Te Whatu Ora

Health New Zealand

Lakes

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Te Käwanatanga o Aotearoa New Zealand Government



Treating Postpartum Haemorrhage

Initial early recognition and action

Call for help and consider involving other clinicians early

- Allocate roles.
- Include care of baby, partner and whānau (including interpreting services and appropriate cultural support).

Assess and arrest bleeding

- Lie the woman/person flat.
- Deliver placenta.
- Massage fundus to expel clots.
- Place baby skin to skin.
- Administer oxytocin 10 units IM or 5 units IV, or Syntometrine[®] 1 mL IM (total Syntometrine[®] dose should not exceed 3 mL in 24 hours).
- · Empty bladder.

Measure cumulative blood loss and assess condition.

Identify cause

- Consider the 4 Ts: -
 - tone uterine atony
 trauma lacerations or rupture
- tissue retained placenta
- thrombin coagulopathy.

Minimise impact of blood loss

- Insert large bore IV cannula (16 g or 18 g).
- · Take blood for FBC, group and hold, coagulation.
- Consult with specialist obstetrician.
- · Start rapid IV fluid replacement with crystalloids (eg, sodium chloride 0.9%, Hartmann's).
- Consider tranexamic acid (1 g/10 mL IV at 1 mL per minute) for all PPH.

Maternal observations and clinical assessment*

- Use MEWS to assess and document:
 - blood pressure, pulse, respiratory rate, temperature, cumulative blood loss, fluid balance.

Blood loss stops and condition of woman/ person is stable

- Continue observations and clinical assessments using MEWS.
- Document plan for ongoing care (including care location).
- Ensure adequate level of observation by health practitioner, or by partner or whānau with access to health practitioner or emergency services.
- Watch for further blood loss.
- Check haemoglobin via FBC.
- After the event, consider a culturally safe opportunity to discuss, reflect and debrief.
- Health professionals consistently underestimate blood loss; healthy people compensate: tachycardia and hypotension are late signs; agitation or restlessness indicates hypovolaemia.

Note:

- FBC = full blood count;
- IM = intramuscular;
- IV = intravenous;
- MEWS = Maternal Early Warning Score; PPH = postpartum haemorrhage.

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Te Whatu Ora Lakes Maternity Service		Key Word(s): Haemorrhage, post-partum			Document Number: 2743436	
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Te Käwanatanga o Aotearea New Zealand Government



Treating Postpartum Haemorrhage

Ongoing significant bleeding

Don't delay transfer to secondary/tertiary obstetric service

- Allocate care of baby and support for partner and whanau to suitable people.
- Start oxytocin infusion (40 units in sodium chloride 0.9% 500 mL over 4 hours).
- · Reconsider the 4 Ts and apply bimanual compression to stop blood loss.
- Ask senior obstetric and midwifery team to attend immediately or be immediately available on arrival if transferring woman/person to a secondary/tertiary obstetric service.

Call for additional support

Consult with obstetric and anaesthetic teams.
 Prepare theatre.

- Inform laboratory of major PPH. Send blood to lab on arrival: FBC, cross-match, APTT and fibrinogen.
 - Point-of-care testing of haemoglobin and coagulation, where available
 - Request blood for transfusion.

Assess and arrest bleeding:

- Reconsider the 4 Ts and AFE.
- Measure cumulative blood loss and assess condition of woman/person.
- Insert second large-bore IV cannula (16 g or 18 g).
- · Massage the fundus to expel clots and consider further bimanual compression (if needed).
- Insert indwelling catheter.
- Administer Syntometrine® 1 mL IM if not given already.
- Consider additional tranexamic acid (1 g/10 mL IV at 1 mL per minute) if ongoing bleeding after 30 minutes and if tranexamic acid has not already been administered.
- · Administer carboprost* 250 micrograms IM or intrauterine every 15 minutes (maximum of 8 doses).
- · Consider examination under anaesthetic for: removal of retained placenta/products
 - repair of tears
 - intrauterine tamponade balloon or packing.

Resuscitation

- Give crystalloids (maximum 2–3 L).
- Give red cell transfusion as soon as possible (may require O negative blood until typespecific blood is available).

