Guideline

Active management of the third stage of labour

Audit standards/ key messages

1. There should be evidence in a woman's birth plan of a discussion on the third stage of labour.
2. Midwives should encourage all women planning vaginal births to undergo active management of the third stage of labour, whilst supporting choice.
3. Active management should be employed where there are risk factors as listed in section 6.2.
4. The drug of choice for the routine active management of the third stage should be Syntometrine®.
5. Consideration should be given to delayed clamping of the cord if the infant does not require immediate resuscitation.
6. Oxytocics drugs should be stored as defined in section 6.5.
7. A swab count must be performed and documented following all normal births in any setting (this is separate to any perineal repair swab count).

1 Scope

Local: This guideline is applicable within Maternity Services and is aimed at both midwives and obstetricians attending vaginal births in the home or hospital setting.

2 Purpose

To make recommendations for midwifery and obstetric practice in relation to active management for the management of the third stage of labour, and to outline when this method of management is appropriate and the practical aspects of undertaking this approach.

3 Abbreviations

PPH	post-partum haemorrhage
RCOG	Royal College of Obstetricians and Gynaecologuists
NICE	National Institute of Clinical Excellence
PCV	packed cell volume
IVH	intra-ventricular haemorrhage

4 Definition of active management

The third stage of labour is the time from the birth of the baby to the expulsion of the placenta and membranes. The active management of the third stage involves a package of care which includes:

- use of a prophylactic oxytocic drug;
- (immediate) clamping and cutting of the cord; and
- use of the Brandt-Andrews manoeuvre (waiting for signs of separation and then applying controlled cord traction) or controlled cord traction (not waiting for signs of separation) to expel the placenta.

5 The Evidence: Active vs physiological management

Current best evidence advises that 'active management' is the recommended method for the third stage. Active management of the third stage is associated with:

- a shortened third stage; **A**
- reduced blood loss;
- reduced incidence of postpartum haemorrhage (PPH);
- a reduction in other serious complications of the third stage.

Active management does not affect the incidence of retained placenta. It has also been found to lead to a reduced neonatal packed cell volume (PCV).

6 Recommendations for practice

6.1 Antenatal/ intrapartum discussion

When discussing the woman's birth plan in the antenatal period, information on options for the third stage and the relative benefits of each method of management should be included. ✓

In the absence of risk factors known to increase the risk of PPH (see section 5.3 below), management of the third stage (physiological vs active), including options and relative benefits of both approaches, should be discussed by the midwife with the woman. Women should be informed that active management of the third stage reduces the risk of maternal haemorrhage and shortens the third stage. Choice of approach should be documented in the birth plan or case notes in the antenatal or intrapartum period, and women should be supported in their choice of method. **C**

6.2 Risk Factors for PPH

There is a greater risk of PPH for women with one or more of the following. Women with these risk factors should be encouraged to undergo an active third stage:

- prolonged labour: first or second stage
- previous postpartum haemorrhage
- low haemoglobin: <9g/dl
- pregnancy-induced hypertension
- polyhydramnios
- antepartum haemorrhage
- multiple pregnancy
- assisted delivery or caesarian section (CS)
- induction of labour
- use of oxytocin in labour
- obstetric cholestasis
- BMI $\geq$ 30 **B**

6.3 When to clamp the cord

The International Federation of Obstetrics and Gynaecology and the World Health Organisation (WHO) no longer recommend immediate cord clamping as a component of active management. In recent publications, both NICE and the RCOG state that the reduction of PPH is due to the oxytocic drug and that the significance of the other two components of active management (immediate cord clamping and controlled cord traction) remain unclear.

There is now a growing body of evidence to suggest that immediate cord clamping may be harmful for both term and preterm babies. Immediate cord clamping reduces placental transfusion and thus lowers neonatal haemoglobin. In term babies, this leads to less jaundice and less need for phototherapy but reduced iron stores which may lead to neuro-developmental delay, which may be irreversible; in the preterm baby it leads to more transfusion and a greater risk of intra-ventricular haemorrhage (IVH). **A**

Whilst gravity influences placental transfusion, from the limited evidence available, whilst the cord is intact, it would seem reasonable to lift the baby **no more than** 20cms above the mother's introitus and to delay cord clamping for up to two to three minutes; this does not appear to have an adverse effect on other outcomes such as PPH rates for the mother. **C**

Midwives and obstetricians should therefore give consideration to delaying cord clamping, particulary for pre-term infants who do not need immediate resusitation at birth, as this may reduce the risk of IVH and the need for transfusion. Simple measures such as drying and keeping the baby warm may be instigated prior to cord clamping. **C**

6.4 Drug of choice

In keeping with the findings of the Cochrane review, Syntometrine® is the drug of choice. **A**

NICE currently recommend the use of Syntocinon® for active third stage management; the decision to use Syntometrine® locally has been made on the basis of a pilot of the routine use of syntocion and a subsequent

observed increase in significant PPH > 1500mls, in 2008. The use of ergometrine-oxytocin as part of the routine active management of the third stage of labour appears to be associated with a small but statistically significant reduction in the risk of PPH of between 500-1000mls when compared to oxytocin alone. No statistically significant difference is seen for blood loss of 1000ml or more.

However, there is an increase in maternal side-effects associated with the use of ergometrine-oxytocin.

