Royal Hospital for Women (RHW)

NAME OF DOCUMENT	Third and Fourth Degree Perineal Tears- Repair, Management and ward based postnatal care.
TYPE OF DOCUMENT	Clinical Business Rule
DOCUMENT NUMBER	
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FORMER REFERENCE(S)	Third and Fourth Degree Perineal Tears- Repair and Management Third and Fourth Degree tear – ward-based care of a postnatal woman
EXECUTIVE SPONSOR	Medical Co-director of Maternity Services
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SUMMARY	Correct identification, classification, repair and postnatal management of 3rd and 4th degree tears, reducing the adverse impact through preventative measures.

Third and Fourth Degree Perineal Tears - Repair, Management and Postnatal Ward-based Care

1. BACKGROUND

TYPE OF TEAR	DEFINITION
First degree	Injury to perineal skin, including the fourchette, hymen, labia, and vaginal mucosa
Second degree	Injury to the perineum involving perineal muscle but not involving the anal sphincter
Third degree	Injury to the perineum involving the anal sphincter complex: 3a: < 50% of external anal sphincter (EAS) thickness torn 3b: > 50% of EAS thickness torn 3c: Both EAS and internal anal sphincter (IAS) torn
Fourth degree	Injury to perineum involving the anal sphincter complex (EAS and IAS) and anal epithelium
Rectal buttonhole	Injury to anorectal mucosa but not anal sphincter. These are not fourth degree tears but can lead to rectovaginal fistulae if not repaired

Reference [1]

2. RESPONSIBILITIES

2.1 Registered Midwives

- Prevention and prompt recognition of third and fourth degree tears
- Administration of analgesia and antibiotics
- Education, routine postnatal care, observation of perineum and escalation of concerns

2.2 Medical Staff

- Prevention and prompt recognition of third and fourth degree tears
- Repair of tear by competent medical officer or under supervision by senior medical officer
- Prescribing analgesia and antibiotics
- Arranging appropriate follow up including appropriate debrief and review in obstetric anal sphincter injury service (OASIS) clinic postpartum
- Documentation

2.3 Physiotherapist

- Promote continence and full rehabilitation of pelvic floor and anal sphincter muscle function
- Review of OASI injuries postpartum and referral for medical review as indicated

3. PROCEDURE

3.1 ***Clinical practice***

3.1.1 **Repair and Management**

- Perform adequate perineal examination after verbal consent from woman who has sustained perineal trauma
- Recommend a rectal examination, ensure clear explanation and consent has been obtained from woman. Document discussion, including if woman decline this examination
- Call a medical officer to inspect the perineum if a 3rd or 4th degree tear is suspected

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- Arrange transfer to operating theatre for repair if a 3b, 3c, 4th degree or buttonhole tear is confirmed
- Consider transfer to operating theatre for repair if a 3a tear is confirmed if analgesia, lighting and/or asepsis is deemed inadequate in birth unit
- Obtain written consent for repair in theatre or verbal consent for repair in birth unit and document
- Repair as soon as possible after birth to reduce the risk of bleeding and infection
- Discuss choice of anaesthesia with the anaesthetic team and the woman. Regional analgesia is the usual practice
- Repair the anorectal mucosa using either:
    - 2-0 polyglactin (Vicryl®) with either continuous or interrupted technique as recommended by the Royal College of Obstetricians and Gynaecologists (RCOG)
    - Interrupted 3-0 polydioxanone (PDS) as recommended locally by colorectal surgeons
- Repair the IAS muscle with interrupted sutures, using fine suture material such as 3-0 PDS or 2-0 polyglactin as this may cause less irritation and discomfort. It is advisable to repair the IAS separately to the EAS
- Repair the EAS with either an overlapping or end-to-end technique (approximation method can be used with equivalent outcome)
- Repair the EAS muscle with either the following as they give equivalent outcomes:
    - monofilament sutures such as polydiaxanone (PDS)
    - braided sutures such as polyglactin (Vicryl®)
- Bury the surgical knots beneath the superficial perineal muscles to prevent knot migration to the skin
- Repair the remainder of the perineal tear using standard method for second degree tear repair.
- Perform a rectal examination (PR) at the completion of the repair to exclude the presence of incorrectly placed sutures
- Recommend use of broad-spectrum antibiotics, postoperative laxatives, and analgesia following OASI repair to reduce the incidence of the postoperative complications as outlined in table 1

