Trust guideline for the management of the Third stage of labour including retained placenta

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V7.0	May 2021	Amanda Anderson, Katherine Greaves, Rosie Goodsell, Sue Holland	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.
V8.0	May 2024	Margaret Pilling (O&G SpR), Nicola Hill	Updated in line with NICE guideline 235: Intrapartum care (2023)

Previous Titles for this Document:

Previous Title/Amalgamated Titles	Date Revised
None	Not applicable

Distribution Control

Printed copies of this document should be considered out of date. The most up to date version is available from the Trust Intranet.

Consultation

This guideline has been ratified by the O&G Clinical Guideline Committee and has been disseminated via the hospital intranet to all members of Maternity staff.

Consultant Anaesthetist
Practice Development Midwives
Consultant Obstetrician

Monitoring and Review of Procedural Document

The document owner is responsible for monitoring and reviewing the effectiveness of this Procedural Document. This review is continuous however as a minimum will be achieved at the point this procedural document requires a review e.g., changes in legislation, findings from incidents or document expiry.

Relationship of this document to other procedural documents

This document is a clinical guideline applicable to NNUH; please refer to local Trust's procedural documents for further guidance, as noted in Section 5.

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1. Introduction

1.1. Rationale

The third stage of labour is defined as the period between the birth of the baby and the expulsion of the placenta and membranes (National Institute of Clinical Excellence (NICE), 2023).

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.

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).

1.2. Objective

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. The information staff provide should be drawn from this guideline, however where this has not been possible, women should be advised that national guidance recommends an active third stage.

1.3. Scope

This guideline is intended for use of all staff working within all maternity settings of NNUHFT.

1.4. Glossary

The following terms and abbreviations have been used within this document:

Term	Definition
NNUHFT	Norfolk and Norwich University Hospital Foundation Trust
MROP	Manual Removal of Placenta
PPH	Postpartum haemorrhage
APH	Antepartum haemorrhage
NICE	National Institute of Health and Care Excellence
RCM	Royal College of Midwives
DCC	Delayed cord clamping
HR	Heart rate
BP	Blood pressure
RR	Respiratory rate
sats	Oxygen saturations
FBC	Full Blood Count
G&S	Group and save.
ID	Identification
IM	Intramuscular
IV	Intravenous

IU	International Units
SSRI	Selective Serotonin reuptake inhibitor
SNRI	Serotonin-Noradrenaline reuptake inhibitor

2. Responsibilities

All maternity and obstetric staff who provide intrapartum care should ensure they remain up to date with this clinical guidance.

3. Policy Principles/Processes to be followed.

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. It comprises a package of care, which include:
    - No routine use of uterotonics
    - No cord clamping until pulsation has stopped or after delivery of the placenta
    - Delivery of the placenta spontaneously or by maternal effort
2) Active management – comprises the following:
    - Routine use of uterotonics
    - Cord clamping and cutting
    - Controlled cord traction after signs placental separation

    Active management is associated with a reduced risk of post-partum haemorrhage (PPH).

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.

3.1. Recommendations and informed choice

Women should be made aware of the different options for managing the third stage of labour 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 and they should be advised that active management is associated with a lower risk of postpartum haemorrhage or requiring a blood transfusion. These risks and benefits should be discussed in the context of the patient's own level of risk (particularly of PPH), to enable them to make an informed decision.

For women requesting active management the choice of uterotonic prophylaxis should be discussed. They should be made aware that Syntometrine® (Oxytocin 5 units/ Ergometrin 500 micrograms) may be more effective at reducing the risk of PPH than oxytocin alone. For this reason, Syntometrine® is the recommended 1st line agent at NNUH for active management of the 3rd stage of labour. However,

Syntometrine® is more likely to cause nausea and vomiting and may be contraindicated e.g. in hypertensive patients or women with severe cardiac, hepatic or renal disease.

Women who request physiological management after appropriate informed decision-making, should be supported in their choice.

Options for managing the third stage of labour should be discussed again at the initial assessment in labour

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.

3.2. Management of the Third Stage of Labour

3.2.1. Active management of the Third stage of labour

- Administer a prophylactic uterotonic agent immediately after birth of the baby and before the cord is clamped

  1st line Uterotonic agents:

  - Syntometrine® 5/500 IM,

    N.B. this is contraindicated in pre-eclampsia/hypertension
  - If there are contraindications to Syntometrine®:
    - Oxytocin 10 units IM **OR**
    - Oxytocin 5 units slow IV injection over 3-5 minutes (if oxytocin has been used during labour)
  - At Caesarean section, Carbetocin by slow IV injection is recommended for prevention of PPH (NICE 2023) – At the time of update to this guideline, Carbetocin is going through a process of being added to the NNUH formulary. Until it is, Oxytocin 5 units slow IV injection over 3-5 minutes is the 1st line management at C/S.
- Allow 1-5 minutes of delayed cord clamping (DCC) then clamp and cut the cord.

