Frimley Health
NHS Foundation Trust

Management of perineal trauma

Key Points

- Assessment of genital trauma should take place without delay after the birth of the baby
- The assessment prior to repair should be recorded in the notes, and a full explanation and plan given to the woman and her partner.
- If a 3rd or 4th degree tear is suspected the midwife should refer directly to the obstetric registrar, to avoid multiple examinations.
- Verbal consent should be obtained before commencing the repair, and the woman made aware of the associated risks.
- Repair of OASIS and complicated perineal trauma repair should only be undertaken by trained doctors or under direct supervision.

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Abbreviations

EAS	External anal sphincter
IAS	Internal anal sphincter
OASIS	Obstetric Anal Sphincter injuries

Contents

1. Purpose of the guideline

1.1. Around 90% of women experience a perineal tear during childbirth. Accurate detection and careful repair by an appropriately trained practitioner are essential to minimise morbidity and prevent additional impact on women's health. Third and fourth degree perineal tears can be a life changing injury and the reporting of these severe tears has increased both locally and nationally. There has been a steady increase in litigation claims associated with perineal trauma. From 2000 to 2010 OASI-related negligence claims against the NHS were estimated to be £31.2 million[11] and related to failure to identify injury, inadequate repair and failure to perform or extend episiotomy.

2. Classification[1]

2.1 If there is any doubt about the degree of third degree tear, it is advisable to classify it to the higher degree rather than the lower degree.

2.2 First degree tear: injury to perineal skin and/or vaginal mucosa.

2.3 Second degree tear: Injury to perineum involving perineal muscles but not involving the anal sphincter.

2.4 Third degree tear: Injury to the perineum involving the anal sphincter complex.

2.5 Grade 3a tear: Less than 50% of external anal sphincter (EAS) thickness torn.

2.6 Grade 3b tear: More than 50% of EAS thickness torn.

2.7 Grade 3c: tear: Both EAS and internal anal sphincter (IAS) torn.

2.8 Fourth degree tear: Injury to the perineum involving the anal sphincter complex (EAS and IAS) and anorectal mucosa.

2.9 Rectal button-hole tear: Tear involving the rectal mucosa with an intact anal sphincter complex.

3. Assessment

3.1. Assessment of genital trauma should take place without delay after the birth of the baby. This includes births that have occurred in water, though in these cases suturing should be delayed until one hour post birth. Prompt assessment allows for identification of those cases which require regional anaesthesia and repair in theatre and assists with completing repairs within one hour.

3.2. The initial examination should be performed gently and with sensitivity using Entonox (Nitrous oxide 50%, Oxygen 50%) for analgesia, unless an effective epidural is in use.

3.3. A full explanation and reassurance should be given to the woman and verbal consent obtained.

3.4. Position the woman so that she is comfortable, and the genital structures can be clearly seen, good lighting is essential.

3.5. Swabs can be used to assist visualisation; these must be radio-opaque and included in the swab count prior to and following the procedure, confirmed with two members of staff and recorded in the notes (see guideline - Management of swabs, instruments and needles within the maternity unit).

3.6. If there is heavy bleeding from the tear a vaginal pack/swab may be inserted and the repair expedited either on labour ward or in theatre. Any pack/swabs left in the vagina should be clearly documented in the notes and handed over to staff providing ongoing care for the woman.

3.7. A perineal, vaginal and rectal examination must be performed on all vaginal births. This has been shown to improve the detection of OASIS - Obstetric Anal Sphincter injuries.

3.8. The assessment prior to repair should be recorded in the notes, and a full explanation and plan given to the woman and her partner.

3.9. If a 3rd or 4th degree tear is suspected the midwife should refer directly to the obstetric registrar, to avoid multiple examinations.

3.10. Skin-to-skin with the baby should be maintained throughout wherever possible. Offer skin-to-skin with the woman's partner if she wishes or if it is impractical for her to continue during the repair.

4. Repair

4.1. Small tears involving the skin only may be left unsutured. Labial tears and grazes which are extensive, wide, bilateral or bleeding should be sutured using 3.0 vicryl rapide following infiltration with lignocaine 1-2% with an orange needle-25 gauge (if there is no effective regional anaesthesia).

4.2. All second degree tears should be sutured, to minimise the risk of infection and blood loss[2]. Verbal consent should be obtained before commencing the repair, and the woman made aware of the associated risks; namely bleeding, infection, wound breakdown and dyspareunia. All skin tears extending to the anal margin are considered OASIS until designated otherwise by the obstetric registrar.

4.3. Suturing of perineal tears should be started within one hour of birth except for women giving birth in water where suturing should be delayed for one hour to allow tissues to dry out[3].

4.4. If the woman declines suturing, she should be advised about the lack of evidence to support this practice, and of the possible complications including: haemorrhage, infection and shortening of the perineum. The outcome of this discussion must be documented in the notes and her decision respected.