Syntometrine® is on the Midwives Exemption List.

In the event of the woman having raised blood pressure (diastolic ≥90mmHg), 10iu Syntocinon® IM should be the drug of choice. Syntocinon® is also on the Midwives list.

Side-effects associated with Syntocinon® and Syntometrine® include:

- nausea and vomiting
- skin rashes
- changes in heartbeat.

In addition, Syntometrine® may cause:

- headache
- hypertension
- postpartum eclampsia
- abdominal pain
- dizziness
- adverse effects on breastfeeding, as it suppresses serum prolactin levels
- cardiac arrest or intracerebral haemorrhage, as the ergometrine causes venous vasoconstriction.

6.5 Storage of oxytocics

1. Syntocinon® and Syntometrine® should be stored in a fridge at 2-8°C.
2. Syntometrine® can be stored up to 25°C for two months, but must be protected from light; it must then be discarded if not used in this time.
3. Syntocinon® can be stored in temperatures up to 30°C for three months, but must then be discarded if not used in this time. **C**

7 Intrapartum procedure

1. Obtain and record verbal consent for use of an oxytocic drug.
2. Administer one ampoule (1ml) of Syntometrine® IM with delivery of the anterior shoulder, or as soon as possible following delivery of the infant.
3. Consider delaying cord clamping for up to two to three minutes but do not raise the baby higher than 20 cms from the intriotus. There is insufficient evidence to state when the cord should be clamped (see section 6.3 above) although it is known that avoiding early clamping reduces the risk of feto-maternal transfusion, which may be important for rhesus-negative women, and preterm infants.
4. Signs of placental separation are:

    - show of blood
    - lengthening cord
    - rise in fundal height
    - uterus assumes a more globular shape and greater mobility.

5. Apply cord traction with counter pressure. When the placenta is visible, release tension and gently cup the placenta with the hands to deliver smoothly.
6. Assess and document blood loss. **B**
7. Check the placenta and membranes for completeness and document findings.

8 Following delivery

Following any (normal) vaginal birth, in any setting, a record of a correct swab count must be recorded in the notes, either using the sticker designed for this purpose, or directly into the text of the intrapartum record. The record must verify whether or not the swab count is correct and be dated, timed and signed. **C**

The principles of swab checking and counting at a delivery must follow the Trust's The count (swabs, instruments and sharps) policy.

This count is separate to the swab check performed when undertaking a perineal repair following a normal birth and recorded on the perineal proforma, when a separate central sterile supply department (CSSD) pack to that used for delivery is opened.

Instrumental births should have a swab count completed for both the delivery and perineal repair, recorded as one overall count, as the same CSSD pack is used in this type of delivery.

Any discrepanices in the swab check must be followed up as described in the Trust policy mentioned above and an incident form completed.

9 Monitoring compliance with and the effectiveness of the guideline

The use and effectiveness of this guideline will be monitored by the following processes.

- Risk management & incident reporting process (see: perinatal services incident reporting and investigation policy and procedure). The obstetric and/ or neonatal risk manager will monitor the numbers of incidents relating to the management of the third stage. Any significant incidents will be investigated according to the perinatal services incident reporting and investigation policy and procedure and then reported to the head of midwifery and/ or neonatal clinical director and subsequently to the Perinatal Clinical Governance Committee in a quarterly report. The Perinatal Clinical Governance Committee will be responsible for reviewing incident data, and for identifying and monitoring any actions required.
- Monthly unit data collections on risk statistics including the incidence of PPH 500-1500mls and more than 1500mls, which are distrubted to all staff and reviewed by the risk team quarterly.
- Clinical audit to look at compliance with the audit standards.
- Any significant trends from patient complaints.
- Feed-back from individual clinicians.

The research and development midwife will be responsible for ensuring that any recommended changes, as a result of the above processes, are made to this document and will ensure that the guideline is based on the best-available evidence.

10 References

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11 Associated documents

- LR 2.10 physiological management of the third stage of labour guideline
- HR 2.45 retained placenta guideline
- HR 2.9 postpartum haemorrhage (PPH) and severe haemorrhage protocol
- Perinatal services incident reporting and investigation procedure
- The count (swabs, instruments and sharps) policy

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Document management

Document control/change history					
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Draft 2	J Ford	As above	May 2006	Polices & Procedures Group (Maternity); Obstetric Divisional Group	
Draft 3	J Ford	As above	May 2008	Polices & Procedures Group (Maternity); Obstetric Divisional Group	Decision to change to IM syntocinon discussed at DU forum & risk meetings. And agreed by senior clinical staff
Draft 4	J Ford	As above	July 2008	DU Forum, Risk Group, Obstetric Divisional Group	In view of concerns re: PPH rates, oxytocic drug changed back to syntometrine
Version 5	J Ford & K Heap	As above	Feb 2011	Neonatal Cons; E Everett, Resus Officer; J Butler, Cons Midwife; DU Forum; K Bongaerts, Pharmacist; Policies & Procedures Group (Maternity); Perinatal Services Management Group	Delayed cord clamping introduced as a consideraton.
Version 6	J Ford	As above	April 2012	K Bongaerts, Pharmacist; Policies & Procedures Group (Maternity); Perinatal Services Management Group	Added in swab count at normal delivery & need to document this.

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