Guideline

Third Stage of Labour - Management

- Determine the appropriate oxytocic for the woman's individual circumstances.
- Unless contraindicated, administer Syntometrine® to women having a forceps birth. Administer concurrent ondansetron. See other circumstances for use of Syntometrine®.
- Administer the prophylactic oxytocic agent to the woman with the birth of the anterior shoulder [2, 3].
- Advise the accoucheur when the oxytocic is administered.
- After the placenta is delivered, immediately massage the fundus of the uterus to make sure it is well contracted, then every 15 minutes for the first hour.
- Notify a medical officer if placenta and membranes remain insitu after 30 minutes (1 hour if physiological). See this section.

1. Purpose

In accordance with the ICM/FIGO joint statement (ref) the Women's policy is to use active management of the third stage of labour [1,2]. Where processes differ between campuses, those that refer to the Sandringham campus are differentiated by *pink italic* text or have the heading **Sandringham campus.**

2. Definitions

Active management: Active management of the third stage of labour consists of interventions designed to facilitate the delivery of the placenta by increasing uterine contractions and to prevent primary postpartum haemorrhage (PPH) by averting uterine atony. The usual components include administration of uterotonic agents, controlled cord traction and uterine massage after birth of the placenta, as appropriate (ref ICM/FIGO joint statement).

Delayed cord clamping (DCC): ≥ 60 s to 3 min if the baby breathes/cries. Delayed cord clamping is recommended as standard of care for all infants, regardless of gestational age, except when newborn resuscitation is anticipated or needed

Early cord clamping: Cord clamping which occurs within 2-3 minutes of administration of an oxytocic.

Physiological management: The birth of the placenta and membranes are expelled by maternal effort only and without using uterotonic agents or controlled cord traction.

3. Responsibilities

Midwifery and medical staff who administer the oxytocic and/or facilitate birth of a placenta.

Midwifery and medical students under supervision.

4. Guideline

4.1 Active management

Choice of oxytocic

Vaginal birth:

1. Oxytocin (10 units IV or IM) is preferred over other uterotonic drugs because it is effective 2-3 minutes after injection, has minimal side effects and can be used in all women.

2. Syntometrine® is more effective than oxytocin (Syntocinon®) in reducing blood loss during the delivery of the placenta, but has more side-effects [3]. Adverse effects include vomiting, elevation of blood pressure and pain after birth requiring analgesia, particularly with the intravenous route of administration. The intramuscular route is preferred and ondansetron is to be administered concurrently.

In the absence of hypertension, Syntometrine® (ergometrine 0.5mg and oxytocin 5 units) 1mL IM is the

preferred oxytocic for women at higher risk of postpartum haemorrhage, such as:

- Previous history of PPH greater than 1 litre
- Previous history of retained placenta
- Prolonged use of oxytocin infusion for induction or augmentation of labour (greater than 8 hours)
- Prolonged active second stage (more than 1 hour of pushing) requiring instrumental birth
- Forceps birth (for any indication)
- Grandmultiparity (greater than or equal to para 5)
- Presence of uterine fibroids.

Caesarean birth:

Oxytocin 5 units IV is preferred over other uterotonic drugs. A further 5 units IV may be administered at the discretion of the obstetrician.

Minimising risk of inadvertent administration

Note: Always use the designated yellow, oblong container for preparation of oxytocics for third stage.

- Do not take third stage oxytocics into the birthing room until the woman has commenced the active phase of the second stage of labour.
- Do not draw up the oxytocic drug until the birth is imminent.
- The accoucheur checks the contents and expiry date of the vial with the assisting midwife.
- Draw up the contents into a 2mL syringe, and keep the checked drug vial and syringe containing the oxytocic away from the neonatal resuscitator and/or cot to minimise inadvertent administration to the neonate.
- Refer to the Women's policy and guideline (intranet access only): Medicine Management Policy and Medicine Management Guideline.

Oxytocin administration

Oxytocin (10 units IV or IM) is preferred over other uterotonic drugs because it is effective 2-3 minutes after injection, has minimal side effects and can be used in all women.

- Administer a prophylactic oxytocic agent to the woman with the birth of the anterior shoulder, or within one to two minutes of the birth of the baby [2, 3].
- Advise the accoucheur when the oxytocic is administered.
- Clamp and cut the umbilical cord close within 2-3 minutes of administration of the oxytocic. Note: It is important to delay this action until after the oxytocic has been administered.
- Immediately after cord clamping place one hand on the uterine fundus and await the onset of a strong uterine contraction 2. This is likely to occur within 2-3 minutes after oxytocic administration4. At this time the fundus will rise up into the accoucheur's hand. It is not necessary to manipulate the uterus.

Controlled cord traction (CCT)

- Place one hand above the level of the symphysis pubis, applying counter pressure in an upward direction, thus stabilising the uterus during CCT. This is sometimes referred to as 'guarding the uterus'. Do not manipulate the uterus[2].
- With the onset of the strong uterine contraction (2-3 minutes after administration of oxytocic), pull downward on the cord following the direction of the birth canal until the placenta appears at the vulva. Maintain counter-pressure to the uterus2.
- During CCT observe for signs of separation of the placenta; lengthening of cord and a small amount fresh blood loss. The uterine fundus will become rounded and smaller.