NB in **term** babies, after 1 minute of DCC there are no transfusion related benefits of DCC.

Clamp and cut earlier if there is concern about the integrity of the cord or if the newborn's heart rate is < 60 bpm and is not rising and Newborn life support cannot be carried out with the cord intact.

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)

Clamp and cut later if the woman requests this

- 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 e.g. 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.
- Await signs of separation (cord lengthening, separation bleed).
- Deliver the placenta by controlled cord traction whilst guarding the uterus.
- 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.
- Observations - throughout this period the woman's condition should be observed based on her colour, respiratory rate, 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.
- If there is a PPH, retained placenta, maternal collapse or any other concerns:
    - Measure and record maternal observations (temperature, HR, BP, RR, sats and estimated blood loss) at least every 15 minutes
    - Inform the obstetric team and transfer to obstetric-led care

3.2.2. Women at high risk of Post Partum Haemorrhage

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 uterotonic agent given in an active third stage (or oxytocin bolus if syntometrine contraindicated).

3.2.3. 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.

3.2.4. Physiological Management of Third Stage of Labour

4. 3.2.4.1 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.

5. 3.2.4.2 Contraindications in Current Pregnancy

- Previous PPH > 1 litre or requiring a blood transfusion
- Previous manual removal of placenta.
- Low lying placenta.
- Abnormally invasive placenta
- Significant APH after 20 weeks in current pregnancy.
- Anaemia (maternal Haemoglobin < 85 g/L at the onset of labour).
- Malpresentation.
- Overdistention of the uterus – e.g. multiple pregnancy, polyhydramnios, macrosomic fetus.
- Intra-uterine death.
- Uterine fibroids or other uterine anatomical anomaly.
- Induction of labour with oxytocin infusion.
- Known coagulopathy.
- Hypertension/pre-eclampsia.
- Grand multiparity (Parity ≥ 4).
- Women who decline blood transfusion Obstetric Haemorrhage in Women who Decline Blood and Blood Products Trustdocs Id: 851.

N.B. Whilst not a contraindication to physiological management, healthcare professionals should be aware and inform women that taking an SSRI or SNRI anti-depressant in the month before birth may result in a small increased risk of PPH. This should be taken into account as part of the bleeding risk assessment.

6. 3.2.4.3 Intrapartum Contraindications

- Prolonged first or second stage of labour.
- Induction of labour or augmentation with oxytocin or prostaglandins.
- Precipitate labour.
- Sepsis.
- Instrumental delivery.
- Caesarean delivery.
- Shoulder dystocia.

- Excessive blood loss during labour or immediately following the birth.
- Delay in delivery of the placenta.

7. 3.2.4.4 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. The cord should not be handled unnecessarily.
- Breastfeeding at this time should be encouraged for women who choose this feeding method.
- The placenta should be delivered by maternal effort. Where a full bladder is suspected encourage the women to pass urine or insert a catheter.
- Observations - throughout this period the woman's condition should be observed based on her colour, respiratory rate, how she feels and her vaginal blood loss.
- The uterus is not palpated or stimulated unless the blood loss becomes excessive.
- If there is a PPH, retained placenta, maternal collapse or any other concerns:
    - Measure and record maternal observations (temperature, HR, BP, RR, sats and estimated blood loss) at least every 15 minutes
    - Inform the obstetric team and transfer to obstetric-led care
    - Recommend the active management care bundle

8. 3.2.4.5 Changing from Physiological to active management of the 3rd stage

Active management should be advised if during a physiologically managed third stage there is:

- Haemorrhage
- Prolonged 3rd stage (see section 3.2.5 for definition)
- The woman wishes to shorten the third stage

8.1.1. Length of the Third Stage

The third stage of labour is prolonged if it is not completed within:

- 30 minutes of the birth of the baby with active management
- 60 minutes of the birth of the baby with physiological management

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 emptying of the bladder, nipple stimulation and adopting an upright posture should be conducted to help deliver the placenta.

8.1.2. 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

8.1.3. 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.

8.2. Retained Placenta

8.2.1. 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.

8.2.2. Management of Retained Placenta

- Insert 1 x 16 G cannula. Take blood for FBC/G & S.
- Ensure oxytocin 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). IV oxytocic agents should not be used to deliver a retained placenta but can be used if the woman is bleeding excessively (NICE 2023).
- 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. Uterine exploration or manual removal of placenta should not be carried out without an anaesthetic.
- Encourage skin to skin /breastfeeding.
- Inform Obstetric Tier 2 or 3 Doctor (via Alertive roles “Obs & Gyae Junior Registrar” and “Obs Senior Registrar”) and anaesthetist (via Alertive role “Anaes Obs Trainee On-Call”) and transfer to obstetric-led care. If there are concerns about a PPH, the escalation should be via a 2222 emergency phone call (as below).

