Nursing Management of PPH

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Team approach to PPH

- Midwives
- Obstetricians
- Anaesthesiologists
- Haematologists – support from blood bank
- Intensive care specialists
- Intervention radiologists
## Classification of PPH

<table>
<thead>
<tr>
<th>PPH severity level</th>
<th>Cumulative bld loss</th>
<th>Haemodynamics</th>
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</thead>
<tbody>
<tr>
<td>Level I</td>
<td>&lt; 2000ml</td>
<td>SBP &gt; 100mmHg, HR &lt; 100 / min</td>
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<tr>
<td>Compensated and stable</td>
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<td></td>
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<tr>
<td>Level II</td>
<td>&lt; 2000ml</td>
<td>SBP: 80 – 100 mmHg, HR: 100 – 120 / min</td>
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<tr>
<td>Uncompensated</td>
<td>Haemocue &gt; 6.0 gm/dl</td>
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<tr>
<td>Level III</td>
<td>&gt; 2000ml</td>
<td>SBP &lt; 80mmHg, HR &gt; 120 / min</td>
</tr>
<tr>
<td>Unstable (severely decompensated)</td>
<td>Haemocue &gt; 6.0 gm/dl</td>
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<tr>
<td>Level IV</td>
<td>&gt; 2000ml and ongoing massive bleeding</td>
<td>Hypotensive, tachycardia, hypovolaemia, anaemia</td>
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<tr>
<td>Critical</td>
<td>Haemocue &lt; 6.0 gm/dl</td>
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</tbody>
</table>
Appropriate number of midwives to be involved in different levels of PPH
Midwife 1 – responsible midwife

- detection of PPH & assess amount of blood loss
- ? cause of PPH – tone, tissue, trauma, thrombin
- if uterine atony, message of uterus / bimanual compression
- check the completeness of placenta & membranes
- examine the genital tract for any active bleeding
Level I

Midwife 1—responsible midwife

- monitor – BP&P Q15 min, I/O chart (catheterize bladder), SaO$_2$
- prepare trolley for exploration of genital tract (PPH set)
- check the availability of T/S form & blood form
- send blood for CBP, clotting profile
Bimanual Compression
Level II

Midwife 1—responsible midwife

- detection of PPH & assess amount of blood loss
- ? cause of PPH – tone, tissue, trauma, thrombin
- if uterine atony, message of uterus / bimanual compression
- check the completeness of placenta & membranes
- examine the genital tract for any active bleeding
Level II

Midwife 2- assistant
• page 1st & 2nd call obstetricians & intern
• prepare patient for venous puncture
• set up IV drip / pump set / CVP line
• prepare Syntocinon drip, Carboprost (Hemabate) & crystalloid solution / plasma expander
• monitor – BP&P Q15 min, I/O chart (catheterize bladder), SaO₂
• prepare trolley for exploration of genital tract (PPH set)
• check the availability of T/S form & blood form
• inform relatives
Level III & IV

Midwife 1– responsible midwife

• same as above
• don’t leave the client alone
• continue message of uterus / bimanual compression until the procedure taken over by obstetrician
• provide psychological care – comfort the client, give explanation before procedure to allay fear
Level III & IV

Midwife 2 - LW in-charge midwife

• LW in-charge deploys enough midwives according to situation
• page 1st, 2nd & 3rd call obstetricians & intern
• inform senior (ward manager in day time / nurse in-charge at night time)
• inform super call in PPH level IV
Level III & IV

Midwife 3 - assistant

• prepare patient for venous puncture
• set up IV drip / pump set / CVP line
• prepare Syntocinon drip, Carboprost (Hemabate), Novoseven & crystalloid solution / plasma expander
• prepare uterine tamponade – Foley catheter / Sengstaken tube
• BP monitoring Q5 mins, continuous monitoring of SaO₂, haemocue
Sengstaken Tube

Oesophageal Balloon:
Volume: 150 – 300ml
Level III & IV

Midwife 4 - assistant
• arrange the transfer of patient to OT for exploration of uterus under GA
• call anaesthetist for exploration in OT
• inform OT nurses to prepare operating theatre
• check the availability of T/S form & blood form, send blood for CBP, clotting profile
• arrange blood & blood products to top up satellite blood bank in labour ward
• inform relatives
Satellite Blood Bank in LW
Documentation

In case of catastrophes:
**Timing is critical** - all events must be timed accurately

Record:
- Patient’s vital signs and response
- Examination / procedures and findings
- Intervention / decision made by midwife / doctor

Very important!!! → potential litigation
Record on Intake & Output

**Timing is critical** - all intake and output must be timed accurately

Record:

- Type of fluid / blood / blood products being infused
- Amount of urine output
- Amount of blood loss (estimated or measured)
Resuscitation - CPR

Timing is critical - all the procedures during resuscitation must be timed accurately.

Record:

- Time to start CPR
- Drugs given
- Patient’s response to CPR
Labour ward management of PPH

- PPH protocol
- Stocking up of medications, checking expiry date and exchange if necessary
- Readiness of PPH set
- Regular drills in PPH, according to the protocol
- Audit in the management of PPH
PPH protocol

• Kept the protocol in LW
• Review protocol regularly, revise / update the protocol if necessary
• Read by all the medical / nursing staff or new comers to the LW
Medications and Instruments

• Well keeping of medications and instrument
• Check the expiry date regularly
• The location / placement for the drugs and instrument must be known to all midwives in labour ward & OT
• Familiarize with the use / side effect of the drugs
Drills and audit

• Regular basis
• Multidisciplinary approach in drills and audit - residents and midwives participate in the drill
• De-briefing after the drill
• All the midwives working in obstetric unit (including managers, NO, APN and midwives working in A/N, P/N) – keep a record to make sure all of them have participated in the drill
Conclusion

PPH is unavoidable

What is avoidable are catastrophies

Catastrophies → potential litigation, can be prevented by:

• Team work – obstetrician, anaesthetist, midwife
• Proper documentation
• Protocol – managed according to protocol