Clinical guideline for the management of perineal trauma following childbirth

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V 10.1	August 2021	Mr Richard Smith, Consultant Obstetrician	A small change on page 5 regarding stool softener to fall in line with the RCOG
V11.0	October 2022	Mr Charles Bircher	Consent guidance
V12.0	August 2024	Mr Charles Bircher/ J Simeoni	Transfer to new template. Addition of repeat antibiotics if PPH >1.5L Addition of OASI Bundle

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Printed copies of this document should be considered out of date.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

The following were consulted during the development of this document:

- Maternity Clinical Guidelines Committee
- Consultant Obstetricians
- Lead Labour Ward Obstetrician
- Practice Development Midwife

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 Norfolk and Norwich University Hospital Foundation Trust; 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

Approximately 90% of women will experience some degree of perineal trauma following vaginal delivery. Trauma can occur spontaneously during vaginal birth or by an episiotomy – though it is possible to have both (for example an episiotomy may extend into a third-degree tear).

1.2. Objective

Perineal damage can have a major adverse impact on women's health and mismanagement of perineal trauma is a source of obstetric litigation. Long-term morbidity associated with anatomically incorrect approximation of wounds or unrecognised trauma to the external anal sphincter can lead to major physical, psychological, and social problems.
The aim of this clinical guideline is to outline the principles for management of perineal trauma following childbirth. The principles are outlined in section 3, alongside the process to follow dependant on classification of trauma and experience of obstetric and midwifery staff.

1.3. Scope

Medical, midwifery and theatre staff providing obstetric care to women sustaining any classification of perineal trauma following childbirth within NNUHFT and its catchment area.

1.4. Glossary

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

Term	Definition
NNUHFT	Norfolk and Norwich University Hospital Foundation Trust
MGC	Maternity Guidelines Committee
NMCP	Nursing, Midwifery and Clinical Professionals Forum
IAS	Internal Anal Sphincter
EAS	External Anal Sphincter
PR	Per rectum
BD	Twice a day
TDS	Three times a day
QDS	Four times a day
Mg	Milligram
G	Gram
IV	intravenous
Fbc	Full blood count
G&S	Group and Save
OASI	Obstetric Anal Sphincter Injury

2. Responsibilities

Be aware of your limitations-if in doubt, call for more experience assistance. Midwives with appropriate skills and experience can repair first degree tears, episiotomies, and second-degree tears. Assistance should be sought from obstetric

team if the midwife has any doubts. Junior obstetric staff can repair first, second and 3rd degree tears with or without supervision depending on experience. Consultant obstetricians can repair all types of perineal tears. A senior obstetrician (senior registrar or consultant) must be involved in deciding who can repair a tear or episiotomy that has completely divided the anal sphincter and/or anorectal mucosa.

3. Policy Principles/Processes to be followed.

3.1. Classification of Perineal tears.

- First degree: injury to the **skin only**
- Second degree: involvement of the **perineal muscles** but not the anal sphincter
- Third degree: injury to the perineum involving the **anal sphincter complex**
- (External anal sphincter [EAS] and internal anal sphincter [IAS]).
    - 3a: less than 50% of EAS thickness torn.
    - 3b: more than 50% of EAS thickness torn.
    - 3c: IAS torn.
- Fourth degree: injury to the perineum involving the anal sphincter complex AND the **anal epithelium**

Third- and fourth-degree tears are uncommon, probably complicating up to 2.5 to 4% of all deliveries, but they can lead to devastating long-term complications such as faecal incontinence. Diagnosis and satisfactory primary repair is essential.

3.2. Reducing Perineal Trauma – OASI 2 Care Bundle

The OASI 2 Care Bundle has been developed between the RCOG, the RCM and The Health Foundation to reduce the risk of OASI at vaginal births. All women should be offered the following 4 elements to reduce their risk of injury.

1. Antenatal Education including information on what is pelvic health, what are perineal tears and episiotomy's, individualised risk factors, antenatal perineal massage, promoting spontaneous vaginal birth, and recovery & potential complications following a severe tear. These discussions should be documented on E3.
2. When indicated, episiotomy should be performed mediolaterally at a 60-degree angle (ideally with epi-scissors) at crowning.
3. Documented use of manual perineal protection (MPP) unless declined or birthing in water. Warm compresses should be offered and used in between contraction.
4. Following birth, the perineum should be examined, and any tears graded appropriately. The examination should include a per rectum examination even if the perineum appears intact. Document this clearly in the notes. Adequate pain relief is needed and a mechanism for requesting the examination to stop should be agreed beforehand.

