Adult Emergency Nurse Protocol

Health
South Eastern Sydney
Local Health District

PV BLEEDING (< 20 weeks gestation) SESLHDPR/391

Aim:
- Early identification and treatment of life threatening causes of vaginal bleeding in women <20 weeks gestation, escalation of care for patients at risk.
- Early initiation of treatment / clinical care and symptom management within benchmark time.

Assessment Criteria: On assessment the patient should have a history of vaginal bleeding plus one or more of the following signs / symptoms:

- < 20 weeks gestation
- Positive urine / serum ßHCG
- Vaginal bleeding +/- clots
- Lower back pain
- Suprapubic pain
- Recent post-coital bleed

Escalation Criteria: Immediate life-threatening presentations that require escalation and referral to a Senior Medical Officer (SMO):

- **Meets Trauma Criteria**
- PV Loss >1pad / hour
- Hypotension or tachycardia
- Patients >20 weeks
- Passing large clots
- Loss of products of conception / fetus
- Severe abdominal pain / rigidity
- Referred pain - shoulder tip / back
- Collapse / Syncope

Primary Survey:
- Airway: patency
- Circulation: perfusion, BP, heart rate, temperature
- Breathing: resp rate, accessory muscle use, air entry, SpO_2.
- Disability: GCS, pupils, limb strength

Notify CNUM and SMO if any of following red flags is identified from Primary Survey and Between the Flags criteria (1).

- Airway - at risk
  - *Partial / full obstruction*
  - *Immobilise c-spine [as indicated]*
- Disability - decreased LOC
  - *GCS ≤ 14 or any fall in GCS by 2 points*
- Breathing - respiratory distress
  - *RR < 5 or >30 /min*
  - *SpO_2 < 90%*
- Exposure
  - *Temperature < 35.5°C or > 38.5°C*
  - *BGL < 4mmol/L or > 20mmol/L*
- Circulation - Shock / altered perfusion
  - *HR < 40bpm or > 140bpm*
  - *BP < 90mmHg or > 200 mmHg*
  - Postural drop > 20mmHg
  - *Capillary return > 2 sec*

History:
- Presenting complaint
- **A**llergies
- **M**edications: Contraception, Anticoagulant Therapy, Anti-hypertensives, Diabetic meds, Analgesics, Inhalers, Chemotherapy, Non-prescription meds, any recent change to meds.
- **P**ast medical past surgical history relevant: including past pregnancies /miscarriages or terminations, gynaecological history, intrauterine contraceptive devices (IUD) i.e. fibroids / endometriosis, STIs.
- **L**ast ate / drank and last menstrual period (LMP)
- **E**vents and environment leading to presentation: post-coital bleed / trauma / sexual assault
- Pain Assessment / Score: **PQRST** (Palliating/ provoking factors, Quality, Region/radiation, Severity, Time onset)
- Associated signs / symptoms: duration and volume of bleeding +/- clots, nausea / vomiting, diarrhoea, urinary symptoms, symptoms of pregnancy loss i.e. products of conception / fetus.
- History: family, trauma and travel - i.e. non-prescribed drug use, ETOH, smoking, domestic / family violence

Systems Assessment:

Focused abdominal / gynaecological assessment:
- *Inspection:* General appearance / colour (pallor), distension, bruising, discolouration. If able, assess amount of PV bleeding loss of clots or products of conception and movement of patient.
- *Auscultation:* Listen for presence/absence of bowel sounds and fetal heart sounds [as indicated]
- *Palpation:* Identify location of pain, unilateral right/left lower quadrant pain, any signs of peritonism i.e. guarding or rigidity, rebound tenderness.

