Royal Hospital for Women (RHW)
BUSINESS RULE
COVER SHEET

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FORMER REFERENCE(S)	Perineal/genital tract repair local operating procedure
EXECUTIVE SPONSOR	Medical Co-Directory of Maternity Services
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SUMMARY	Explanation and guidance for primary perineal/genital tract trauma repair. Explanation and guidance on assessment and management of perineal/genital tract repair breakdown and indications for secondary repair

Royal Hospital for Women (RHW)
CLINICAL BUSINESS RULE

Perineal/Genital tract trauma - primary and secondary management

RHW CLIN010

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1. BACKGROUND

More than 85% of women who have a vaginal birth will sustain a primary perineal tear.[2] The incidence of wound dehiscence following primary repair is up to 13.5%. The most common cause of wound dehiscence is infection.[10]
Most cases of wound dehiscence are managed by allowing natural healing via secondary intention, in which granulation tissue contracts to bring the wound edges together.[10] However, early re-suturing of dehisced wounds can prevent potentially significant physical and psychological sequelae and should therefore be considered in selected cases.

The aim of this CBR is to:

- Provide explanation of primary perineal/genital tract trauma repair
- Provide guidance on assessment and management of perineal/genital tract trauma repair breakdown and indications for secondary repair

This CBR does not cover the management of a woman who has sustained a third or fourth-degree perineal tear or a buttonhole tear (see Third and Fourth Degree Perineal Tears- Repair, Management and ward based postnatal care for this).

Definitions

Term	Definition
Buttonhole tear	A buttonhole tear is a tear that extends from the vaginal mucosa to the anal epithelium or rectal mucosa without involving the external anal sphincter complex
EAS	External anal sphincter (EAS) complex is the plane of skeletal muscle fibres surrounding the anus
Episiotomy	Surgical incision made in the perineum and posterior vaginal wall to enlarge the vaginal orifice, in order to augment delivery and/or prevent OASIs. A right mediolateral episiotomy (RMLE) is recommended over a midline episiotomy
IAS	Internal anal sphincter (IAS) is the smooth muscle fibre surrounding the anus and is surrounded by the EAS
OASIs	Obstetric anal sphincter injuries (OASIs) includes third- and fourth-degree perineal tears
Perineal tear	A tear of the area from the anus to the posterior fourchette of the vagina. Obstetric perineal tears occur following vaginal birth. Other tears include vaginal or labial tears. Perineal tears are classified according to Sultan classification:[1] - First degree: injury to the skin and subcutaneous tissue of the perineum and vaginal epithelium with perineal muscles intact - Second degree: injury to fascia and musculature of perineal body including muscles of the superficial transverse perineal muscles and the posterior fibres of the bulbocavernosus muscles, with external anal sphincter (EAS) intact - Third degree: injury extends into the fibres of the EAS and/or the internal anal sphincter (IAS) - 3a tear: injury involves <50% of EAS

	- 3b tear: injury involves >50% of EAS - 3c tear: injury involves both EAS and IAS - Fourth degree: injury extends through the EAS and IAS and into the anorectal mucosa

2. RESPONSIBILITIES

2.1 Medical staff – assess and repair primary perineal trauma, review and manage perineal breakdown and secondary repair
2.2 Midwifery staff accredited to perform perineal repairs – assess and repair primary perineal trauma

3. PROCEDURE

3.1 **Equipment**

- light source
- designated suture trolley
- suture pack
- sterile drapes
- radio-opaque abdominal sponges 20cm x 20cm
- radio-opaque vaginal plug (tampon) with tail
- antiseptic solution
- local anaesthetic
- 23 gauge needle and 20mL syringe
- appropriate absorbable synthetic sutures material
- personal protective equipment

