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Trust Guideline for the Management of the Third Stage of Labour including Retained Placenta

For Use in:	Maternity Services
By:	Midwives and Obstetricians
For:	Third Stage of Labour including Retained placenta
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7	28/05/2021	Lifestart trolley section added. Amendments made to be in line with NICE and references updated Oxytocin infusion rate has changed and more specific information re delayed cord clamping	Amanda Anderson, Katherine Greaves, Rosie Goodsell, Sue Holland

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Background

The third stage of labour is defined as the period of time between the birth of the baby and the expulsion of the placenta and membranes (National Institute of Clinical Excellence (NICE), 2014).

There is a range of professional opinion on the most appropriate management of the third stage of labour. Where possible, women should be informed of the pros and cons of both approaches as applicable to them in a timely fashion to allow them to make a true informed choice. The information staff provide should be drawn from this guideline. Where this has not been possible, women should be advised that national guidance recommends an active third stage.

With both managements it is now recommended that delayed cord clamping for at between one and five minutes occurs for an uncompromised neonate. This can provide the infant with an extra 30% more blood and aids the start of extra uterine life with improved haematocrit and haemoglobin levels (McDonald and Abbott, 2006, Resuscitation Council, 2010).

Management of the third stage broadly falls into two categories:

1) Physiological management – where the woman's body expels the placenta and membranes using the natural physiological changes in hormones and maternal effort. Clamping and cutting of the cord may be delayed until it no longer pulsates.

2) Active management – where a bolus of oxytocin/Syntometrine is given intramuscularly/ or intravenously, clamping and cutting of the cord is performed at least one minute after delivery and the placenta and membranes are delivered by controlled cord traction. This technique has been shown significantly to reduce the risk of post-partum haemorrhage (PPH) and is recommended by NICE (2014).

Numerous trials have associated the use of prophylactic oxytocin/Syntometrine with a significant reduction in blood loss at delivery and the risk of having a PPH (McDonald et al, 2009, Cotter et al, 2010, Begley et al, 2011). However, the routine use of an active third stage in low risk healthy women has been questioned, with some advocating the use of

skin-to-skin contact and the initiation of breastfeeding to aid the natural physiological hormonal changes within the woman, facilitating a physiological third stage (Buckley, 2005, Anderson et al, 2006, Finnegan and Davies, 2005).

It is important however, that with either physiological or active management, PPH is recognised and managed early. Please refer to guideline Major Obstetric Haemorrhage Trustdocs Id: 852, as it remains a leading cause of morbidity.

Midwives should remain skilled in both active and physiological management of the third stage.

Rationale

This guideline aims to provide guidance for both midwives and obstetricians in the physiological and active management of the third stage of labour and the management of retained placenta.

Recommendations

Women should be made aware that active management of the third stage significantly reduces the risk of major PPH and the need for a blood transfusion and that national recommendations currently advise all women to have active management due to associated lower risk of PPH (NICE 2014).

Women who request physiological management after appropriate information and are deemed at low risk of PPH, should be supported by all staff in this choice (NICE, 2014, RCM, 2012).

Informed choice

Informed choice regarding the management of the third stage of labour should be offered to all women. This information should be given ideally in the antenatal period, Information relating to expectations for both an actively managed and physiologically managed third stage should be discussed along with the benefits and risks associated with each (NICE, 2014).Options for managing the third stage of labour should be discussed again at the initial assessment in labour (NICE, 2014).

Any discussions relating to the third stage of labour and the wishes of the mother should be recorded in the maternity handheld notes and in the personalised care plan

Active management

Clinical management of an active third stage of labour

- Syntometrine 5/500 should be given intramuscularly as soon as possible after the delivery of the baby during all vaginal deliveries that are having active management of the third stage (NB if hypertensive or cardiac disease, use oxytocin 10 units IM). At Caesarean section, 5 units of oxytocin i.v. is 1st line management of third stage.
- Await signs of separation (cord lengthening, separation bleed).
- Ensure the uterine fundus is firm and central. A fundus displaced to the side of the abdomen may indicate a full bladder. Where a full bladder is suspected encourage the women to pass urine or insert a urinary catheter.
- Do not clamp and cut the cord earlier than 30 sec and maximum duration of 1 minute from the birth of the baby, unless there is concern about the integrity of the cord or the

baby has a heart rate less than 60 beats/minute, that is not getting faster and stabilisation cannot be commenced with the cord intact. After 1 minute of DCC there is NO proven transfusion related benefits and there may be an increased risk of jaundice requiring Phototherapy

