Perineal or Genital Trauma Following Childbirth UHL Obstetric Guideline

University Hospitals of Leicester NHS Trust

Trust ref: C99/2008

Contents

1. Introduction and who the guideline applies to:

This guideline is aimed at all Health Care Professionals involved in the identification and repair of perineal or genital trauma following childbirth.

Background:

This guideline is based of the recommendations made in Clinical Guideline 55 Intrapartum Care published by NICE and The Management of Third and Fourth Degree Perineal Tears (Green Top Guideline 29 June 2015) published by the RCOG.

Related documents:

- **Intrapartum Care UHL Obstetric Guideline**
- **Bladder Care During and After Labour and Delivery UHL Obstetric Guideline**
- **Surgical Swabs Instruments Needles and Accountable Items UHL Policy**
- **Aseptic Non Touch Technique UHL Guideline**

- **Hand Hygiene UHL Policy**
- **Safer Surgery UHL Policy**

What's New?

- Examination for the identification anal sphincter damage now discussed in more detail.
- Recognition of button holing and actions included.
- Basic principles section now added
- Added swab the perineal area with an antiseptic solution suitable for genital skin preparation prior to placing sterile drapes over the area to be sutured.
- Added identify risk & follow the OASI care bundle to 3rd & 4th degree prevention.
- Added - Consider maternal position during birth/crowning, do not use lithotomy unless clinically indicated to perineal protection section.
- Information at discharge section added

2. Systematic assessment of perineal or genital trauma:

2.1 Perineal protection includes:

Perineal protection includes

1. Left hand slowing down the delivery of the head (if right handed)
2. Right hand protecting the perineum (if right handed)
3. Mother NOT pushing when head is crowning (communicate)
4. Think about episiotomy (risk groups and correct angle)

- Warm compression during the second stage of labour reduces the risk of anal sphincter injuries.
- A swab dampened with warm tap water may be used. It must be warm to the touch but not hot. They must not be heated using a microwave. Heat packs MUST NOT be used.

Consider maternal position during birth/crowning, do not use lithotomy unless clinically indicated

2.2 Assessment of the perineum and genital structures

The perineum and lower vagina should be assessed for trauma by a practitioner trained in the recognition and management of perineal trauma. All areas of the perineum and lower vagina should be examined also noting any damage to the labia, clitoris, urethra and anal sphincter.

A digital rectal examination should be performed to exclude damage to the anal sphincter complex and rectal buttonhole tears.

If anal sphincter damage is present, there may be an absence of puckering around the anterior aspect of the anus.

The internal sphincter should be identified lying between the external anal sphincter and the anal epithelium. It is paler than the external sphincter and its fibres are circular. After inspection, you should proceed to palpation. The practitioner should insert their index finger into the woman's rectum and ask her to squeeze.

The muscle bulk of the sphincter should also be palpated between the thumb and index finger in a pill-rolling motion

2.3 Tears classification

Tears should be classified according to the following:

First-degree tear: Injury to perineal skin and/or vaginal mucosa.

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

Third-degree tear: Injury to perineum involving the anal sphincter complex:
- **Grade 3a tear**: Less than 50% of external anal sphincter (EAS) thickness torn.
- **Grade 3b tear**: More than 50% of EAS thickness torn.
- **Grade 3c tear**: Both EAS and internal anal sphincter (IAS) torn.

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

Rectal buttonhole: If the tear involves rectal mucosa with an intact anal sphincter complex, it is by definition NOT a fourth degree tear. It should be documented as a **rectal buttonhole** tear. If not recognised and repaired, this type of tear may lead to a rectovaginal fistula.

2.4 Basic principles when performing perineal repairs

1. This examination should be conducted with adequate analgesia and with adequate lighting.
2. The examination should be conducted in the lithotomy position where possible so that genital structures can be seen clearly; this position should be maintained for the minimum time required to perform a full and thorough examination.
3. The perineal repair should be completed within 120 minutes after completed third stage at the latest; however, where there is significant blood loss repair should be prompt. Where the woman requires repair in theatre the decision should be based on clinical judgment.
4. All tears, bruising oedema or inflammation should be documented in the health record with a diagram where appropriate.