3.2 **Clinical Practice**

Primary repair of perineal or genital tract trauma

- Ensure all necessary equipment is available
- Consent the woman for an examination of the genital tract including per-rectal exam
- Explain the repair procedure and gain verbal consent from the woman
- Screen for any known allergies to local anaesthetic or antiseptic solution
- Position the woman into lithotomy or a semi recumbent position for appropriate visualisation of the genital tract
- Assess the tear with another midwife or medical colleague
  - Perform a systematic assessment of the genital tract in good light
  - Ensure the apex of the tear is visualised
  - Perform a per-rectal examination to exclude the presence of an OASIS or buttonhole tear
  - Determine whether clinician has the requisite skills and the woman is in the appropriate location
    - If there is an OASIS injury or inadequate visualisation, recommend repair in the operating theatre
  - Explain the findings to the woman
- Repair of genital tract
  - Clean the perineal area using chlorhexidine 0.2% solution
  - Drape the woman with sterile drapes
  - Ensure adequate analgesia – if there is no epidural block or an ineffective epidural block
    - infiltrate the area with local anaesthetic (1% lignocaine without adrenaline to maximum of 20mL)
    - If already infiltrated for birth ensure maximum volume does not exceed 20mls in total. Contact anaesthetics if more analgesia is required
    - Record lignocaine/lidocaine on medication eMeds

- Midwives to use standing order when required Standing Orders (nsw.gov.au)

- Repair the wound in three layers (vaginal wall, perineal muscle, perineal skin) using a rapidly absorbed suture e.g. 2-0 Vicryl Rapide®)
- Commence suturing from 0.5cm above the apex to the introitus using continuous non-locking sutures, until the hymenal remnants are reached approximating wound edges and eliminating dead space
- Appose the perineal muscles in one or two layers using either interrupted or continuous sutures
- Appose the perineal skin edges with subcuticular (or interrupted) sutures starting from the inferior end of the wound
- Labial and other trauma should be sutured separately using appropriate suture material. Assess need for indwelling catheter if trauma in close proximity to urethra
- Perform a per-rectal examination to ensure there is no suture material in the rectum after gaining verbal consent again
- Palpate the fundus and estimate the blood loss
- Explain perineal hygiene measures and the expected healing process to the woman
- Perform a count of the instruments and sponges/tampons with a second staff member and sign count
- Dispose of sharps appropriately
- Offer, administer and prescribe ongoing oral or rectal analgesia to the woman

Secondary perineal wound breakdown/infection, management and repair

- Perform a systematic examination on any woman who presents with concerns or symptoms related to the perineal tear including:
  - dehiscence and/or infection of the wound
  - pain
  - malalignment of wound edges causing distortion of genital tract anatomy
- Assess:
  - presence of maternal pyrexia or any abnormal maternal observations
  - perineal pain, oedema, redness and bruising
  - degree of approximation of tissues
  - wound discharge
  - per-rectal examination to exclude occult rectal injury
- Ensure consultant obstetrician review for woman with significant dehiscence or significant maternal morbidity (pain, disfigurement, etc.)
- Acknowledge minimal evidence regarding management of wound dehiscence with the woman (see Education Notes) allowing for shared decision making as to whether a secondary repair is necessary:
  - collect bacterial swabs from wound
  - treat with antibiotics prior to repair
  - recommend secondary repair when the wound is free from exudate
  - suggested indications for a secondary repair include:
    - infection including abscess formation, pustular exudate or necrotic tissue
    - significant pain
    - disfigurement
- Perform secondary repair in the operating theatre with appropriate analgesia
- Repair by:
  - cleaning wound edges with hydrogen peroxide
  - remove any suture material
  - debride infected or necrotic tissue
  - remove any non-viable tissue
  - sharp dissection to create fresh edges of non-closed wound
  - suture and re-approximation of wound
- Continue antibiotics and analgesia as prescribed

