Visual summary

Postpartum haemorrhage

A suggested approach to management based on possible causes*

Primary postpartum haemorrhage — Within the first 24 hours of delivery

Poor uterine tone

Clinical findings

- Abdominal palpation: Uterus feels relaxed, boggy, and soft
- Uterine fundus: May be felt above the umbilicus if uterine cavity is filled with blood and clots

Investigations

- Full blood count
- Coagulation profile
- Urea and electrolytes

If patient is not responsive to fluid and blood replacement:

- Abdominal ultrasound: To exclude uterine rupture or intra-peritoneal bleeding

Management

- Uterotonic agents: Oxytocics; Prostaglandins; Ergot alkaloids
- Uterine balloon tamponade
- HAEMOSTASIS algorithm: See main article for recommended, stepwise, surgical measures when medical treatment fails

Tears or trauma

Clinical findings

- Bleeding: from areas of trauma within genital tract
- Uterine rupture
- Extension of uterine angles
- Tears during caesarean section
- Extragenital causes: Such as subcapsular live rupture or rupture of ovarian or splenic vessels

Investigations

- Inspection during caesarean section: By exteriorisation
- Ultrasound: May help identify free fluid in patients with uterine rupture

Management

- Repair of identified genital tract trauma
- Pelvic arterial embolisation: May be required in cases of broad ligament or supralevator haemoatoma

Retained tissue

Clinical findings

- Retained placenta and membranes: Identified during bimanual examination

Investigations

- Examination under anaesthesia

Management

- Manual removal: of placenta or retained products of conception under regional or general anaesthetic

Coagulopathy

Clincal findings

- Continuing bleeding, contracted uterus

Investigations

- Urea and electrolytes
- Full blood count
- Coagulation profile

Management

- Medical: Immediate replacement of blood and coagulation factors and platelets
- Surgical: Only with trauma or atonic haemorrhage unresponsive to medical treatment

Secondary postpartum haemorrhage — 24 hours to 12 weeks after delivery

Endometritis

Clinical findings

- Uterine tenderness: on clinical examination
- Guarding and rebound tenderness: May be noted if there is peritonitis

Investigations

- Ultrasound to exclude: Retained products of conception; Pelvic abscess
- High vaginal swabs

Management

- Oral antibiotics
- Admit to hospital: for intravenous antibiotics if patient is unwell or haemodynamically unstable

Pseudo-aneurysm, uterine artery

Clinical findings

- Profuse bleeding
- Shock

More than 24 hours after childbirth

Investigations

- Doppler ultrasound
- MRI
- Pelvic angiography

Management

- Medical: Antibiotics if coexisting infection; Correction of blood volume
- Surgical: Uterine artery embolisation

Retained tissue

Clinical findings

- Fever
- Foul smelling or offensive vaginal discharge
- Uterine tenderness

Investigations

- Ultrasound: To confirm retained products of conception; To exclude pelvic abscess

Management

- Medical: Oral antibiotics; Admit for intravenous antibiotics if unwell or haemodynamically unstable
- Surgical: Evacuation of retained products of conception; Consider expectant management in mild cases

*Adapted from RCOG Green-top Guideline on postpartum haemorrhage[5]