The following basic principles should be observed when performing perineal repairs:

- Perineal trauma should be repaired using aseptic technique.
- Safe sign check in procedure should be followed
- Equipment should be checked and swabs and needles counted before and after the procedure.
- Good lighting is essential to see and identify the structures involved.
- Good anatomical alignment of the wound should be achieved.
- All swabs must be counted aloud by the operator and the assistant immediately prior to the procedure and this should be documented on the white board within the room by the assistant.
- In Homebirth environments, 2 midwives will document the sharps and swab count on the perineal repair page in the handheld maternity records.
- Any swab inserted into the vagina during the procedure must be:
    - ♣ Recorded on the whiteboard as individual items and not as part of the swab count
    - ♣ Secured to the sterile drapes with a clip /instrument
- The swab packaging must be kept until the end of the final count
- Any unaccounted items must be documented on the white board in red and until proven otherwise it should be assumed that the item is in the wound. All swab bags and rubbish bags should be checked. If the item is still unaccounted for, the midwifery coordinator must be informed and actions taken as per UHL “Management of Surgical Swabs, Instruments, Needles and Accountable items “Policy.
- Rectal examination should be carried out after completing the repair to ensure that suture material has not been accidentally inserted through the rectal mucosa.

2.5 Repair of first and second degree trauma:

Repair of the perineum should only be carried out by a practitioner who is competent in perineal repair unless the operator is under instruction and direct supervision for training. Full details can be found in the Maternity Training Needs Analysis.

Informed consent from the patient should be documented in the health care record.

Perineal repair should only be undertaken with tested effective analgesia in place, using infiltration with up to 20 ml of 1% lidocaine or equivalent, topping up epidural analgesia or spinal anaesthesia if necessary.

- Midwives performing perineal repair - it is important to note that if 5 ml of Lidocaine 1% has already been used for infiltration of the perineum prior to performing an episiotomy then only 15 ml is left available for infiltration prior to repair. The maximum IN TOTAL that may be given is 20ml. If a further dose is required it must be prescribed and discussed with the Anaesthetist.

If the woman reports inadequate pain relief at any point this should immediately be addressed.

Women should be advised that:

- In the case of first degree trauma: the wound should be sutured in order to improve healing, unless the skin edges are well apposed in which case suturing is not always necessary.

- In the case of second degree trauma: The perineum should be sutured in order to improve healing.

Perineal repair:

- Swab the perineal area with an antiseptic solution suitable for genital skin preparation prior to placing sterile drapes over the area to be sutured.
  - Rapidly absorbed polyglactin 910 (Vicryl Rapide®) is the most appropriate suture material for repair as it is associated with less pain when compared with standard absorbable synthetic material.
  - The use of a loose, continuous non-locking method for vaginal mucosa and perineal muscles and a continuous subcuticular technique for perineal skin is recommended; this is preferable to interrupted measures of closure as there is less pain and need for analgesia, less need for suture removal and it uses less suture material.(startOg)
  - Difficult trauma should be repaired by an experienced practitioner in theatre under regional or general anaesthesia. An indwelling catheter should be inserted for 12 hours to prevent urinary retention (see Bladder care during and after labour and delivery guideline).
- Rectal non-steroidal anti-inflammatory drugs should be offered routinely following perineal repair of first- and second-degree trauma, provided these drugs are not contraindicated.

2.6 Third & Fourth Degree Perineal Trauma (Obstetric Anal Sphincter Injuries)

- Identify risk
- Follow the OASI care bundle
- Evidence for the protective effect of an elective episiotomy is conflicting

- Mediolateral episiotomy should be considered in instrumental deliveries or where episiotomy is indicated.
- The mediolateral technique is recommended, with careful attention to ensure that the angle is 60 degrees away from the midline when the perineum is distended at crowning.

- Manual perineal protection (MPP) at crowning can result in better outcomes. Recent interventional studies have demonstrated successful reduction in obstetric anal sphincter injury rates, all of which have described manual perineal protection/'hands on' techniques, see RCOG guidance).
- For spontaneous births MPP should be used unless the woman objects or her chosen birth position does not allow it.

Repair of third and fourth degree perineal trauma:

- Obstetric anal sphincter repair should be performed (or directly supervised) by appropriately trained practitioners. "Appropriately trained" means those practitioners who have completed formal training on repair of obstetric anal sphincter injuries.

