

MPS Technical Update

Prevention of Postpartum Haemorrhage by Active Management of Third Stage of Labour

OCTOBER 2006



Recommendations

Active management of third stage of labour should be offered by all skilled attendants at every birth to prevent postpartum haemorrhage (PPH). Oxytocin is the uterotonic of choice for prevention of PPH.

Background

Postpartum haemorrhage (PPH), defined as vaginal bleeding in excess of 500 mL after childbirth¹ is the leading cause of maternal deaths. PPH occurs in over 10% of all births and is associated with a case fatality rate of 1%². Twenty-five per cent of all maternal deaths are caused by severe haemorrhage².

It is important to remember that:

- Estimates of blood loss are usually inaccurate and notoriously low;
- The importance of a given volume of blood loss varies with the woman's health status. A woman with a normal haemoglobin level may tolerate blood loss that would be fatal for an anaemic woman;
- Bleeding may occur at a slow rate over several hours and PPH may not be recognized until the woman is in shock; and
- Risk assessment in the antenatal period does not effectively predict those who will have PPH.

Evidence

Failure of the uterus to adequately contract after childbirth (uterine atony) and thus prevent bleeding is the leading cause of PPH.

Active management of the third stage of labour prevents PPH by over 60% (relative risk 0.38, 95% confidence interval 0.32-0.46)³ and therefore should be offered by all skilled birth attendants at every childbirth.

Oxytocin is the preferred drug because it is effective in 2-3 minutes after injection, has minimal side effects, can be used in all women and is more stable in storage than ergometrine⁴.

Steps in Active management of the third stage of labour

- **Give oxytocin immediately:**
 - ▶ Within 1 minute of birth of the baby, palpate the abdomen to rule out the presence of an additional baby(s) and give oxytocin 10 units intramuscularly.
 - ▶ Quickly dry and wrap the baby and give to mother if appropriate.

- **Deliver the placenta by controlled cord traction:**

- ▶ Just prior to performing cord traction clamp the cord close to the perineum using sponge forceps. Hold the clamped cord and the forceps with one hand.
- ▶ Keep slight tension on the cord and await a strong uterine contraction (2-3 minutes).
- ▶ Place the other hand just above the woman's pubic bone and stabilize the uterus by applying counter traction during controlled cord traction. This helps prevent inversion of the uterus.
- ▶ When the uterus becomes rounded or the cord lengthens, very gently pull downwards on the cord to deliver the placenta. Do not wait for a gush of blood before applying traction on the cord. Continue to apply counter traction to the uterus with the other hand.
- ▶ If the placenta does not descend during 30-40 sec of controlled cord traction (i.e. there are no signs of placental separation), do not continue to pull on the cord.
- ▶ Gently hold the cord and wait until the uterus is well contracted again. If necessary, use a sponge forceps to clamp the cord closer to the perineum as it lengthens.
- ▶ With the next contraction, repeat

controlled cord traction with counter traction. **NEVER PULL ON THE CORD WITHOUT PUSHING THE UTERUS UP WITH THE OTHER HAND.**

- ▶ As the placenta delivers, the thin membranes can tear off. Hold the placenta in two hands and gently turn it until the membranes are twisted.
- ▶ Slowly pull to complete the delivery.
- ▶ Look carefully at the placenta to be sure none of it is missing. If a portion of the maternal surface is missing or there are torn membranes with vessels, suspect retained placental fragments and manage appropriately¹.

- **Massage the uterus**

- ▶ Immediately massage the fundus of the uterus through the woman's abdomen until the uterus is contracted.
- ▶ Repeat the uterine massage every 15 min for the first two hours.
- ▶ Ensure that the uterus remains hard after you stop uterine massage.

If bleeding continues, check for other causes of PPH (genital lacerations and retained placental fragments) and manage appropriately (See WHO guidelines for advice on management^{1,5}).

Reference List

1. World Health Organization. Managing Complications in Pregnancy and Childbirth. Geneva: World Health Organization, 2000.
2. World Health Organization. The World Health Report 2005.
3. Prendiville WJ, Elbourne D McDonald S. Active versus expectant management in the third stage of labour (Cochrane Review). In: The Reproductive Health Library, Issue 3, 2000. Oxford: Update Software Ltd.
4. Hogerzeil HV, Walker GJ. Instability of (methyl) ergometrine in tropical climates: an overview, Eur J Obstet Gynecol Reprod Biol 1996; 69: 25-9
5. World Health Organization. Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice. Geneva: World Health Organization, 2nd edition, 2003.