- If the woman requests that the cord is clamped and cut later than 1 minute, support her in her choice.
- .For premature babies ensure LifeStart™ trolley is available to allow any necessary resuscitation with the cord intact -refer to Clinical Guideline for Delayed Cord Clamping (DCC) Therapy for Pre-Term and Term Infants (Trustdocs Id:17346)
- Perform controlled cord traction whilst guarding the uterus to deliver the placenta.
- Record the time of cord clamping
- Use NNUH Trust approved cord clamps. If women chose to use a ligature of their choice explain the risks eg slippage and bleeding and document discussion and method used in the hand held maternity notes and E3. There is currently no available evidence on the most appropriate method of cord clamping therefore sterile trust cord clamps are recommended
- Throughout this period the woman's condition should be observed based on her colour, respirations, how she feels and her blood loss.
- Breastfeeding or nipple stimulation at this time should be encouraged for women who choose this feeding method to assist with placental separation.
- Skin to skin contact should be facilitated where possible.
- Do not use either umbilical oxytocin infusion or prostaglandin routinely.

Length of an active management

The placenta is retained if not delivered within 30 minutes of an actively managed third stage (NICE, 2014).

Women at high risk of PPH

Women at high risk of PPH should have wide bore intravenous access (16G grey cannula) and receive an oxytocin infusion of 30IU in 500mL normal saline 0.9% at a rate of 166ml/hr for 2 hours after delivery of the placenta, in addition to the prophylactic Syntometrine bolus given in an active third stage (or oxytocin bolus if syntometrine contraindicated).

Special cases

For certain women (e.g. cardiac problems) a reduced volume of oxytocin dilution in the third stage of labour may be necessary.
For women with cardiac disease please refer to the individual antenatal management plan (COACS form - yellow sheet in the hospital notes) and discuss with a senior obstetrician/anaesthetist.

For women with severe pre-eclampsia please refer to Management of Pre-Eclampsia and Hypertensive Disorders in Pregnancy Trustdocs Id: 887 for guidance on fluid restriction.

Physiological Management of third stage of labour

Inclusion Criteria

Women who have had a spontaneous first and second stage of labour and do not have any of the contraindications listed below should be supported in their choice of management of the third stage after they have received appropriate information.

Contraindications in current pregnancy

- Previous PPH.
- Previous manual removal of placenta.
- Placenta praevia.
- Significant APH after 20 weeks in current pregnancy.
- Anaemia (Haemoglobin under 105 g/L and/or MCV <80).
- Malpresentation.
- Multiple pregnancy.
- Polyhydramnios.
- Macrosomic fetus.
- Intra-uterine death.
- Uterine fibroids or other uterine anatomical anomaly.
- Evidence of chorioamnionitis.
- Induction of labour with oxytocin infusion.
- Known coagulopathy.
- Hypertension/pre-eclampsia.
- Grand multiparity (more than 5).
- Women who decline blood transfusion Obstetric Haemorrhage in Women who Decline Blood and Blood Products Trustdocs Id: 851.

Intrapartum contraindications

- Prolonged first or second stage of labour.
- Precipitate labour.
- Augmented labour.
- Instrumental delivery.
- Excessive blood loss during labour or immediately following the birth.

Clinical management of a physiological third stage

- Once born, the baby is placed against the mother's skin to allow the normal physiological and hormonal changes to occur within both the woman and the

neonate. Minimal disruption and separation of mother and baby should occur during this time.

- Immediate assessment of the newborn and continued observation of its condition should occur to allow early intervention/resuscitation if required.
- The cord should not be clamped or cut until the cord has stopped pulsating, or it can be left intact until the placenta is expelled.
- Breastfeeding at this time should be encouraged for women who choose this feeding method.
- The woman's condition should be observed based on her colour, respiratory rate and how she feels. Her vaginal blood loss should be closely observed.
- The uterus is not palpated or stimulated unless the blood loss becomes excessive.
- The placenta should be delivered by maternal effort. Where a full bladder is suspected encourage the women to pass urine or insert a catheter.

Management of the cord

In physiological management of the third stage of labour the cord is not handled unnecessarily. Controlled cord traction must not be performed and the woman should be encouraged to expel the placenta herself by bearing down and pushing with the continued contractions.

There should be no clamping of the cord until pulsation has stopped (NICE 2014). If the cord is clamped and divided once it has ceased pulsating, the maternal end should be left to drain.
If blood for rhesus negative women is required from the cord, it must be remembered that only a small amount is required (microtainer with pink top will be sufficient). When the placenta is delivered, if there is minimal blood left in the cord, it can be taken from vessels closer to the placenta.

Length of a physiological management

A physiological third stage is prolonged if it is not complete within 1 hour (NICE, 2014). After this time change to active management should be recommended Careful monitoring of the woman's condition and blood loss should be performed throughout this period and measures should be taken; such as empting of the bladder, nipple stimulation and adopting an upright posture should be conducted to help deliver the placenta.

Where blood loss is considered excessive, summoning of help and conversion to an actively managed third stage should be the first line of care. Offer a change from physiological management to active management for women who wish to shorten the third stage of labour.