4.5. Non- suturing of 2nd, 3rd and 4th degree tears is only recommended if it is the woman's informed choice.

4.6. The discussion and provision of information given to the woman, and consent gained, regarding all types of perineal repair must be documented in EPIC. Complete the laceration section of the delivery summary within EPIC, and complete diagram on the patient pelvic health female bodymap located within the postnatal navigator.

4.7. Doctors in training, student and newly qualified midwives may repair episiotomies, first and second degree tears and labial tears under the direct supervision and instruction of an experienced doctor or senior midwife, until assessed as competent when they may repair these independently.

4.8. A record of midwives' competencies can be accessed via Electronic Rostering System (ERS), or via the Practice Development Team (WPH).

4.9. A record of doctors' competencies (includes locally employed doctors) is held on their e-portfolio which is accessible by the college tutor and their individual educational supervisor' for simplicity. Midwives' competencies are held by the individual and recorded by the practice development team.

5. Preparation

5.1. Explain procedure; obtain verbal consent; position the woman to enable clear visualisation of the tear, making her as comfortable as possible. On labour ward this is generally in lithotomy, at home and in the Midwifery Led Unit position as able and preferred.

5.2. A good light source and seating for the operator is essential.

5.3. An aseptic technique is used.

5.4. Check equipment, perform swab and needle count with a second member of staff.

5.5. Only large x-ray detectable swabs are to be used.

5.6. Once the woman is positioned, the area should be cleaned with sterile water.[4]

5.7. Drape using the sterile drapes. If required, a tampon can be added to the sterile field and inserted into the vagina, to aid good visualisation of the apex and control the lochia. The ribbon end of the tampon must be clipped to the upper drape and included in the swab count.

5.8. Adequate tested analgesia/anaesthesia must be ensured. In the absence of regional anaesthesia up to 20mls total of 1% (10mg/ml) lidocaine may be initially used (including that used for pre-delivery infiltration). It should be administered into the muscle through the tear on each side and to the skin along each edge. This takes approximately three minutes to take effect. The maximum dose of lidocaine 1% is 3mg/kg body weight meaning that for women weighing >65kg greater than 20mls 1% lidocaine may be used, but this would necessitate individual calculations based on body weight.

5.9. Suturing under regional anaesthesia should be offered if there is inadequate analgesic effect following local infiltration.

6. Suture material

6.1. The use of absorbable synthetic material such as vicryl rapide for the repair of perineal trauma is associated with less perineal pain, analgesia use, dehiscence and re-suturing.[5] The tensile strength of vicryl rapide is reduced between 10-14 days and fully absorbed by 35-42 days.

6.2. The suture of choice for 1st and 2nd degree tears is 2.0 vicryl rapide. The suture of choice for labial tears is 3.0 vicryl rapide.

6.3. Urethral or clitoral tears may require suturing in theatre by the obstetric registrar, the suture of choice is vicryl rapide 3.0 or 4.0. An indwelling urinary catheter will be required.

7. Technique

7.1. The apex of the tear should be identified visually and the first suture inserted 1cm above this. The posterior vaginal wall should be repaired using a continuous non-locking suture, ensuring dead space closure. The perineal muscles should be repaired using continuous or interrupted sutures, depending on the operator's preference. These sutures should be continued to the fourchette, bringing the muscles into apposition.[6]

7.2. The skin may be closed using either interrupted or continuous sub-cuticular sutures. Whilst sub-cuticular sutures are associated with less pain in the immediate postpartum period, there is no evidence to support a reduction in long term pain[5]. If the operator is more familiar with interrupted sutures this is acceptable.

7.3. Check that haemostasis and tissue alignment have been achieved by reviewing the tear and blood loss.

7.4. Remove the tampon if used.

7.5. Perform PV and PR examination to check patency of repair and to detect any sutures that may have inadvertently breached the rectal/anal mucosa.

7.6. Administer rectal non-steroidal anti-inflammatory medication (diclofenac sodium 100mg) unless contra-indicated (e.g. asthmatic, inflammatory bowel disease, blood loss ≥ 2000mls, or allergic). Avoid NSAIDs e.g. ibuprofen for 12-16 hours following diclofenac sodium PR administration.

7.7. Check swabs, tampons and sharps with second member of staff before leaving the room.

7.8. Dispose of sharps before leaving the room.

7.9. Make the woman comfortable and ensure the bed linen is replaced as necessary.

7.10. During or after carrying out the repair discuss with the woman and her partner: the extent and details of the repair, personal hygiene, pelvic floor exercises, diet, analgesia, and advise against smoking or the use of foam rings.

