MINISTRY OF HEALTH
MANATŪ HAUORA

Treating Postpartum Haemorrhage

Initial early recognition and action

Call for help
- Allocate roles
  - include care of baby, partner and family/whānau

Assess and arrest bleeding
- Lie woman flat
- Deliver placenta
- Massage fundus and expel clots
- Place baby skin to skin
- Administer uterotonics
  - Syntocinon 10iu IM or 5iu IV **or** Syntometrine 1ml IM (unless contraindicated)
- Empty bladder

Identify cause
- Consider the 4Ts
  - Tone – uterine atony
  - Tissue – retained placenta
  - Trauma – lacerations or rupture
  - Thrombin – coagulopathy

Minimise impact of blood loss
- Insert large bore IV cannula (16g)
- Take blood for FBC, Group and Hold, Coags
- Give high flow oxygen
- Consult with specialist obstetrician regarding transfer
- Start rapid IV fluid replacement and commence with crystalloids (Normal Saline, Hartmann's or similar)

Maternal observations and clinical assessment[1]
- Assess and document:
  - blood pressure, pulse, respiratory rate, temperature, cumulative blood loss, fluid balance

Blood loss stops and woman's condition is stable
- Continue observations and clinical assessments
- Document plan for ongoing care (including best location)
- Ensure woman has adequate level of observation by health professional or partner, family/whanau with access to health professional or emergency services
- Watch for further blood loss
- Check haemoglobin

[1] Remember:
- all health professionals consistently underestimate blood loss
- healthy women compensate: tachycardia and hypotension are late signs
- agitation or restlessness in women indicates hypovolaemia.

Ongoing significant bleeding

Don't delay transfer to secondary/tertiary obstetric service if at home or in a primary unit
- Allocate care of baby to suitable person
- Commence Syntocinon infusion (40iu in Normal Saline 1000mls over 4 hours)
- Reconsider the 4Ts
- Apply bimanual compression to arrest blood loss
- Ensure senior obstetric and midwifery team present on arrival

Call for additional support
- Transfer care to senior obstetrician as per Referral Guidelines
- Summon anaesthetist
- Prepare theatre team
- Inform laboratory of major PPH
  - send blood to lab on arrival: FBC, Group & Hold, coagulation studies
  - request blood for transfusion

Assess and arrest bleeding
- Reconsider the 4Ts
- Assess cumulative blood loss
- Insert second large bore IV cannula (16g)
- Massage the fundus to expel clots and consider bimanual compression
- Insert indwelling catheter
- Administer Carboprost[2] 250mcg every 15 minutes (maximum of 8 doses), IM or intrauterine **or** Misoprostol 800mcg, buccal or PR
- Consider EUA for
  - removal of retained placenta/products
  - repair of tears
  - intrauterine balloon or packing

Resuscitation
- Give crystalloids (maximum 2–3L)
- Give red cell transfusion as soon as possible
- Start transfusing O Neg red cells if urgent transfusion required until cross-matched blood available

Maternal observations and clinical assessment
- Assess and document:
  - blood pressure, pulse, respiratory rate, temperature, cumulative blood loss, fluid balance

Blood loss stops and woman's condition is stable
- Continue observations and clinical assessments
- Document plan for ongoing care (including best location)
- Ensure 1:1 care
- Watch for further blood loss
- Check haemoglobin via FBC

[2] Carboprost can cause severe bronchospasm. Avoid in women with a history of asthma or bronchospasm.

Ongoing uncontrolled bleeding

Call for additional help
- Senior obstetrician and senior anaesthetist clinically responsible for care
- Consult with haematologist/transfusion medicine specialist
- Transfer to operating theatre

Assess and arrest bleeding
- Reconsider the 4Ts
- Consider laparotomy
- Consider early recourse to hysterectomy
- Consider other options if appropriate:
  - uterine compression suture (+/- tamponade balloon/packing)
  - uterine artery ligation
  - internal iliac emobilisation
  - aortic compression

Resuscitation
- Administer blood and blood products
- Trigger massive transfusion protocol (MTP) where available[3]
- Avoid hypothermia, hypocalcaemia and acidosis
- Use of cell saver where available
- Consider tranexamic acid
- Consider recombinant factor Vlla

Maternal observations and clinical assessments
- Consider arterial line or central venous line
- Assess and document blood pressure, pulse, respiratory rate, temperature, oxygen saturation:
  - document cumulative blood loss and accurate fluid balance (hourly urine output)
  - hourly FBC and coagulation studies

Blood loss stops and woman's condition is stable
- Make plan for ongoing care
- Consider transfer to ICU

[3] Many units are using MTP; however the underlying principle of all the MTP is early recognition and prevention of worsening coagulation.

There should be ongoing communication with the woman, her family and whānau and multidisciplinary team throughout.

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