Blood loss stops and condition of woman/person is stable

- Continue observations and clinical assessments using MEWS and monitor blood loss.
- Document plan for ongoing care (including care location).
- Ensure 1:1 care.
- Check haemoglobin via FBC.
- Consider IV iron replacement promptly, applying a low threshold for prescribing.
- After the event, ensure a culturally safe opportunity to discuss, reflect and debrief.

Maternal observations and clinical assessment

 Use MEWS to assess and document blood pressure, pulse, respiratory rate, temperature, cumulative blood loss, fluid balance.

> Carboprost can cause severe bronchospasm: avoid use if woman/person has a history of asthma or bronchospasm.

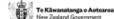
Note:

- AFE = amniotic fluid embolism
- APTT = activated partial thromboplastin time
- FBC = full blood count
- IM = intramuscular
- IV = intravenous
- MEWS = Maternal Early Warning Score
- PPH = postpartum haemorrhage

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2/3



Te Whatu Ora Health New Zealand

Lakes



Treating Postpartum Haemorrhage

Ongoing uncontrolled bleeding

Call for additional help

- · Transfer clinical responsibility for care to senior obstetrician and senior anaesthetist.
- Consult with haematologist/transfusion medicine specialist.
- · Transfer to operating theatre.
- · Ensure support for partner and whānau.

Assess and arrest bleeding

- Reconsider the 4 Ts and AFE.
- · Consider other options if appropriate:
- uterine compression suture (with or without tamponade balloon/packing)
 uterine artery ligation
- internal iliac embolisation
- aortic compression.
- dontic compression
- Consider laparotomy.
- Consider early recourse to hysterectomy.

Resuscitation

- Initiate massive transfusion protocol where available.*
- Assess coagulation status including fibrinogen.
- Administer blood and blood products guided by laboratory and point-of-care tests of haemoglobin and coagulation (aim for APTT <40 s, PR <1.5, platelets >75 x 109/L, fibrinogen >2 g/L).
- Avoid hypothermia, hypocalcaemia and acidosis by keeping patient warm and warming all fluids and blood products (if warming facilities are available).
 Consider cell salvage.

Maternal observations and clinical assessment

- · Consider arterial line or central venous line.
- Use MEWS to assess and document blood pressure, pulse, respiratory rate, temperature, oxygen saturation:
 - document cumulative blood loss and accurate fluid balance (hourly urine output).
 - FBC and coagulation studies at least hourly until blood loss stops.

Blood loss stops and condition of woman/ person is stable

- · Make plan for ongoing care.
- Consider transfer to intensive care unit, high dependency unit or acute observation unit.
- Consider IV iron replacement promptly, applying a low threshold for prescribing.
- After the event, ensure a culturally safe opportunity to discuss, reflect and debrief.

Ongoing culturally safe communication

- Communicate with woman/person, partner and whānau to ensure informed consent.
- Explain what is happening.
- Answer questions about risks/benefits of treatment, escalation, etc.
- Provide for appropriate cultural practices where possible.

* Many units use an MTP. The underlying principle of all MTPs is early recognition and prevention of worsening coagulation.

Note:

AFE = amniotic fluid embolism; APTT = activated partial thromboplastin time; FBC = full blood count;

IV = intravenous; MEWS = Maternal Early Warning Score; MTP = massive transfusion protocol; PR = prothrombin ratio.

March 2022 | HP8054

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Authorised by: Maternity CQI	Issue Date: May 2023		Review Date: May 2026	Version 1.1	:	Page: 3 of 4

Associated Documents

- Adult Massive Haemorrhage Pathway (Massive Transfusion Protocol) 585349
- Post-partum Haemorrhage Emergency Documentation Sheet
- Maternity Early Warning Score (MEWS) Chart

References

- Ministry of Health. 2022. National Consensus Guideline for Treatment of Postpartum Haemorrhage | Aratohu Tūtohu ā-Motu mō te Tumahu Ikura Whakawhānau Pēpi. Wellington: Ministry of Health.
- National Consensus Guideline for Treatment of Postpartum Haemorrhage and Treating Postpartum Haemorrhage poster. <u>https://www.health.govt.nz/system/files/documents/publications/treating_postpartum_haemorrhage_1april22.pdf</u>

Authorised by: Maternity Clinical Quality Improvement (CQI) Meeting

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