- Repairs of third and fourth degree tears must take place in theatre under regional or general anaesthetic.

- Repair should take place as soon as possible after identification of the obstetric anal sphincter injury.

External anal sphincter:

a) Use either an overlapping or end-to-end (approximation) method

b) Figure of eight sutures should be avoided as they cause ischaemia

c) Use either monofilament sutures such as polydiaxanone (PDS) or modern braided sutures such as polyglactic (Vicryl ®)

Internal anal sphincter:

- Repaired separately with interrupted or mattress sutures without any attempt to overlap

- Use fine suture size such as 2-0 Vicryl or 3-0 PDS

- When obstetric anal sphincter repairs are being performed, burying of surgical knots beneath the superficial perineal muscles is recommended to prevent knot migration to the skin.

- Women should be warned of the possibility of knot migration to the perineal surface, with long acting and non-absorbable suture materials.

Ano-rectal mucosa:

- Repair using interrupted or continuous technique. Figure of eight sutures should be avoided as they can cause ischaemia.

- Avoid using PDS sutures for mucosal repair as they can cause more irritation than Vicryl.

- Burying knots underneath the skin is not essential- the recommendation for this technique dates back to the use of Catgut

The operator must **document** the following, both on the electronic record system and also on the appropriate page in the patient's health record:

- Consent for suturing
- Analgesia used for suturing
- Type of suture material
- The anatomical structures involved
- Methods used, with explanation should they have deviated from this guideline
- All swabs and needles must be accounted for
- Achievement of haemostasis
- Examination both PV and PR
- Any analgesia administered

Where a vaginal pack is intentionally left in situ

- The "Bakri Intrauterine Balloon and Vaginal Pack In situ Form" must be completed and attached to the front of the woman's hospital notes.
- The in situ sticker must also be placed on every history page within the notes and on each page of the HDU chart. This is the responsibility of the operator who leaves the pack in.
- The pack must be removed prior to transfer to the postnatal ward and documented in the health records both paper and electronic

2.7 Post-operative management should include:

- Completion of an incident form

- Broad spectrum antibiotics – Prescribe broad-spectrum antibiotics in line with the Antimicrobial Summary UHL Womens Guideline (C4/2018) recommendations for third and fourth-degree tears"

- The oral route can be used after the first dose if the woman is able to tolerate it. (as per Antimicrobial Summary UHL Womens Guideline).

- For known or previously known MRSA positive patients see Antimicrobial Summary UHL Womens Guideline

- Post-operative laxatives (bulking agents should not be given routinely with laxatives, as this may increase the level of incontinence in the

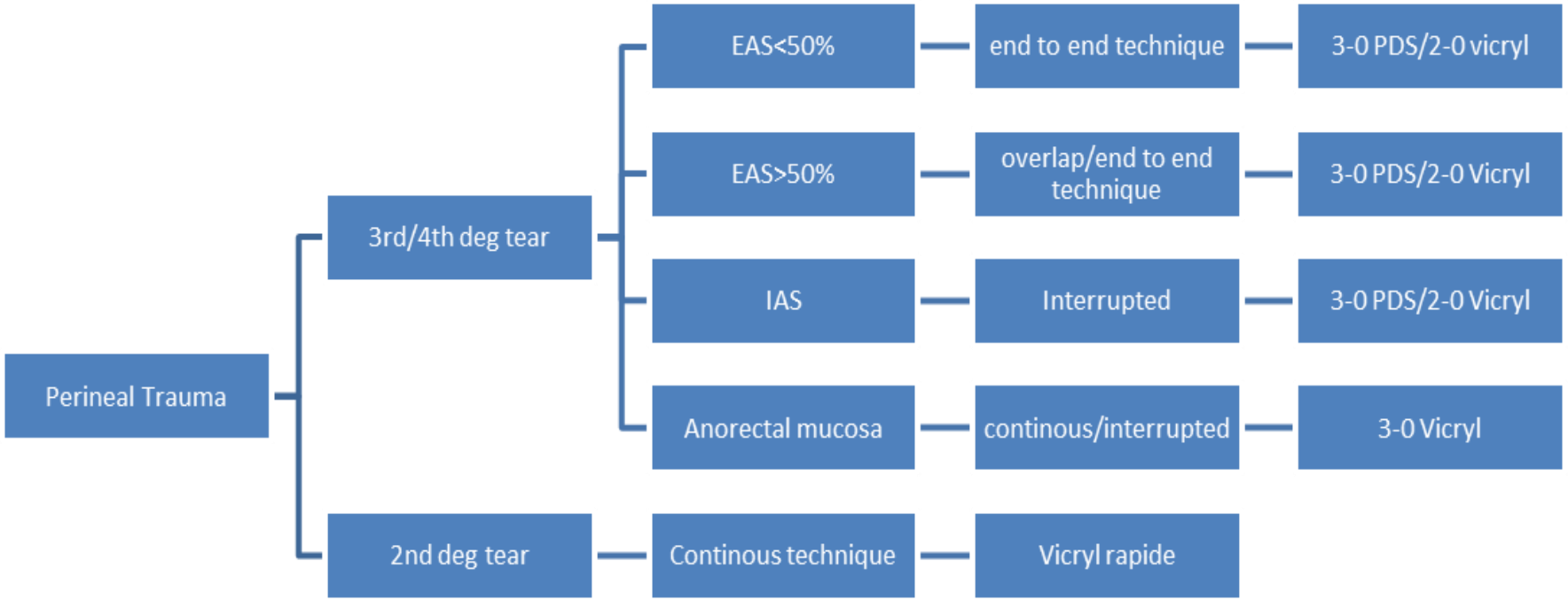
immediate post-partum period) Stool softening agents such as Lactulose are recommended and should be given for about 10 days postnatal.

