MATERNITY UNIT
GUIDELINE:

POSTPARTUM HAEMORRHAGE (PPH)

SCOPE:
All midwives, nurses and obstetricians working in the maternity unit

AUTHOR:
Midwifery Educator

PURPOSE:
To provide best practice guidance on the prevention and management of postpartum haemorrhage

DEFINITIONS:

There are numerous definitions of PPH in the literature. The most widely recognised is blood loss in excess of 500ml for a vaginal birth, and greater than 1,000mls for a caesarean section. Because it is often difficult to accurately measure blood loss, the usefulness of ‘traditional’ definitions of PPH is now being questioned.

A primary PPH occurs within 24 hours of childbirth, a secondary PPH occurs from 24 hours to the first six weeks after the birth.

At Hauora Tairāwhiti it has been agreed that the definition of a primary PPH is a blood loss during the first 24 hours of 500mls or more, regardless of the mode of birth as it is the potential effect on the woman that is important, as is adequate and timely management. This is also the definition used to benchmark against data collection throughout New Zealand.

GUIDELINE:
Refer to flowchart APPENDIX 1

PPH is a life-threatening event and can cause short and long term morbidity and maternal mortality. The optimal management of PPH requires a multi-disciplinary approach to ensure rapid and aggressive early intervention. Early open and ongoing communication is critical in order to effectively treat any woman experiencing a PPH. Communication channels include those between health professionals as well as with the woman and her partner and family/whānau.

The National PPH guideline (Appendix 1) can be accessed from the guideline folder in each birthing suite and is also attached to the red emergency trolley. This guideline provides clear instructions of the actions required depending on the amount of bleeding.
In any case of PPH:

- Call for help
- Assess and arrest the bleeding
- Minimise the impact of blood loss and resuscitation
- Document the clinical events and interventions
- Debrief the family/whānau
- Incident report if ≥ 1L

Action should be undertaken as soon as abnormal blood loss is suspected – before the woman has lost 500 mL of blood.

Effective treatment requires identification of cause: consider the 4 Ts: Tone, Trauma, Tissue and Thrombin in any assessment. Note: more than one site may be contributing to the overall blood loss.

In all cases of PPH, it is necessary to consider the maternal condition in relation to known blood loss, and if the maternal condition worsens with no visible blood loss, it is imperative to assess the cause as early as possible.

Regardless of setting, practitioners and facilities providing maternity care should understand how to organise transfer of any woman experiencing PPH. Clear transfer protocols should be in place, along with treatment plans, to enable timely intervention and access to additional and specialist assistance when required.

Careful monitoring and documentation during the immediate treatment of PPH and over the next 24–48 hours is critical. Accurate estimation and documentation of cumulative blood loss as well as the treatment provided is necessary.

In cases of significant blood loss, early transfusion with red blood cells is essential to maintain tissue oxygenation. In urgent situations where cross-match blood is unavailable, transfusion with O negative blood is required. Consider activating the massive blood transfusion policy sooner rather than later. This can only be activated by a senior medical officer (SMO). The midwife may wish to prompt the SMO to activate this in circumstances of excessive or uncontrolled bleeding.

During PPH treatment, allocate a responsible person to the role of caring for the baby, partner and family/whānau.

A PPH experience can be traumatic for the woman, her partner and family/whānau and practitioners involved. Provide all those involved with the opportunity for discussion, reflection and debriefing where necessary.
<table>
<thead>
<tr>
<th>Blood loss % (ml)</th>
<th>Systolic blood pressure, mm/Hg</th>
<th>Signs and symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 – 15% (500 to 1,000)</td>
<td>Normal</td>
<td>Palpitations, dizziness, tachycardia</td>
</tr>
<tr>
<td>15 – 25% (1,000 to 1,500)</td>
<td>Slightly low</td>
<td>Weakness, sweating, tachycardia – Urgent action is required at this stage, do not leave until next stage</td>
</tr>
<tr>
<td>25 – 35% (1,500 to 2,000)</td>
<td>70 to 80</td>
<td>Restlessness, pallor, oliguria</td>
</tr>
<tr>
<td>35 – 45% (2,000 to 3,000)</td>
<td>50 to 70</td>
<td>Collapse, air hunger, anuria</td>
</tr>
</tbody>
</table>

At Tairāwhiti Hauora we have access to a Bakri balloon from theatre, see APPENDIX 2. We also weigh all blood soiled linen and disposables to estimate blood loss, see APPENDIX 3.

ASSOCIATED DOCUMENTS:
Hauora Tairāwhiti – Massive Blood Transfusion Policy

REFERENCES:

Date of Approval: 17/03/2017
Next Review Date: 17/03/2020
Flow chart of PPH management

Click here to open Appendix 1 Flowchart of Postpartum Haemorrhage Management
Appendix 2

Bakri balloon for management of postpartum hemorrhage (stored in theatre)

A) The Bakri balloon catheter is used for temporary control or reduction of postpartum hemorrhage when conservative management of uterine bleeding is warranted. It is easy to place and rapidly achieves tamponade within the uterine cavity, thereby potentially avoiding a hysterectomy. B) Under ultrasound guidance, the balloon portion of the catheter is inserted into the uterus, making certain that the entire balloon is inserted past the cervical canal and internal ostium. C) The device is intended for one-time use. Reproduced with permission from: Cook Women's Health.

This is a silicone balloon with a capacity of 500ml normal saline and the strength to withstand a maximum internal and external pressure of 300mg/Hg.
Appendix 3

Pictorial Reference Guide to Aid Visual Estimation of Blood Loss at Obstetric Haemorrhage

Mr Patrick Bose, Dr Fiona Regan and Miss Sara-Paterson Brown
(Queen Charlotte’s Hospital, London)

a. Soiled Sanitary Towel
30ml

b. Saturated Sanitary Towel
100ml

c. Full Kidney Dish
500ml

d. Saturated Small Swab 10x10cm
60ml

e. Saturated Large Swab 45x45cm
350ml*

f. Incontinence Pad
250ml

g. PPH on Bed only
1000ml

h. PPH Spilling to Floor
2000ml*

i. 100cm Diameter Floor Spill
1500ml*

*Blood loss in scenarios (e) (h) (i) are significantly underestimated (p<0.05)