ANTEPARTUM HAEMORRHAGE (APH) (including placental abruption)

DEFINITION
Bleeding from genital tract in woman of >24 weeks’ gestation

IMMEDIATE MANAGEMENT
- Admit to maternity unit
- Inform SHO and/or obstetric registrar, who will review and formulate care plan
- Insert a size 14 or 16 gauge IV cannula and take bloods – see Investigations below

Clinical assessment
- Immediate clinical assessment of severity of haemorrhage and treatment required
- If maternal shock, marked abdominal pain or tenderness or fetal heart-rate abnormalities, see Major APH or abruption below
- Obtain detailed history from woman or those accompanying her
- Assess colour and amount of vaginal blood loss to determine whether fresh or stale, moderate or major

Examination
- Full antenatal examination (in accordance with local Trust admission policy). Include:
  - fundal height to correspond with dates
  - lie, presentation and 5ths palpable of presenting part. A high presenting part/abnormal lie can indicate placenta praevia
  - examine abdomen for tenderness/tenesness/location of pain
  - Perform vaginal speculum examination, except when known major placenta praevia
  - Assess cervix dilatation and appearance
  - Take triple swabs, including chlamydia
  - Refer to ultrasound scan to determine localisation of placenta

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<th>If placenta low lying, do NOT perform digital vaginal examination to avoid accidental trauma to placenta and possible severe haemorrhage</th>
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- Auscultate fetal heartbeat to determine presence
- Perform electronic fetal monitoring (EFM) to assess fetal wellbeing – see Electronic fetal monitoring guideline

Monitor
- Start Maternity Early Warning Scoring chart (MEWS) – follow local procedure

Investigation
- Take bloods for:
  - FBC
  - group & save and crossmatch if bleed significant
  - consider coagulation studies
  - consider Kleihauer test (irrespective of blood group and according to severity of bleed)

| For Rh negative women, obstetrician will prescribe anti-D immunoglobulin |

MODERATE APH
Management
- Immediate management above plus crossmatch 2 units red cells
- If bleeding becomes heavier or maternal/fetal condition deteriorates, caesarean section indicated

| If minor APH progresses to major, caesarean section indicated |

MAJOR APH OR ABRUPTION
Presenting symptoms
- Maternal shock
- Marked abdominal pain or tenderness
Fetal heart-rate abnormalities

Bleeding may be concealed or revealed

Management

**This is an obstetric emergency**

- Activate emergency buzzer and request assistance from:
  - delivery suite team leader
  - obstetric registrar and SHO
  - on-call obstetric anaesthetist and anaesthetic nurse or operating department practitioner
- Notify consultant obstetrician and consultant anaesthetist
- Team leader will delegate management tasks and nominate a team member to document events

**Resuscitation**

- Manage and maintain – Airway, Breathing, Circulation
- Record vital signs every 5 min (include MEWS)
- Avoid aortocaval compression
- Give high flow oxygen

**Replace blood volume loss**

- Insert 2 large bore (14 or 16 gauge) IV cannulae
- Take blood for:
  - crossmatch
  - FBC
  - clotting screen
- Request 4–6 units crossmatched blood to delivery suite blood bank urgently from haematology
- While awaiting blood, infuse compound sodium lactate (Hartmann’s) solution or sodium chloride 0.9% and colloid
- If blood loss life-threatening un-crossmatched O Rhesus-negative blood may be used from delivery suite refrigerator
- Insert indwelling urinary catheter

**When infusing large amounts of intravenous fluids rapidly, infuse via blood warmer**

**Analgesia**

- Dosage and administration according to severity of pain. Opiates may be required for placental abruption

**Monitor**

- Non-invasive BP
- Pulse oximetry
- Renal function: monitor urine output hourly
- report volume <30 mL/hr to attending obstetric and anaesthetic staff
- Fetal heart by EFM
- if no signs of fetal heart-rate – ultrasound scan to confirm/rule out intrauterine death

**Intrauterine death**

- Inform consultant obstetrician and discuss plan of care with woman, considering severity of haemorrhage and maternal condition
- The longer the fetus stays in-utero, the higher the risk of disseminated intravascular coagulation (DIC)

**Caesarean section**

- If fetal heart-rate present and maternal condition stable, transfer to theatre for emergency lower segment caesarean section (LSCS)
- Inform neonatologist and request attendance at delivery

**Expect and be prepared for massive postpartum haemorrhage (PPH) whether delivered vaginally or by LSCS (see Postpartum haemorrhage guideline)**

- Central venous pressure (CVP) line/arterial line may be inserted by anaesthetic team to monitor fluid balance and aid resuscitation
In coagulopathy or massive transfusion, seek advice from consultant haematologist, who will arrange blood and blood products and correct clotting factor deficiencies.

**POST-OPERATIVE/POST-DELIVERY CARE**

- Transfer woman to delivery suite high dependency area
- If ventilation necessary, transfer to acute Trust ITU – see Maternal transfer guideline

**PLACENTA PRAEVIA**

**Definition**
- Placenta wholly or partially inserted in lower segment of uterus

**Major or complete**
- Placenta encroaching on cervical opening (determined by ultrasound scan)
  - deliver by caesarean section

**Minor or partial**
- Placenta not encroaching on cervical opening

**Management of bleeding**
- Woman to remain on delivery suite
- Crossmatch minimum of 2 units blood to delivery suite blood bank urgently

**Conservative management**
- Consider depending on amount of bleeding and gestation
- If <35 weeks’ gestation, administer corticosteroids (in accordance with local preterm policy) to assist fetal lung maturity
- In a significant bleed, on-call consultant obstetrician will discuss plan of care for conservative management or delivery with mother and document in maternal healthcare record

**Caesarean section**
- With significant bleeding, consultant obstetrician will deliver by caesarean section or directly supervise a senior registrar
- Crossmatch 4 units of blood and have ready in delivery suite blood bank, preferably before delivery achieved

*Women with a previous caesarean section and anterior placenta praevia are at high risk of placenta accreta and should be managed by consultant obstetrician/anaesthetist*

**Choice of anaesthesia**
- Decided by anaesthetist and woman – usually spinal but general anaesthesia may be indicated in haemodynamically unstable woman

**Post-operative infusion**
- Commence oxytocin infusion as per local practice

**PLACENTA ABRUPTION**

**Definition**
- Accidental haemorrhage due to partial or complete separation of normally situated placenta
- Bleeding may be concealed or visible

**Causes**
- Trauma
- Hypertensive disease or pre-eclampsia
- Previous abruption
- High parity
- Twin gestation
- Polyhydramnios
- Smoking
- Prolonged rupture of membranes
Management

Dependent on severity of bleed
- If minor APH, midwife will monitor:
  - amount of vaginal blood loss
  - abdominal tenderness
  - pain
  - vital signs
- If active bleeding, monitor fetus with continuous EFM

Conservative management
- Consider if <35 weeks’ gestation
- Administer corticosteroids (in accordance with local preterm policy) to assist fetal lung maturity
- If bleeding continues, consultant obstetrician/registrar will consider delivery, possibly by induction

EXTRAPLACENTAL BLEEDING
- Coagulation defects (e.g. von Willebrand’s disease), cervical polyps, cervical ectropion, cervical carcinoma, ruptured vulval varices and infection

Antepartum haemorrhage flowchart (MOET)