Notify CNUM and Senior Medical Officer (SMO) if any of following red flags is identified from History or Systems Assessment. (2)

- Pallor and/or dizziness
- Large PV loss >1pad/hour
- Bruising to abdominal / pelvic region
- Hypotension
- Signs of trauma to abdomen
- Absent bowel sounds
- Severe abdominal pain
- Loss of products of conception / fetus
- Abdominal distension / rigidity
- Referred pain - shoulder tip / back
- Nausea / vomiting with pain
- Past hx of ectopic pregnancy

Investigations / Diagnostics:

Bedside:
- BGL: If < 3mmol/L or >20mmol/L notify SMO
- ECG: [as indicated] look for Arrhythmia

Laboratory / Radiology:
- **Pathology**: Refer to local nurse initiated **STOP** – FBC, UEC
  Blood Group and Antibody
  Quantitative ßHCG

• Urinalysis / MSU (if urinary symptoms) • Urine BHCG	Blood Cultures (if Temp >38.5 or < 35°C) • **Radiology:** Abdominal / Pelvic Ultrasound *(discuss with SMO)*
Nursing Interventions / Management Plan: **Resuscitation / Stabilisation:** • Oxygen therapy and cardiac monitor [as indicated] • IV Cannulation (16-18gauge if unstable) • IV Fluids: Sodium Chloride 0.9% 1 L IV stat versus over 8 hours *(discuss with SMO)*	**Symptomatic Treatment:** • **Antiemetic:** as per district standing order • **Analgesia:** as per district standing order • **IV Fluids:** as per district standing order
Supportive Treatment: • Nil By Mouth (NBM) • Monitor vital signs as clinically indicated (BP, HR, T, RR, SpO_2) • Monitor neurological status GCS as clinically indicated • Monitor pain assessment / score	• Fluid Balance Chart (FBC) • PV Loss Chart • Provide emotional support - Refer to Social Worker [as available]

Practice Tips / Hints:

- Any woman of childbearing age presenting with abdominal / pelvic pain should be considered pregnant until proven otherwise
- Differential diagnosis must always exclude ectopic pregnancy, ovarian torsion appendicitis, peritonitis.
- Ectopic pregnancy can be associated with vomiting, diarrhoea or collapse.
- If heavy PV loss consider urgent speculum examination to remove any clots in cervical os (which may be causing vagally induced hypotension).
- Vaginal bleeding is common in the first trimester (0 to $13^{6/7ths}$ weeks), occurring in 20 to 40 percent of pregnant women. The four major sources of non-traumatic bleeding in early pregnancy are, Ectopic pregnancy, Miscarriage (threatened, inevitable, incomplete, complete), Implantation of the pregnancy, Cervical, vaginal, or uterine pathology (e.g. polyps, inflammation/infection, trophoblastic disease) (4)
- Analgesics are imperative in the presence of pain and discomfort, and non-steroidal anti-inflammatory drugs are best avoided. Paracetamol is the analgesic of choice
- Trust, rapport, sensitivity and privacy are essential considerations that need to be made when caring for women who present with gynaecological emergencies.
- Appropriate patients may be referred to or followed-up with an Early Pregnancy Assessment Service (EPAS) which operate in most medium to large NSW hospitals.
- Provide a written patient fact sheet for "Bleeding in Early Pregnancy" available online from Emergency Care Institute (ECI): https://www.aci.health.nsw.gov.au/networks/eci/clinical/ed-factsheets

Further Reading / References:

1. SESLHDPR/283 Deteriorating patients – Clinical Emergency Responsie System for the Management of Adult and Maternity Patients

2. Pregnancy loss (miscarriage): Management techniques (UpToDate) Oct 2020

3. Ectopic Pregnancy: Epidemiology, Risk factors and anatomic sites (UpToDate) Oct 2020

4. Norwitz, ER and Park JS (2017) Overview of the etiology and evaluation of vaginal bleeding in pregnant women. Available Online April 20107 http://www.uptodate.com/contents/overview-of-the-etiology-and-evaluation-of-vaginal-bleeding-in-pregnant-women?source=search_result&search=vaginal+bleeding+in+pregnancy&selectedTitle=1%7E150

5.Horvat, L 2011, 'Gynaecological Emergencies' in Curtis, K. & Ramsden, C (eds), Emergency and Trauma Care for nurses and paramedics, Mosby Elsevier, China, pp 819-837.

6. Homer, C 2011,'Obstetric Emergencies' in Curtis, K. & Ramsden, C (eds), Emergency and Trauma Care for nurses and paramedics, Mosby Elsevier, China, pp. 841-860.

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- Murphy, M (2007) Emergency Department Toolkits Westmead Hospital , SWAHS
- Hodge, A (2011) Emergency Department, Clinical Pathways. Prince of Wales Hospital SESLHD.

Revision and Approval History

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