7.11. Record the repair and any additional blood loss in the notes, using the diagram to assist.

7.12. If an instrumental delivery has been performed a single prophylactic dose of IV antibiotics should be administered within 3 hours of delivery[11, 12] (as per Microguide). This is due to it significantly reducing confirmed or suspected maternal infection compared to placebo regardless of the type of perineal trauma. There is insufficient evidence to support the routine use of IV antibiotics post a normal birth with episiotomy therefore this is not recommended.

8. Postnatal management

8.1. The mother must be offered a postnatal appointment and support with a midwife following any type of perineal injury or repair. In the case of 3rd and 4th degree tears this will be with an obstetrician. The follow up plan must be documented in the maternity notes. Any information regarding support given to the woman as listed below must also be documented in full in the woman's electronic maternity notes:

8.1.1. A full explanation of the trauma she has sustained, including the immediate and long term effects and management.
8.1.2. Advice about personal hygiene in the immediate postnatal period.
8.1.3. Adequate analgesia whilst in hospital and advice regarding further analgesia once home.

8.2. Examination of the perineum will be offered at every postnatal check (whether in hospital or at home), to all women who have perineal damage and/or undergone perineal repair, and to all those women experiencing perineal pain. At least one perineal check must be performed prior to discharge by the community midwife, with the woman's verbal consent.

8.3. Women are advised to notify their community midwife, GP or Maternity Triage if they are concerned about perineal healing, discharge or pain.

8.4. Women are advised and instructed on pelvic floor exercises. On discharge, women are given an information booklet containing QR codes referring them to websites and information leaflets, including "Postnatal exercises and Advice". Advice is available to all women online from the FHFT website.

8.5. Women are offered advice about resuming sexual activity by their community midwife prior to discharge.

9. Management and repair of third and fourth degree tears

9.1. Incidence has increased three fold in last decade currently 3-5% locally and nationally.

9.2. See classification on page 3.

9.3. Diagnosis should be made as soon as possible after birth, avoiding multiple P.V. and P.R. examinations.

9.4. Refer to the obstetric registrar and anaesthetist if not already in theatre.

9.5. Written consent is to be obtained, with full explanation of the benefits and risks of repair (unless the woman is already in theatre following a trial of operative vaginal delivery in which case verbal consent is acceptable).

9.6. Midwife to cannulate and send blood for FBC and group and save if not already performed.

9.7. An obstetrician who has been assessed as competent in OASIS repair should repair or supervise repair of OASIS (all registrars must consult the on call consultant prior to repair). A consultant must attend for all 4th degree tear repairs.[9]

9.8. Comprehensive documentation of structures that are torn is important and if necessary, a diagram should be drawn.

9.9. All OASIS repairs must be conducted in theatre with good light, appropriate instruments and aseptic technique.

9.10. All repairs must be performed under regional or, in exceptional circumstances, general anaesthetic.

9.11. Intravenous antibiotics: see antimicrobial guidelines (Microguide).

9.12. The torn anal epithelium should be repaired with interrupted or continuous Vicryl 3.0 sutures.

9.13. Internal anal sphincter tears should be repaired separately by end to end approximation with interrupted 3.0 PDS (monofilament) or 2.0 Vicryl sutures (braided). These sutures are less likely to precipitate infection, stitch abscess and discomfort.

9.14. The torn ends of the external anal sphincter should be identified and grasped with Allis tissue forceps. The muscle can be dissected laterally to facilitate mobilisation of the external anal sphincter. When the anal sphincter is completely torn it can be repaired with either the end to end or overlap technique. If the sphincter is partially torn an end to end repair should be done using 3.0 PDS or 2.0 Vicryl. A partially torn sphincter should not be iatrogenically divided.

9.15. Avoid using figure of eight sutures.

9.16. Great care must be exercised in reconstructing the perineal muscles to provide support to the sphincter repair using a 1.0 vicryl to give extra support to the sphincter. The anal sphincter is more likely to be damaged during a subsequent vaginal delivery in the presence of a short deficient perineum.

9.17. If the baby is assessed as low risk one birth partner and the baby can proceed to theatre with mother. The baby is under the care of the birth partner, but responsibility remains with the midwife. The theatre staff would only be expected to provide immediate care in an emergency.

9.18. Complete an RL incident report.

9.19. SUTURING OF RECTAL BUTTON-HOLE TEARS[13]. To be performed as per 4th degree tear unless the button-hole tear is high (beyond 7cm from the anal verge) or faecal soiling. In these scenarios the opinion of a colorectal surgeon may be sought. Repair should be only conducted by a consultant or obstetric registrar who has been trained and is competent to carry out the repair. The proximal and distal end of the button hole tear must be clearly visualised. The rectal mucosa should be sutured with continuous 3.0 Vicryl. The rectovaginal fascia should then be closed in layers using 2.0 vicryl. Vaginal skin should then be closed with 2.0 Vicryl due to a higher risk of recto-vaginal fistula.

