

Nursing Management of PPH

Ho Lai Fong
Ward Manager
Department of Obstetric & Gynaecology
Queen Mary Hospital
Hong Kong, SAR

Team approach to PPH

- Midwives
- Obstetricians
- Anaesthetists
- Haematologists – support from blood bank
- Intensive care specialists
- Intervention radiologists

Classification of PPH

PPH severity level	Cumulative bld loss	Haemodynamics
Level I Compensated and stable	< 2000ml	SBP > 100mmHg HR < 100 / min
Level II Uncompensated	< 2000ml Haemocue > 6.0 gm/dl	SBP: 80 – 100 mmHg HR: 100 – 120 / min
Level III Unstable (severely decompensated)	> 2000ml Haemocue > 6.0 gm/dl	SBP < 80mmHg HR > 120 / min
Level IV Critical	> 2000ml and ongoing massive bleeding Haemocue < 6.0 gm/dl	Hypotensive, tachycardia, hypovolaemia, anaemia

**Appropriate number of
midwives to be involved in
different levels of PPH**

Level I

Midwife 1 – responsible midwife

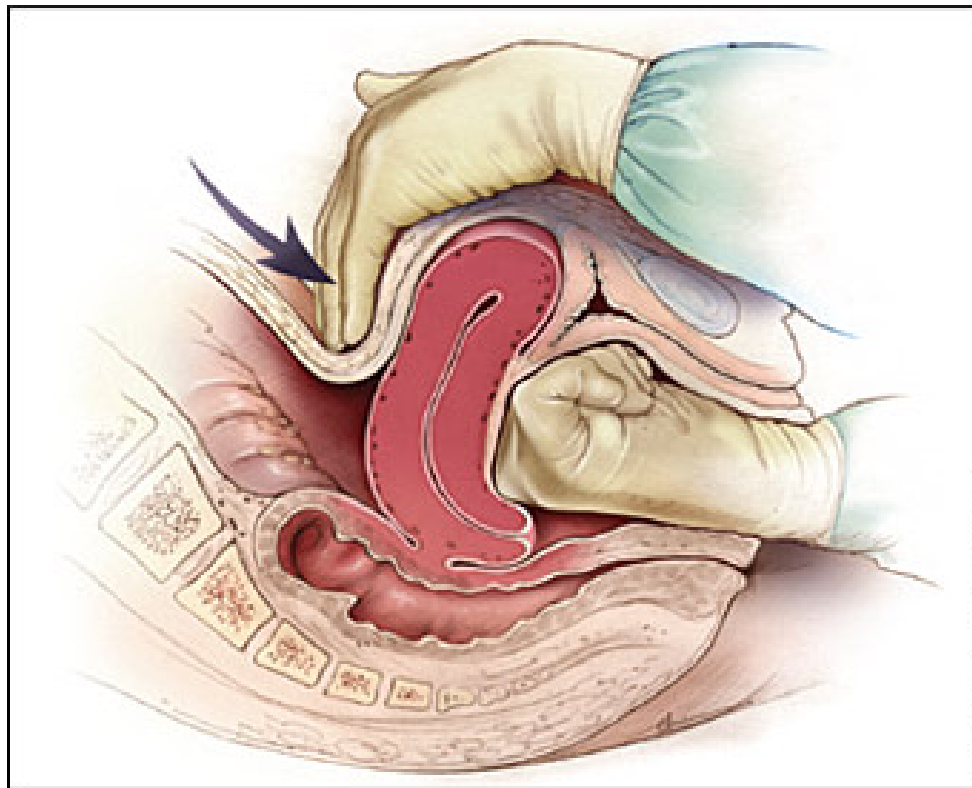
- detection of PPH & assess amount of blood loss
- ? cause of PPH – tone, tissue, trauma, thrombin
- if uterine atony, massage of uterus / bimanual compression
- check the completeness of placenta & membranes
- examine the genital tract for any active bleeding

Level I

Midwife 1 – responsible midwife

- monitor – BP&P Q15 min, I/O chart (catheterize bladder), SaO₂
- 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, massage 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 massage 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

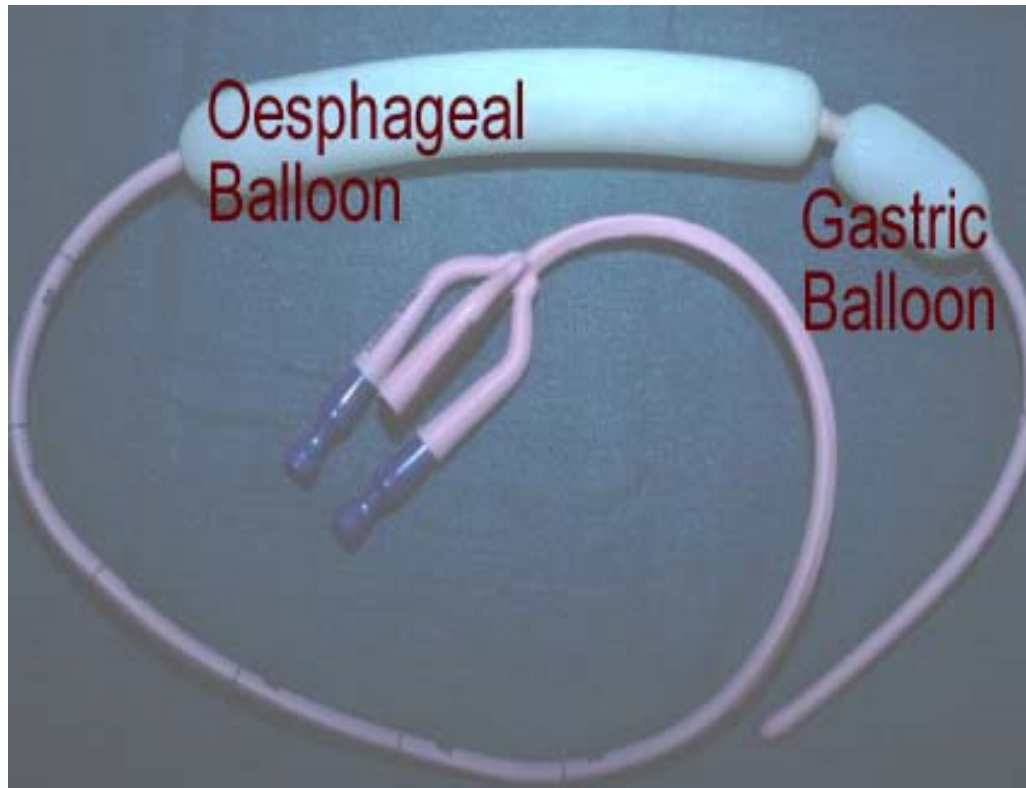
- LW in-charge deploys enough midwives according to situation
- page 1st, 2nd & 3rd call obstetricians & intern
- inform senior (ward manager in day time / nurse in-charge at night time)
- inform super call in PPH level IV

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