3.3. Prediction and Prevention of anal sphincter tears

Risk factors for anal sphincter trauma include:

- Primiparity (up to 4%)
- Birth weight > 4 kg (up to 2%)
- Forceps delivery (up to 4%)
- Shoulder dystocia (up to 4%)
- Occipito-posterior position at delivery (up to 3%)
- Short perineum (<3cms)
- Epidural analgesia (up to 2%)
- Induction of labour (up to 2%)
- Midline episiotomy (up to 3%)

The risk factors identified cannot readily be used to prevent the occurrence of extensive perineal trauma. Delivery in left lateral position or all fours is associated with least trauma. The clinician and the woman should work together to achieve a **slow and controlled birth**.

Where episiotomy is indicated, the mediolateral technique is recommended, with careful attention to the angle cut away from the midline. Aim at an angle of 45^0-60^0 and ensure the cut is sufficient to prevent the episiotomy extending into the anal sphincter.

3.4. Who can perform the repair?

Be aware of your limitations-if in doubt, call for more experience assistance. Midwives with appropriate skills and experience can repair first degree tears, episiotomies and second-degree tears. Assistance should be sought from obstetric team if the midwife has any doubts. Junior obstetric staff can repair first, second and 3rd degree tears with or without supervision depending on experience. Consultant obstetricians can repair all types of perineal tears. A senior obstetrician (senior registrar or consultant) must be involved in deciding who can repair a tear or episiotomy that has completely divided the anal sphincter and/or anorectal mucosa.

3.5. Clinical Assessment of the perineum and lower vagina

All women who have a vaginal delivery should have systematic examination of the vagina, perineum, and rectum for an accurate evaluation of any trauma sustained prior to suturing, and the findings should be clearly documented in the notes. The woman should usually be in lithotomy position with adequate lighting.

3.6. When non-suturing may be applicable

Where the skin edges of a first-degree tear are well apposed, it can be left un-sutured and allowed to heal naturally.

3.7. Methods and Materials used in first and second degree perineal repair

1. Ensure adequate analgesia.
2. Ensure adequate exposure.
3. Ensure correct apposition of the tissue layers.
4. First degree tears should normally be sutured to improve healing (see above when non-suturing may be applicable). Vaginal epithelium should be closed with continuous non-locked 2/0 Vicryl rapide® suture and perineal skin with continuous subcuticular 2/0 Vicryl rapide® suture.
5. In a second-degree tear, perineal muscles should be approximated with continuous 2/0 Vicryl rapide® sutures. The skin is closed in the same way as for a first-degree tear. Uncomplicated episiotomies should be repaired in the same manner (extended episiotomies should be repaired by appropriately skilled practitioners).
6. The use of a continuous absorbable subcuticular suture is associated with less short-term pain, but the long-term effects on pain and dyspareunia are less clear
7. Ensure that swabs, instruments, and needle count is correct after the repair has been completed, and that there are no abnormalities on rectal or vaginal examination. Swab and sharp counts should be documented clearly before and after the procedure in the woman's health record. Wherever possible, two signatures from health professionals are required at both counts.
8. 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. These must be removed immediately after removal of swab or instrument.
9. Ensure that adequate post-partum pain relief is prescribed[6]. This will usually include Diclofenac® 100mg PR unless contraindicated.
10. Ensure that adequate operation notes are made.
11. Advice should be given about perineal hygiene, avoidance of constipation and pelvic floor exercises.

3.8. Documentation of consent

If time allows written consent should be obtained for all perineal repairs performed in theatre under general or regional anaesthesia. In this situation, the Repair of Suspected Third- or Fourth-Degree Tear specific consent form should be used.
In the emergency, or for repairs performed in the delivery room, verbal consent should be obtained which should be witnessed by another care professional. Obstetricians and the witness to verbal consent must record the decision in the patient's notes. If a woman who is deemed to have capacity to consent refuses perineal repair, even after full consultation and explanation of the consequences for her, her wishes must be respected. In this situation the woman should be reviewed by a senior obstetrician.

