bleeding in the non-pregnant patient
- Common medical issues in the pregnant patient
- Obstetric Emergencies

Tags: #appendicitis,#cyst rupture,#ectopic pregnancy,#miscarriage,#obstetrics,#obstetrics and gynaecology,#ovarian pathology,#pregnancy,#pregnant patient,#PV bleeding,#PV bleeding in early pregnancy,#torsion,#ultrasound