- Review in OASIS clinic two weeks after discharge

3.3 **Documentation**

- Medical Record

3.4 **Educational Notes**

- Risk factors for perineal tears include nulliparity, Asian ethnicity, vaginal birth after Caesarean, large fetal weight (>4000g), shoulder dystocia, occiput-posterior position, prolonged second stage of labour (>60 minutes), instrumental delivery and oxytocin use[3-5]
- There are limited studies which have compared the outcomes of suturing first- and second-degree tears versus secondary intention. Some evidence suggests that secondary intention is associated with poorer wound approximation and healing[6]. The perineal muscle of second-degree tears should be sutured as a minimum
- Monocryl had been shown in studies to be equally favourable for intracutaneous closure of the skin, in terms of risk of wound dehiscence and pain score[18]
- There is limited evidence to support the use of cooling treatments such as ice packs for the relief of perineal pain but can be offered for maternal comfort [7.] Non-steroid anti-inflammatory drugs (NSAIDs) provide greater pain relief for acute postpartum perineal pain, compared to placebo or paracetamol, and should be used in the absence of contraindications such as pre-eclampsia or severe asthma[8]

Secondary repair

- The incidence of wound breakdown following primary repair is up to 13.5%. It can cause significant psychological and physical morbidity, as well as postpartum sepsis[9]
- Wound dehiscence typically presents a week after the initial repair[15,16]
- Some identified predisposing factors for requiring secondary repair include nulliparity, smoking, episiotomy, prolonged second stage of labour, forceps delivery, chromic suture material and surgeons' inexperience[11-12]
- There is very limited evidence informing the management of wound breakdown and the indications for secondary repair of perineal tears
- A secondary surgical repair is performed usually undertaken within weeks of the initial repair, rather than delayed (three months postpartum), which was formerly recommended[11]
- Limited evidence suggests a secondary repair of a perineal wound achieves a good result[11]
- One randomised study comparing the management of dehiscence with healing by secondary intention vs secondary closure found that complete healing was significantly quicker when a secondary repair was performed.[13] Another demonstrated superiority of primary re-suturing as compared with spontaneous healing in the setting of episiotomy wound breakdown.[14] These studies, however, were undertaken over 20 years ago with a small number of participants
- In a Cochrane review evaluating the therapeutic effectiveness of secondary suturing of dehisced perineal wounds to healing by secondary intention, researchers found low-level evidence that re-suturing of perineal wound dehiscence in the first two weeks of delivery led to:
  - reduction in perineal pain during the healing process,
  - reduction in dyspareunia
  - increased satisfaction with the cosmetic result[15]

  However, the review concluded that there is insufficient evidence available to support or refute secondary suturing for the management of a perineal wound breakdown following childbirth
- The same researchers also undertook a qualitative study to better understand women's experiences and preferences following perineal wound dehiscence; a strong preference for treatment is reported[9]
- More recently, a Danish study demonstrated that most early secondary repairs of labial tears, first- and second-degree perineal tears and episiotomies had an anatomically acceptable result with no severe complications reported[16]

3.5 **Related Policies/procedures**

- Second stage of labour – recognition of normal progress and management of delay
- Third and fourth degree perineal tears – Repair, management and Ward Based Postnatal Care
- Accountable Items in the Birthing Environment (outside operating theatres)
- Postpartum haemorrhage – prevention and management
- Assisted vaginal birth guideline – SESLHDGL/050
- Management of the deteriorating Maternity woman

3.6 **References**

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4. IMPLEMENTATION, COMMUNICATION and EDUCATION PLAN

This 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. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and

5. 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
- If the woman is from a non-English speaking background, offer an interpreter; call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters

6. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
July 2023 2/6/20 16/7/15 July 2015 19/9/13 10/9/13 20/6/13 June 2013 September 2012 & November 2012 6/12/07 November 2007 16/10/06 12/9/06		Reviewed and endorsed Maternity Clinical Business Rule Committee Reviewed and endorsed Maternity Services LOPs Approved Quality & Patient Safety Committee Reviewed and endorsed Maternity Services LOPs Approved Quality & Patient Safety Committee Reviewed and endorsed Maternity Services LOPs Approved Quality & Patient Safety Committee Reviewed Minor additions Approved Patient Care Committee Reviewed following clinical incident Approved Quality Council Maternity Services Clinical Committee
19/10/23	6*	Endorsed at RHW Safety and Quality Committee and held over for publication as awaiting for SESLHD DTC to publish standing order documented in CBR.

* unclear the number of times document has been reviewed so revision 6 taken from the number of times it states reviewed in the approval history.