- Physiotherapy

- All women who have sustained a 3rd or 4th degree tear should be referred to the multidisciplinary perineal repair clinic at the LGH at 6 - 12 weeks postpartum

- Referral to an appropriate specialist if urinary and/or faecal incontinence or pain is present at the postnatal review.

2.8 Perineal repair technique flow chart



2.9 Physiotherapy assessment following third & fourth degree trauma

- The Physiotherapist attends the postnatal ward daily (Monday to Friday). All women who have sustained 3rd / 4th degree tears should be referred to inpatient physiotherapy via ICE. This referral should be made by the midwife completing the E3 delivery summary.
- The Physiotherapist will aim to see these women on the ward to give them advice on postnatal exercises and guidance on recovery and follow up if any adverse symptoms are experienced.
- Women who are discharged before they have seen the Physiotherapist will have a telephone follow up within 5 working days of discharge.
- Ward clerk books a postnatal outpatient follow up appointment at around 6 – 12 weeks for all women who have sustained 3rd and 4th degree tears.

2.10 Repair of the perineum at home birth:

- Community midwives should adhere to the above guidance when completing perineal suturing at home.
- If third or fourth degree perineal trauma is identified or it is felt that further assistance is required from a more experience operator the delivery suite should be informed using the SBAR handover of care.
- The community midwife should transfer with the woman via ambulance (999) to hospital, assess the urgency of transfer i.e. risk of PPH and escalate as appropriate.

2.11 Information on discharge:

a) All women should receive or be sign posted to The UHL “Care of your perineum after childbirth” leaflet and this should be documented. The leaflet will provide further information about diet, perineal hygiene, prevention of infection and the importance of pelvic floor exercises. Further information is also included in the leaflet about follow up care where appropriate and how and when to access support, as well as on options for future deliveries.
b) The woman should be made aware prior to discharge if she had a 3rd or 4th degree perineal trauma and this should be documented on the Maternity Community Transfer Form or in the health record.
c) Women who have sustained a 3rd or 4th degree tear should be advised that 60–80% of women are asymptomatic 12 months following delivery and EAS repair.
d) The risk of sustaining a further third- or fourth-degree tear after a subsequent delivery is 5–7%.
e) All women who sustained OASI in a previous pregnancy should be counselled about the mode of delivery and this should be clearly documented in the notes.
f) The role of prophylactic episiotomy in subsequent pregnancies is not known and therefore an episiotomy should only be performed if clinically indicated.
g) All women who have sustained OASI in a previous pregnancy and who are symptomatic or have abnormal endo-anal ultrasonography and/or

manometry should be counselled regarding the option of elective caesarean birth.