Table 1- medication/analgesia regimen

Indications	• Third or fourth degree perineal tear • Button hole tear
Antibiotic regimen	• Administer <u>before the repair</u>: ○ A single dose of cefazolin 2 g intravenous (IV, 3 g if woman more than 120 kg) OR ○ A single dose of Clindamycin 600mg IV if woman has history of immediate <u>*severe or delayed severe hypersensitivity*</u> to penicillin **PLUS** ○ A single dose of metronidazole 500 mg IV • Prescribe <u>post repair</u>: ○ amoxicillin with clavulanic acid (Augmentin®) 875+125 mg orally (PO) every 12 hours for five days OR ○ cephalexin PO 500mg sixth hourly + metronidazole PO 400mg 12-hourly for five days if woman has history of immediate <u>*non severe or delayed non severe hypersensitivity*</u> to penicillin OR ○ Trimethoprim + sulfamethoxazole 160+ 800mg 12-hourly **PLUS** metronidazole 400mg 12-hourly for five days if woman has history of immediate <u>*severe or delayed severe hypersensitivity*</u> to penicillin

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Laxative regimen	• Stool softener:
	  ○ Docusate 50mg **twice** a day
	AND/OR
	• Osmotic Laxatives:
	  ○ Lactulose 20mL daily **OR**
	  ○ Macrogol 3350 with electrolytes (Movicol ®) 1 sachet 12 hourly

Analgesia regimen (for all perineal tears)	• Paracetamol suppository 1g on repair/after examination • Diclofenac suppository 100mg on repair/after examination (check contraindications) • Paracetamol 1000mg q6 hourly regular PO • Diclofenac 50mg q8 hourly regular PO • Perineal ice pack for 20 mins PRN • Tramadol IR 50-100mg 6 hourly as required (max 400mg/24 hours) PO • Oxycodone 5-10mg 6 hourly as required (max 40mg/24 hours) PO • Ondansetron 4-8mg 8 hourly as required (max 24mg/24hours) sublingual/PO

- Refer woman to physiotherapy department. Referral to be made to physiotherapy via eMR by medical staff at time of repair. Recommend pelvic floor exercises from 6–12 weeks postpartum
- Arrange medical review within 48 hours after birth to discuss diagnosis, implications of tear, and importance of follow-up
- Arrange review for a woman who has had an obstetric anal sphincter injury (OASI) at four weeks and four months postpartum in the OASIS clinic

3.1.2 **Postnatal Ward-Based Care**

- Give information leaflet (available in the p drive under patient information, postnatal) to woman at suitable time during her postnatal stay
- Recommend ice packs for the first 72 hours
- Recommend gentle perineal compression through layering pads and firm fitting underwear
- Ensure analgesia, broad-spectrum antibiotics (commenced at the time of repair) and regular stool softeners/laxatives (as outlined in table1) are prescribed
- Assist the woman to breastfeed, lying supported on side if perineum is too painful. Suggest trying a rolled towel under each thigh when sitting to alleviate pressure
- Encourage pelvic floor muscle contraction when standing or moving to alleviate pain
- Recommend perineal washes with water only, advise no soap and instruct woman to gently dry perineum to reduce infection risk
- Observe lochia and condition of perineum daily
- Prevent constipation by encouraging:
  - adequate fluid intake
  - correct defecation techniques and advise against straining. Suggest support of stitches with a pad or toilet tissue when defecating
  - woman to answer the first urge to defecate
- Provide an opportunity for the woman to discuss and debrief her birth and subsequent severe perineal trauma
- Ensure review by registrar or consultant medical officer prior to discharge (ideally on day one postpartum)
- Ensure review by physiotherapist
- Ensure defecation has occurred prior to discharge, unless woman has midwifery follow-up at home
- Ensure follow up in OASIS clinic has been arranged for four weeks and four months postpartum
- Give the woman clear instructions at discharge regarding analgesia, antibiotics, and stool softeners
- Give the woman clear written instructions at discharge regarding who to contact if new or concerning symptoms occur (please refer to details on patient information leaflet)