9. **3.3.2.1 In the presence of haemorrhage or haemodynamic instability**

- Emergency Call 2222- PPH.
- This will inform Obstetric Tier 1, 2 and 3 doctors and the Obstetric anaesthetist
- Transfer to obstetric-led care
- Implement immediate clinical treatment:
    - Empty bladder, **and**
    - Uterine massage, **and**
    - Uterotonics:
        - Repeat the dose of Syntometrine® (or oxytocin if contraindicated),
        - Commence infusion of 30 units of Oxytocin in 500 mL 0.9% normal saline at 166 mL/hour, **and**
    - IV fluids – 1 litre crystalloid e.g. Hartmann’s, **and**
    - Controlled cord traction – if placenta not yet delivered
- Insert 2 x 16 G cannula.
- Take blood for FBC and urgent cross-match of 4 units of blood.
- Tranexamic acid 1g IV (over 10 minutes) – a 2nd dose may be given after 30 minutes if continuing PPH
- Continuous assessment of estimated blood loss, the woman’s condition and to identify the source of the bleeding
- Consider oxygen supplementation – 15 litres via a non-rebreath mask (target oxygen saturations = 94 – 98%)
- 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

- Allocate a member of staff to stay with the woman and her birthing partner(s) to support them, explain what is happening and answer any questions.

Refer to guideline Major Obstetric Haemorrhage Trustdocs Id: 852 for further guidance on the management of PPH.

9.1.1. Manual Removal of the 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 further uterotonic agents 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
    - Where blood loss is >1.5L, consider an additional dose of prophylactic antibiotic after fluid replacement. Refer to guideline Major Obstetric Haemorrhage Trustdocs Id: 852
- 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.

10. Training & Competencies

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

11. Related Documents

Trust guideline for the management of major obstetric haemorrhage	TrustDocs852
Guideline for management of Women requesting immersion in water for active labour and/or birth	TrustDocs 804
Clinical guideline for delayed cord clamping (DCC) therapy in pre-term and term infants	TrustDocs 17346
Trust guideline for the management of pre-eclampsia and hypertensive disorders in pregnancy	Trust Docs 887
Trust guideline for the management of	Trust docs 851

obstetric haemorrhage in women who decline blood and blood products including the Jehovah witness community	
Trust guideline for the management of swabs, tampons and sharps in maternity services when used for vaginal birth and perineal repair	Trust docs 9635

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13. Monitoring Compliance

Compliance with the process will be monitored through the following:

Key elements	Process for Monitoring	By Whom (Individual / group /committee)	Responsible Governance Committee /dept	Frequency of monitoring
PPH >1.5 litres Datix trigger	Case review of PPH cases highlighted by Datix	Maternity risk and governance team	Maternity governance	Case by Case

MOH cases are discussed at the Maternity Review and Escalation Meeting to determine if case was appropriate and as per this guideline. Where learning has been identified it will be disseminated via appropriate routes including individualised training and discussion relevant governance meetings.

14. Appendices

There are no appendices for this document.

15. Equality Impact Assessment (EIA)

Type of function or policy	Existing

Division	Women and Childrens	**Department**	Maternity Services
Name of person completing form	Nikki Hill	**Date**	01/08/2024

Equality Area	Potential Negative Impact	Impact Positive Impact	Which groups are affected	Full Impact Assessment Required YES/NO
Race	None	None	n/a	no
Pregnancy & Maternity	None	None	n/a	no
Disability	None	None	n/a	no
Religion and beliefs	Decline blood and blood products.	nil	Jehovah witness	No – care as per specific guideline
Sex	None	None	n/a	No
Gender reassignment	None	None	n/a	No
Sexual Orientation	None	None	n/a	No
Age	None	None	n/a	No
Marriage & Civil Partnership	None	None	n/a	No
EDS2 – How does this change impact the Equality and Diversity Strategic plan (contact HR or see EDS2 plan)?		No impact		

- **A full assessment will only be required if: The impact is potentially discriminatory under the general equality duty**
- **Any groups of patients/staff/visitors or communities could be potentially disadvantaged by the policy or function/service**
- **The policy or function/service is assessed to be of high significance**

IF IN DOUBT A FULL IMPACT ASSESSMENT FORM IS REQUIRED

The review of the existing policy re-affirms the rights of all groups and clarifies the individual, managerial and organisational responsibilities in line with statutory and best practice guidance.