Managing resistance to CCT

- If the placenta does not descend during 20 - 30 seconds of CCT or if there is resistance to CCT, do not continue to pull on the cord.
- Hold the cord loosely (i.e. without any pulling/traction) and wait until the uterus is well contracted again.
- With the next contraction, repeat controlled cord traction with counter-pressure[2].
- Never apply CCT without applying counter traction above the pubic bone on a well-contracted uterus[2.] Downward traction on the cord must be released before uterine counter-traction is relaxed.
- Do not encourage CCT in conjunction with maternal effort.

Birthing the placenta and membranes

Once the placenta is visible at the introitus:

- release cord traction
- release counter traction on the fundus
- As the placenta emerges,
  - hold the placenta in two hands and gently turn it until the membranes are twisted. Slowly pull to complete third stage.
  - use an upward and downward or a twisting movement to ease the membranes slowly out of the vagina.
- Document time of birth of placenta and membranes.
- If the membranes tear, gently examine the upper vagina and cervix wearing sterile gloves and use a sponge forceps to remove any pieces of membrane that are present.
- If the placenta and membranes remain insitu and the woman is not bleeding, consider bladder management - either bedpan or indwelling catheter.
- Notify a medical officer if placenta and membranes remain insitu after 30 minutes. Refer to guideline: Placenta - Retained, Management of
- Immediately massage the fundus of the uterus to make sure it is well contracted[2].

Immediate post birth management

- Palpate the fundal height and massage the fundus every 15 minutes for first hour following birth of placenta and membranes.
- Repeat uterine massage as needed during the subsequent hour [2].
- Ensure the uterus does not relax after you stop uterine massage[2].
- Monitor PV bleeding.
  - If the vaginal bleeding is excessive, determine the cause and refer to guideline: Postpartum Haemorrhage Management including Postnatal Care.
  - Ensure early repair of any perineal/cervical trauma
- Examine placenta and membranes for completeness. If a portion of the maternal surface is missing or there are torn membranes with vessels, suspect retained placenta fragments. Refer to a medical officer for further management.
- Document the findings.
- All other post birth observations should occur as per section 3.9.1 in the guideline: Labour and Birth and Early Puerperium – Care during.

4.2 Physiological management of third stage

Principles: physiological third stage

Physiological management allows placental separation and expulsion to occur spontaneously without intervention. This precludes the administration of oxytocic drugs. This process may take from fifteen minutes to one hour.

Management

- The accoucheur waits for signs of separation and descent of the placenta:
  - small fresh blood loss
  - lengthening of cord
  - fundus becomes rounded and smaller
- Allow the placenta and membranes to be expelled by maternal efforts.
  - Maternal positioning, such as squatting or sitting, by utilising the forces of gravity, will aid expulsion.
- If the placenta and membranes remain insitu after 1 hour, notify RMO. Refer to guideline: Appendix 1 of Placenta – Retained, Management of.
- Immediate post birth management as for section 4.6 Immediate post birth management.
- **NOTE: If there are any signs of significant bleeding administer oxytocic agent and manage actively** as per section 4 Active Management of Third Stage and refer to guideline: Postpartum Haemorrhage Management including Postnatal Care

5. Evaluation, monitoring and reporting of compliance to this guideline

Compliance to this guideline will be monitored measured by review of incidents reported through VHIMS.

6. References

Title Title of Study or Article	***Level*** (1-IV)	***Author/s***	***Source – Journal title*** Date of publication Volume and Issue number Pages	***Comments*** – please include: - Database searched - Keywords searched - Study design - Size of sample etc
1. Active versus expectant management in the third stage of labour.	**1**	Prendiville WJ, Elbourne D, McDonald S	The Cochrane Database of Systematic Reviews 2000, Issue 3. Art. No.: CD000007. DOI: 10.1002/14651858.CD000007	
2. International Confederation of Midwives (ICM) and International Federation of Gynaecologists and Obstetricians (FIGO). 2004. Joint Statement: Management of the third stage of labour to prevent post-partum haemorrhage.				

Title Title of Study or Article	***Level*** (1-IV)	***Author/s***	***Source – Journal title*** Date of publication Volume and Issue number Pages	***Comments*** – please include: - Database searched - Keywords searched - Study design - Size of sample etc
3. Prophylactic ergometrine-oxytocin versus oxytocin for the third stage of labour.	**1**	McDonald S, Abbott JM, Higgins SP.	The Cochrane Database of Systematic Reviews 2004, Issue 1. Art. No.: CD000201. DOI: 10.1002/14651858.CD000201.pub2.	
4. Down-up sequential separation of the placenta.		Herman A, Zimerman Z, Arieli S, Tovbin Y, Bezer M, Bukovsky I, Panski M.	Ultrasound in Obstetrics and Gynecology.2002 19: 278-281.	

Royal Women's Hospital Policies, Guidelines and Procedures:

- Postpartum Haemorrhage Management including Postnatal Care
- Placenta - Retained, Management of
- Labour and Birth and Early Puerperium – Care during
- Medicine Management Policy
- Medicine Management Guideline

7. Legislation/Regulations related to this guideline

Not applicable.

8. Appendices

Not applicable.