3.9. Management of third- and fourth-degree tears

Diagnosis should be confirmed by an obstetrician with appropriate experience. Inform the senior resident obstetrician, who should decide who should repair a tear or episiotomy that has completely divided the anal sphincter and/or anal epithelium. Obtain consent (see above recommendations).

Intravenous access should be established, and blood sent for FBC/G & S

Inform anaesthetist and arrange for the patient to be transferred to theatre, where formal repair can be undertaken with all the advantages of aseptic conditions, good light, good exposure, adequate assistance, and appropriate instruments.

The inherent tone of the sphincter muscle often causes torn muscle ends to retract, so adequate muscle relaxation is necessary to retrieve the ends and repair them without tension. Therefore, all repairs should be performed under regional (spinal or epidural) or general anaesthesia - it is **NOT** acceptable for the repair to be attempted using local anaesthetic.

The full extent of the injury should be evaluated by a careful vaginal and rectal examination in the lithotomy position and graded according to the above classification. (**NB.** In acute obstetric trauma it is not always possible to identify the IAS – but the extent of damage to the EAS should be recorded in all cases). In the presence of a fourth-degree tear, the torn anal epithelium should be repaired with interrupted 3/0 Vicryl® sutures with the knots tied in the anal lumen.

The sphincter muscles should be repaired using 3/0 PDS® sutures. Although alternatives sutures, such as nylon or Prolene® are also acceptable, they can cause stitch abscesses and the sharp ends can cause discomfort requiring removal.

There is some evidence that primary repair of the anal sphincter is best achieved by means of an overlapping repair, rather than conventional end-to-end approximation with a “figure of 8” suture. This suggestion was disputed by a subsequent prospective, randomised controlled trial that compared conventional end-to-end repair and the overlap technique and found no significant differences in continence rates at three months’ follow-up. Either technique seems to be appropriate.

Great care should be exercised in reconstructing the perineal muscles to provide support to the sphincter repair. Muscles of the perineal body are reconstructed with interrupted 2/0 Vicryl® sutures after closing the vaginal epithelium with a continuous 2/0 Vicryl® rapide suture. Finally, the perineal skin should be approximated with a continuous subcuticular suture, as this is associated with less short-term perineal pain and wound gaping[4].

- A rectovaginal examination is required to confirm complete repair and to ensure that all tampons and swabs have been removed.
- If a swab or instrument is to be left in situ for transfer to theatre for repair, a green bracelet must be placed alongside the ID bracelet. This must be removed immediately after removal of swab or instrument.

  - Please refer to Swabs, tampons and sharps in the maternity services when used for vaginal birth and perineal repair (Management of) Trust Doc ID 9635

- Administer prophylactic antibiotics:
  - Cefuroxime 1.5g I.V. and metronidazole 1g P.R. [9,10] followed by five days oral metronidazole 400mg tds and cefradine 500mg tds.
  - If penicillin allergic use Clindamycin 600mg I.V. and Gentamicin 160mg I.V. followed by clindamycin 300mg QDS PO for 5 days
  - 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.
- Offer rectal Diclofenac® 100mg- unless this is contraindicated6.
- Insert indwelling urinary catheter in all women7.
- Ensure that adequate operation notes are made.
- Ensure an incident form is completed.
- Prescribe a stool softener (Lactulose® 10ml b.d.) for five days. (Do not prescribe a bulking agent such as Fybogel as it has been shown these increases incontinence rates).
- Ensure that adequate analgesia (excluding constipating agents, such as codeine) is prescribed. Extensive perineal and vaginal injury is a known risk factor for post partum retention and voiding dysfunction please refer to A clinical guideline for Bladder care and Fluid Balance, Antenatal, Intrapartum and Postnatal Trust docs ID 12617

3.10. Postnatal Follow up for women who have had third- or fourth-degree tear

1. Ensure that the patient is seen by one of the obstetric physiotherapists prior to discharge. The physiotherapist will arrange a six-week follow-up appointment. At weekends, the midwife should give the patient the information leaflet on perineal trauma and arrange a physiotherapy appointment.
2. Ensure that the patient has a twelve-week follow-up appointment in the perineal clinic to see the multi-disciplinary team, during which a careful history should be taken of bowel, bladder, and sexual function. A vaginal and rectal examination should be performed to check for complete healing, scar tenderness and sphincter tone. All women with 3B, 3C and 4th degree tears are offered ano rectal manometry and endo anal ultrasound scan. Future delivery is recommended based on these findings and the notes are reviewed by a consultant before recommendations for future delivery are made.

