Initial response to postpartum haemorrhage (PPH)

Resuscitation

DRSABC (as relevant to circumstances)

Assessment

- Volume/rate of bleeding
- Lie flat, oxygen 10-15 L/minute
- Keep warm, temperature every 15 minutes
- Continuous pulse and SpO₂
- BP every 5 minutes (more often if indicated)
- Confirm prophylactic third stage uterotonic given
- IDC-monitor output and maintain accurate fluid balance
- 4Ts (tissue, tone, trauma, thrombin)

Urgent bloods

Placenta

out and

complete?

Fundus

firm?

Genital

tract

intact?

Blood

clotting?

Yes

Yes

Yes

Yes

during management

coagulation profile CONCURRENTLY

Consider

- FBC, Full chemistry profile (Chem20), coagulation profile, blood gas
- X-match if none current with laboratory
 ROTEM[®]/TEG[®] if available
- PoC pathology (i-STAT, Hemocue[®]) if no onsite laboratory

Initial IV fluid replacement (use warmed IV fluids/warming devices)

- IV cannula (x 2) 14–16G (consider intraosseous if unattainable)
- IV fluid up to 3.5 L total (commence with crystalloid up to 2 L, if additional indicated use crystalloid/colloid up to 1.5 L)
- If indicated, 2 units of RBC (Group specific or O negative)

Tranexamic acid (as soon as possible)—1 g undiluted IV over 10 minutes

Transfer to OT if:

over 1-2 minutes

Second line drugs

intramyometrial

Assess for:

Repair—secure apex

Apply CCT and attempt delivery

Cotelydon or membranes missing

Oxytocin 5 IU IV over 1-2 minutes (may

Oxytocin 5-10 IU per hour IV infusion (30

15-methylprostaglandin F2α (Carboprost)

250 micrograms IM or 500 micrograms

Transfer to OT if unable to access site

Ergometrine 250 microgram's IM or IV

Misoprostol 800-1000 micrograms PR

IU in 500 mL @ 83-167 mL/hour)

Inspect cervix, vagina, perineum

Clamp obvious arterial bleeders

Do not wait for blood results to treat• Use ROTEM® /TEG® if available

Monitor 30-60 minutely FBC, ABG,

coagulation profile, ionised calcium

Review MHP activation criteria

o Uterine rupture or inversion

Puerperal haematoma

liver rupture, AFE)

Repeat 4T assessment

Avoid hypothermia and acidosis

Consider early fibrinogen replacement

Non-genital cause (e.g. subcapsular

o Placenta adherent/trapped

repeat once after 5 minutes)

RSQ 1300 799 127 contact early (as relevant to service)

No

No

No

No

Unknown

Tone

Surgical procedures

Coagulopathy may influence surgical decisions

• Preserve future fertility if possible

· Manual removal + curettage

- Intrauterine balloon tamponade
- Laparotomy:
 - o Interim aortic compression
 - B-Lynch compression suture
 - o Uterine artery embolisation
 - o Uterine-ovarian artery ligation Hysterectomy (consider early)

- Optimise exposure with retractors
- Inspect cervix, vagina, perineum
- Assess uterus intact
- Repair secure apex

Thrombin

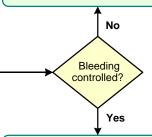
- Intrauterine balloon tamponade
- Uterine-ovarian artery ligation
- Internal iliac artery ligation
- Uterine artery embolisation or
- Hysterectomy (consider early)

Unknown cause

Laparotomy - EUA



- Bimanual compression Transfer to OT or to higher level facility as relevant
- Refer to MHP flowchart



Monitor:

- Vital signs-assess for shock
- Fundal tone
- Vaginal blood loss
- Haemoglobin

Transfer as required to:

- Postnatal area
- Intensive care/high dependency
- Higher level facility

Postnatal care:

- Provide psychological support
- Treat anaemia
- Administer VTE prophylaxis Monitor for DVT/PE
- Follow-up and self-care advice

ABG: arterial blood gas, AFE: amniotic fluid embolism, BP: blood pressure, CCT controlled cord traction, DRSABC: standard emergency procedure Danger-Response-Send for help-Airway-Breathing-Circulation, DVT: deep vein thrombosis, EUA: examination under anaesthetic, FBC: full blood count, IDC: indwelling catheter, IM: intramuscular, IV: intravenous MHP: major haemorrhage protocol, OT: operating theatre, PE: pulmonary embolism, PoC: point of care, RBC: red blood cells, ROTEM®/TEG®: types of blood clotting analysers, RSQ: Retrieval Services Queensland, SpO2: saturation of oxygen, VTE: venous thromboembolism, <: less than, >: greater than

Queensland Clinical Guideline. Primary postpartum haemorrhage. Flowchart: F24.1-1-V6-R29