The Third Stage of Labour following a water birth

If a woman opts to use water for pain relief in labour, a discussion regarding the third stage of labour should occur before entering the pool. Where active management is chosen, the woman should be advised to leave the pool. Where physiological management is deemed safe and supported, there is no evidence to contraindicate the delivery of the placenta in the water. However blood loss is harder to estimate in this circumstance and should be observed carefully and where visibility within the water is reduced the woman should be

asked to leave the pool to estimate blood loss more accurately. Refer to guideline Water Birth Management Trustdocs Id: 804

Completion of the Third stage of Labour

Full documentation of the management of the third stage of labour should occur following delivery and examination of the placenta and membranes
All swabs and needles should be accounted for and double checked with another member of staff and signed for in the appropriate part of the maternal hand-held notes and on E3

Management of Retained Placenta

Background

Retained placenta is described as failure to deliver the placenta after 30 minutes (with active management) and 60 minutes (in physiological management) following delivery of the baby.

The reported incidence of retained placenta was 1.5% in 2020

The main risk of this obstetric complication is post-partum haemorrhage. This occurs in about 10% of cases and is more likely to occur following partial separation of the placenta or when it is has separated completely but is retained within the uterus. Other risks include infection, as well as complications related to the removal of the placenta.

Management

- Ensure oxytocic has been given in the third stage see above– if not, give Syntometrine 5/500 IM (NB if hypertensive or cardiac disease use oxytocin 10 units IM).
- Insert a self-retaining urinary catheter to ensure that the bladder is empty.
- Offer a vaginal examination to ensure placenta is not retained within the vagina. Ensure adequate pain relief -if the woman reports inadequate analgesia during the assessment, stop the examination and address this immediately
- Expedite delivery of the placenta, particularly in those with a history of manual removal.
- Encourage skin to skin /breastfeeding.
- Inform Obstetric S.H.O., SpR and anaesthetist.
- Insert 1 x 16 G cannula. Take blood for FBC/G & S.
- Commence infusion of 30 units of Oxycinon in 500 mL of 0.9% normal saline at 166 mL/hour and arrange for manual removal of placenta.
- Do not use intravenous oxytocic agents routinely to deliver a retained placenta.

. In the presence of haemorrhage or haemodynamic instability

- Emergency Call 2222- PPH.
- Inform Obstetric S.H.O., SpR and anaesthetist.
- Insert 2 x 16 G cannula.

- Take blood for FBC and urgent cross-match of 4 units of blood.
- Repeat the dose of Syntometrine.
- Commence infusion of 30 units of Oxytocin in 500 mL 0.9% normal saline at 166 mL/hour.
- Offer a vaginal examination to assess the need to undertake manual removal of the placenta.
- Arrange for urgent manual removal of placenta.
- If a swab or instrument is to be left in situ for transfer to theatre for repair, 2 x green bracelets must be placed alongside the ID bracelets on ankle and wrist. Ensure this information of intentionally retained swab/instrument is handed over to the theatre team The green ID bracelets must be removed immediately after removal of swab or instrument. Ensure delivery swab/instrument count correct and documented please refer to Swabs, tampons and sharps in the maternity services when used for vaginal birth and perineal repair (Management of) Trustdocs Id: 9635

Manual removal of placenta

- This is an invasive procedure with potential complications (haemorrhage, infection or genital tract trauma).
- Ensure adequate analgesia: manual removal is a painful procedure.
- Give 5 IU Oxytocin by slow I.V. injection on evacuating the uterus.
- Administer prophylactic antibiotics:
    - Single dose of: Cefuroxime 1.5g IV and Metronidazole 1g IV
    - If penicillin allergic use single dose of Clindamycin 600mg IV and Gentamicin 160mg IV
- Commence Oxytocin infusion (post-partum regimen – see above).
- When swabs or instruments that have been left in situ prior to transfer to theatre are removed from the woman, then the green wrist bands (attached to indicate a retained swab or placenta) must be removed immediately.

Clinical audit standards

The maternity services are committed to the philosophy of clinical audit, as part of its Clinical Governance programmes. The standards within this clinical guideline will be subject to audit, with multidisciplinary review of the audit results at one of the monthly departmental Clinical Governance meetings. The results will be summarised and a list of recommendations formed into an action plan, with a commitment to re-audit within three years, resources permitting.

Audit standard: MROP within 1 hr of delivery where there is significant haemorrhage or haemodynamic instability (target 100% – excepting home births).

Development

This guideline was originally written by Katherine Greaves and amalgamated with Trust guideline Management of Retained Placenta Trustdocs id 883 by Katharine Stanley before being discussed and further modified at an obstetrics Guideline Committee meeting on

3/2/2017. It was reviewed at various stages with the latest amendment in May 2021 where the oxytocin infusion rate has changed and more specific information re delayed cord clamping

Distribution list/ dissemination method

Trust Intranet – 'Trustdocs'

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