10. Postnatal management

10.1. Ideally, the doctor who undertakes the repair should review the woman prior to her discharge home. If this is not possible, the woman should be reviewed by the doctors responsible for the postnatal ward.

10.2. All women should be prescribed stool softeners (lactulose 15mls BD) as straining to defecate may disrupt the repair. This must be explained to women. Women with a 3rd degree tear may go home before opening their bowels. Women with a 4th degree tear should not be discharged home until they have opened their bowels. If a woman chooses to discharge herself, a detailed discussion must take place as to the importance of the first bowel movement. Laxatives should continue for 10 days.

10.3. Women should be prescribed oral antibiotics as per the antimicrobial guideline (see Micro guide).[7]

10.4. Women should be referred to the obstetric physiotherapist prior to discharge.

10.5. An appointment should be made in the OASIS / post-natal clinic for 12-16 weeks' time.

11. Management of subsequent pregnancies

11.1. All women with a previous OASIS should be referred for antenatal assessment and counselling regarding mode of delivery, in pelvic floor ANC where possible.

11.2. A vaginal delivery is suitable for many women with a previous OASIS regardless of the severity of the tear, if their continence is not impaired and they have a normal endoanal ultrasound. Five percent of women with a previous OASIS will have another OASIS (background risk 1%). Women with anal incontinence or an abnormal endoanal ultrasound need to be assessed and considered for caesarean section.

11.3. Routine medio-lateral episiotomy does not reduce the risk of recurrent OASIS[8] and may increase its risk. Therefore, a decision to perform an episiotomy should be made on a case by case assessment by the birth attendant.

12. Re-Suturing of Dehisced Obstetric Perineal Wounds

Should be reviewed and decided by consultant. A retrospective series of 72 women who underwent resuturing showed that 76.2% of the women had completely healed by 8 weeks post suturing. The study shows positive outcomes from early re-suturing of perineal wound dehiscence with faster healing, reduced follow-up requirements and few major complications.[14]

13. Operator skill

The outcome for women is better in the hands of doctors trained in the repair of OASIS and complicated perineal trauma repair should thus only be undertaken by trained doctors or under direct supervision.[1]

14. Communication

If there are communication issues (e.g., English as a second language, learning difficulties, blindness/partial sightedness, deafness) staff should take appropriate measures to ensure the woman understands the actions and rationale behind them.

15. Equality Impact Assessment

The users of this guideline will take into account their statutory duty to promote equality and human rights and act lawfully within current equality legislation and guidance.

This guideline has been equality impact assessed and has been shown to have no adverse impact on any equality group.

The Trust will continue to monitor its effect and will assess again if negative impact is identified or at the review date.

16. Standards for record keeping

16.1. Documentation of consent for repair.

16.2. Details regarding the repair should be clearly documented on the perineal suturing record or the OASIS proforma (as appropriate) with a diagram if necessary.

16.3. Third and fourth degree tears must be classified according to the RCOG classification of OASIS.[1]

17. Auditable standards

17.1. All perineal and vaginal tears are repaired by an obstetrician who is competent in OASIS repair.

17.2. Number of OASIS as a percentage of vaginal deliveries.

17.3. Documented systematic examination of the perineum, vagina and rectum prior to suturing

17.4. Proportion of OASIS repaired in theatre, type of analgesia, suture material, method of repair and grade of operator.

17.5. Documentation of discussion regarding support following the repair.

17.6. Proportion of OASIS seen for follow up postnatally.

18. Monitoring compliance

18.1. Clinical incidents relating to perineal repair are reportable through the Trust's incident reporting system and presented for discussion at the maternity risk management group if risk issues are identified.

18.2. A RL incident from should be completed for all third and fourth degree tears.

18.3. The management of perineal trauma will be subject to audit every three years. The lead midwife for audit is responsible for coordinating the audit. Results will be presented at the departmental clinical audit meeting. Action plans will be monitored at the obstetrics and gynaecology clinical governance meeting.

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Full version control record

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This guideline has been registered with the trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt contact a senior colleague or expert. Caution is advised when using guidelines after the review date. This guideline is for use in Frimley Health Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version Control Sheet

Version	Date	Guideline Lead(s)	Status	Comment
1.0	Dec 2015	Vivienne Novis/Helen Walker	Final	Approved by Obstetrics and Gynaecology Clinical Governance Committee
2.0	June 2019	Glefy Furtado	Final	Approved by Obstetrics and Gynaecology Clinical Governance Committee
3.0	July 2023	Helen Walker, Consultant Obstetrician	Final	Full review and update, Ratified at Obstetric Clinical Governance Committee 28.07.23

Related Documents

Document Type	Document Name
Guideline	Management of swabs, instruments and needles within the maternity unit