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3.2 **Documentation**

- Medical record
- Discharge summary

3.3 **Educational Notes**

- Women who sustain an OASI should be fully informed and given time to ask questions. The benefits of follow-up need to be discussed. This should include written information where possible [3,4] The reported risk of OASI recurrence varies. It is estimated at 4-8%. There is no significant increase in OASI rates in subsequent pregnancies when risk factors remain the same [6,7]
- Inform women antenatally of risk factors for recurrence of OASI[7]:
    - Instrumental birth (RR 3.12, 95% CI 2.42-4.01) significant
    - Birth weight
        - > 4kg (RR 1.69, 95% CI 1.6-1.79) significant
        - > 4.5kg (RR 2.25-2.99) significant
    - Grade of previous tear (RR 4.1, 95% CI 1.3-1.5) significant
- For asymptomatic women, a vaginal birth following an OASI does not increase the risk of subsequent symptoms [7.] However, women with anal incontinence symptoms may worsen, particularly for women who experienced transient anal incontinence after their first birth[7]. Most women who remain symptomatic describe incontinence of flatus or faecal urgency [1,4]
- Discuss with woman who has history of OASI, mode of birth early in pregnancy, throughout pregnancy as required, and again at around 36 weeks[1]
- No high-level evidence to recommend an optimal mode of birth[1]
    - Consider:
        - Extent of previous injury
        - Functional status - symptoms experienced in both the short and long term by woman
        - Extent of anatomical and functional defects shown on anal ultrasound and anal manometry
    - Discuss balance of risks and benefits as unique to each woman[8]
- Recommend/consider caesarean section if[8]:
    - Current symptoms of anal incontinence
    - Psychological and/or sexual dysfunction
    - Previous fourth degree tear
    - Endoanal defects evident on ultrasound
    - Low anorectal manometric pressures
    - Woman's request
- There is no evidence to support the role of prophylactic episiotomy in subsequent vaginal deliveries[1]
- According to the RCOG "if the tear only involves mucosa with an intact anal sphincter complex (buttonhole tear) this has to be documented as a separate entity. If not recognised and repaired this type of tear may cause anovaginal fistula"[1]
- Polyglactin is preferable to PDS for repair of anorectal mucosa as it may cause less irritation and discomfort[1]
- Use ice packs with caution as they can impede blood supply[5]
- The 2015 RCOG Green Top Guideline (No. 29) has recommended against prescribing bulking agents in addition to laxatives as this led to a temporary increase in faecal incontinence. It is therefore recommended prescribing single agent stool softeners only[1]

3.4 **Implementation, communication, and education plan**

- The revised CBR will be distributed to all medical, nursing and midwifery staff via @health email.
- The CBR will be discussed at ward meetings, education and patient quality and safety meetings.
- Education will occur through in-services, open forum, and local ward implementation strategies to address changes to practice. Emphasis will be placed on updated antimicrobial therapy guidelines as per eTG.
- Staff will be asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR.
- The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access

3.5 **Related Policies/procedures**

- Perineal/Genital Tract Repair

3.6 **References**

1. Royal College of Obstetricians and Gynaecologists. (2015). Management of third and fourth degree perineal tears following vaginal delivery. Guideline no 29. RCOG, London
2. London. Electronic Therapeutic Guidelines (eTG). (2021). Prophylaxis for repair of obstetric anal sphincter injuries.
3. Women's healthcare Australasia. (2019). The Perineal Protection Bundle
4. Australian Commission on Safety and Quality in Healthcare. (2021).Third and Fourth Degree Perineal Tears, Clinical Care Standard
5. Wilson, A.N. and Homer, C.S. (2020), Third- and fourth-degree tears: A review of the current evidence for prevention and management. Aust N Z J Obstet Gynaecol, 60: 175-182
6. Priddis H, Dahlen HG, Schmied V, Sneddon A, Kettle C, Brown C, et al. Risk of recurrence, subsequent mode of birth and morbidity for women who experienced severe perineal trauma in a first birth in New South Wales between 2000-2008: a population-based data linkage study. BMC Pregnancy Childbirth 2013; 13:89
7. Jha S, Parker V. Risk factors for recurrent obstetric anal sphincter injury (rOASI): A systematic review and meta-analysis. Int Urogynecol J 2016;27(6):849-57.
8. Harvey MA, Pierce M, Alter JE, Chou Q, Diamond P, Epp A, et al. Obstetrical anal sphincter injuries (OASIS): Prevention, recognition, and repair. Clinical Practice Guideline No. 330. Journal of Obstetrics and Gynaecology Canada 2015;37(12):1131-48.

4. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal woman, she may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours
- If the woman is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

5. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
May 2023		Review and endorsed by Safety and Quality Committee
2022	1	