3.11. Standards for record keeping in relation to all types of perineal repair

Documentation must include the following:

1. Tear classification
2. Consent for suturing

3. Analgesia/anaesthesia
4. Repair technique and suture material
5. Vaginal and rectal examination at the end of the procedure
6. Documentation of swabs, needles, and instrument count
7. Post-operative analgesia
8. Bladder care
9. Name, designation and signature of the clinician, and date

3.12. Support following the repair

All women who have suffered perineal trauma will be offered the “How to look after your perineum after having a baby” leaflet (M103). Women who have sustained more extensive perineal trauma will also be offered the “Third- and Fourth-degree perineal tears leaflet (M53).

3.13. Monitoring complications of perineal repair

The perineal wound and caesarean section surgical site surveillance form should be completed for all women who sustain a perineal tear. Any women returning to the hospital for review of their perineum following suturing should have the incident reported via the DATIX incident reporting system. There is a specific trigger under Departmental Triggers: Delivery suite; review of perineum.

3.14. Future Pregnancies

All women with severe perineal trauma in their previous pregnancy should be counselled regarding the risk of developing anal incontinence or worsening symptoms with subsequent vaginal birth. If asymptomatic, there is no clear evidence as to the best mode of delivery, and no clear evidence to support the role of routine prophylactic episiotomy.

We recommend vaginal birth or Caesarean section on the basis of pressure study and endo anal ultrasound. A patient can be completely asymptomatic and have a defect on the scan with low increment on squeeze pressure. A further vaginal delivery will increase the risk of faecal incontinence by 30-40%. We usually recommend caesarean section for these women. We acknowledge that this practice is debatable.

If symptomatic, the option of referral to a colorectal surgeon should be offered and subsequent delivery by caesarean section should be considered. There are no randomised controlled trials to suggest the best method of delivery following a previous third- and fourth-degree tear.

Some women with faecal incontinence may wish to defer any anal sphincter surgery until their family is complete. It is unclear whether these women should be advised to undergo a further vaginal delivery, since it could be argued that the damage has already occurred and that the risk of further significant damage is minimal.

Women who have had a previous successful secondary sphincter repair for faecal incontinence should be delivered by elective caesarean section.

4. Training & Competencies

Please refer to the maternity staff training needs analysis (TNA) Trust Doc ID 8649

5. Related Documents

Maternity Training Needs Analysis	Trust Doc ID 8649
Trust Docs ID 852 Major Obstetric Haemorrhage	Trust Doc Id 852
How to look after your perineum after having a baby	TrustDoc Id 8199
Perineal repair consent form. Third- and Fourth-Degree tear.	TrustDocs id=4098
NICE Intrapartum Care (NG235)	NICE Intrapartum Care ng235
Swabs, tampons and sharps in the maternity services when used for vaginal birth and perineal repair (Management of)	Trust Doc ID 9635
A clinical guideline for Bladder care and Fluid Balance, Antenatal, Intrapartum and Postnatal	Trust docs ID 12617

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7. Monitoring Compliance / Audit of the policy principles

Key elements	Process for Monitoring	By Whom (Individual / group /committee)	Responsible Governance Committee /dept	Frequency of monitoring
Occurrence and rate of 3rd/4th degree tears	Datix reporting/ Maternity Dashboard	Maternity Risk and Governance team	Maternity Risk and Governance team	Case by case review and monthly dashboard reporting

The risk and governance team will review cases of 3rd and 4th degree tears to ensure appropriate care has been received. They will be responsible for developing the action plans and will disseminate lessons learned via the most appropriate committee e.g. Clinical Effectiveness; Clinical Governance, Patient Safety and where appropriate, the Compliance Assurance Group.

8. Appendices

There are no appendices for this document.

9. Equality Impact Assessment (EIA)

Type of function or policy	Existing guideline

Division	Women and Childrens	**Department**	Medical, maternity and Obstetric theatre.
Name of person completing form	J Simeoni	**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	Standardised care ensured for all pregnant persons	n/a	No
Disability	None	None	n/a	No
Religion and beliefs	None	None	n/a	No
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.