2.12 Routine postnatal perineal examination:

- The perineum should be inspected by the Midwife at every contact until discharge from midwifery follow up.
- The optimal position for perineal examination is mother lying on her back, knees bent and legs open.
- Observe the perineum for bruising, oedema and inflammation
- Document all findings in Postnatal Notes.
- If concerns regarding the healing of the perineum are found in the postnatal period, referral can be made to the GP or MAU for assessment.
- Where there are any on-going concerns following initial treatment, if appropriate the Midwife can refer a woman to the perineal clinic by contacting LGH AAA clinic co-ordinator either by telephone – 0116 2584823

3. Education and Training:

Midwifery staff providing intrapartum care must be competent at perineal trauma management.

This competence may have been acquired prior to taking up employment at the UHL (and reported by self-assessment), or they may have attended the UHL Trust teaching on identification and repair of perineal trauma. See the Maternity Training Needs Analysis for further details.

All medical trainees performing perineal repair must be competent at perineal trauma repair.

This competence may have been acquired prior to taking up employment at the UHL (and reported by self-assessment), or they may have attended the UHL Trust teaching on identification and repair of perineal trauma. See the Maternity Training Needs Analysis for further details.

All medical trainees performing repair of 3rd/4th degree tears must attend a formal obstetric anal sphincter repair course during, or before their rotation to UHL.

4. Monitoring compliance:

- 100% evidence of adequate documentation of systematic examination of the vagina, perineum and rectum prior to suturing of OASI (Obstetric anal sphincter injury)

- 100% of OASI repaired with evidence of type of analgesia, suture material, method of repair and grade of operator

- 100% of women with OASI receiving postoperative advice as per guideline and follow up appointment

5. Supporting References:

Jha S, Parker V
Risk factors for recurrent obstetric anal sphincter injury (rOASI): a systematic review and meta-analysis. Int Urogynecol J. 2016 Jun;27(6):849-57. Epub 2015 Dec 16.

https://youtu.be/8AV3Qpghfa0(link for 2nd, 3rd and Fourth degree perineal repair from StratOG)

http://insitetogether.xuhl-tr.nhs.uk/pag/pagdocuments/Antimicrobial%20Summary%20UHL%20Womens%20Guideline.pdf

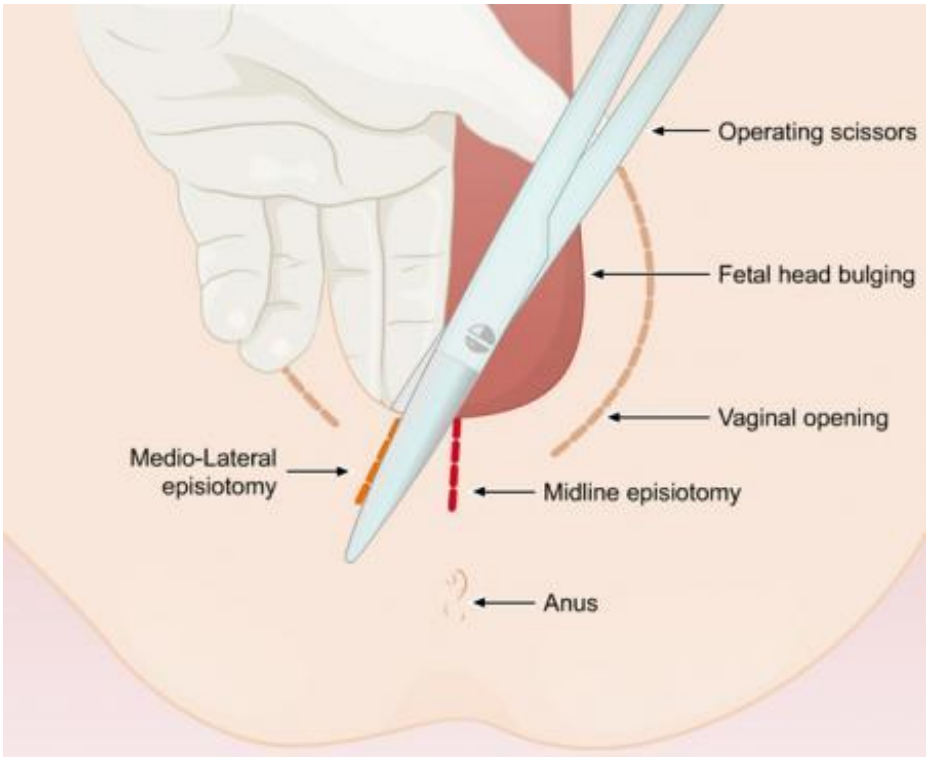
6. Keywords:

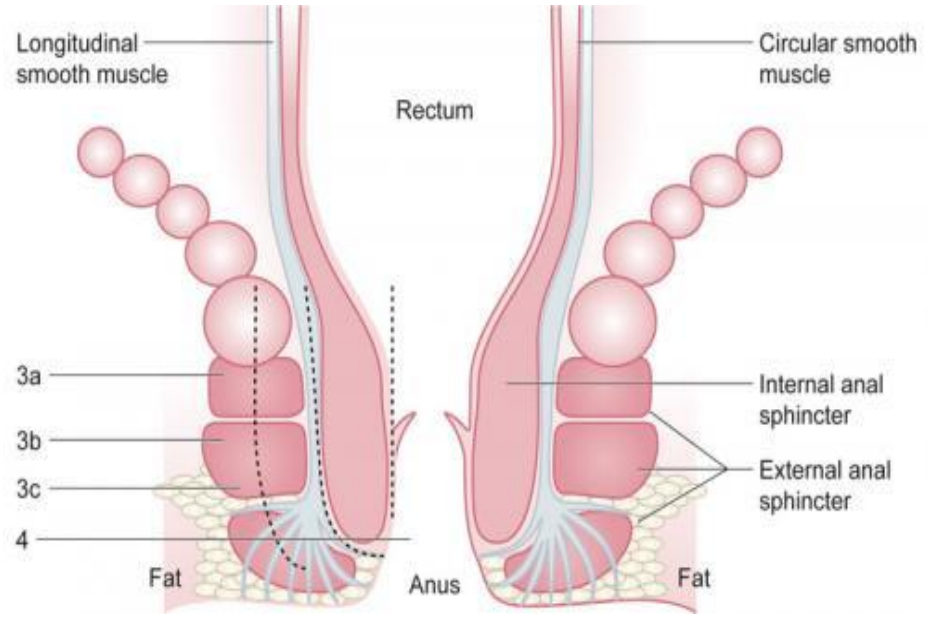
Anal sphincter, OASI, Perineal repair, Suturing, Trauma

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

CONTACT AND REVIEW DETAILS			
Guideline Lead (Name and Title) Author: D Tincello, C Welsh and J Johnson Lead: A Doshani - Consultant			**Executive Lead** Chief Nurse
Details of Changes made during review:			
Date	**Issue Number**	**Reviewed By**	**Description Of Changes (If Any)**
Feb 2020	**6**	**K Williams**	**Added: updated tisept for cleaning** **Remove pack before transfer to postnatal ward**
Jan – March 2023	**7**	**A Doshani & F Shafqat**	Examination for the identification anal sphincter damage now discussed in more detail. Recognition of button holing and actions included. Basic principles section now added Added swab the perineal area with an antiseptic solution suitable for genital skin preparation prior to placing sterile drapes over the area to be sutured. Added identify risk & follow the OASI care bundle to 3rd & 4th degree prevention. Added - Consider maternal position during birth/crowning, do not use lithotomy unless clinically indicated to perineal protection section. Information at discharge section added

Appendix 1: Episiotomy & perineal muscle identification diagram





(Pictures taken From StratOG)

Appendix 2: 3rd/4th degree tear repair risks stickers

3rd/4th degree tear risks sticker

Common Risks:

- Faecal urgency and incontinence, 26:100
- Flatus incontinence, 1:10 to 1:100
- Perineal pain and dyspareunia, 9:100
- Wound infection, 8:100
- Urinary infection, 1:10 to 1:100
- Suture material causing discomfort and requiring removal, 1:10 to 1:100
- Healing with excessive immature tissue formation, 1:10 to 1:100

Uncommon Risks:

- Possibility of recommending delivery by caesarean section in future pregnancies if symptoms persist or investigations suggest abnormal anal function, 1:100 to 1:1000
- Haematoma, 1:1000 to 1:10 000
- Consequences of failure of repair requiring the need for further interventions and treatments, 1:1000 to 1:10 000
- Developing a fistula, less than 110 000