REF: CTMobs 109

Bwrdd Iechyd Prifysgol Cwm Taf Morgannwg University Health Board

GUIDELINE for Management and repair of Perineal Trauma

Initiated By	Cwm Taf Morgannwg University Health Board Obstetrics and Gynaecology Directorate
Approval Group	Labour Ward and Guideline Forums
Distribution	Midwifery and Obstetric staff within Cwm Taf Morgannwg University Health Board (via email)
Archiving	Directorate secretary will be responsible for archiving all versions
Document Location	WISDOM and Health Board intranet Hard copy in Management file /Guidelines on fileshare
Freedom of Information	Open

CHANGE HISTORY

Version	Date	Author Job Title	Reasoning
1	November 2022	Intrapartum lead midwife	New CTMUHB

AUTHORSHIP, RESPONSIBILITY AND REVIEW

Author	Dawn Apsee	Ratification Date	November 2022
Job Title	Intrapartum lead midiwfe	Review Date	November 2025

CONTENTS

1. OBJECTIVE

To provide evidence-based guidelines for midwives/doctors in repair of perineal trauma following childbirth. See separate guidelines for repair of 3rd and 4th degree perineal trauma.

2. CLASSIFICATION OF PERINEAL TEARS

It is essential that midwives/doctors identify the extent of the perineal trauma and document it according to the agreed classification (Sultan et al 1994)

First Degree	Superficial laceration to the vaginal epithelium or perineal skin.
Second Degree	Damage to the superficial and/or deep perineal muscles which may expose but does not extend into the anal sphincters.
Third Degree	Damage to the superficial and/or deep perineal muscles and anal sphincter/s. More recently third degree tears have been sub-classified as: (a) less than 50% of the external anal sphincter (EAS) damaged (b) more than 50% of the EAS damaged (c)Internal anal sphincter (IAS) damage
Fourth Degree	Damage to the same structures as above including disruption of the EAS and/or IAS and anorectal epithelium
Button-hole rectal tear	An isolated tear of the anal epithelium or rectal mucosa and vagina but without involving the anal sphincter

3. BACKGROUND

85% of women who have a spontaneous vaginal birth will sustain some form of perineal trauma and up to 69% of these will require suturing.
Incorrectly approximated wounds can lead to major physical, psychological and social problems.

Contributing factors to perineal pain:-

- Skill of the operator

Midwives and doctors who are appropriately trained will provide a consistent, high standard of perineal repair.

Student midwives who have completed the perineal trauma module with documented evidence in passport for skills can assist with the repair under the guidance of a midwife that has been assessed as competent.

- Technique of repair

The continuous suturing techniques especially if compared to interrupted methods, are associated with less short-term pain. If the continuous technique is used for all layers (vagina, perineal muscles and skin), the reduction in pain is even greater compared to skin only.

- Type of materials used

Three randomised controlled trials compared Vicryl rapide and Vicryl, found a significant reduction in the need for suture removal with vicryl rapide up to three months following childbirth. Taking this into account *Vicryl Rapide* is the ideal suture material for perineal repair and is recommended by the NICE intrapartum guidelines (2007)

The main principle on which the practice of suturing is based is to:

* control bleeding
* minimise the risk of infection
* assist the wound to heal by first intention - healing is usually rapid and scaring is minimal
* achieve correct anatomical alignment
* restore normal function

Non-suturing of perineal trauma:

First–degree tears may be left un-sutured at the midwife or doctor's discretion but informed consent from the women must always be sought and this must be documented in the medical

records. A superficial tear must be sutured if it is excessively bleeding or there is any uncertainty regarding alignment of the traumatised tissue, which may affect the healing process.

4. ASSESSMENT OF TRAUMA

4.1 All women who have a vaginal birth and sustain genital tract trauma should be examined systematically to assess the severity of damage. This should include an assessment of the perineum, lower vagina and rectal examination to exclude any damage to the anal sphincter complex (external and internal anal sphincters and rectal mucosa).

Please note that informed consent must be obtained prior to performing the rectal examination.

4.2 A second opinion must be obtained from an experienced clinician if the practitioner is inexperienced at assessing perineal damage or unsure of the degree of trauma sustained.

4.3 If the trauma is complex, may need regional / general anaesthetic.

4.4 Standards for Record Keeping in relation to Perineal Trauma

The findings of the examination must be clearly documented in the woman's records, using the agreed classification as part of the trauma record.

- With a record of the repair required including the anaesthetic, suture material and technique used.
- A post repair summary including as appropriate, haemostasis, vaginal pack in situ, count for swabs/needles and tampon if used is correct, PV & PR examination, sutures for removal, laxatives, for consultant review.
- Advice given, extent of trauma, type of repair, pain relief, hygiene, diet, including fibre, pelvic floor exercises.
- The record will have the date, time and signature of the repairer.
- The follow up arrangements as appropriate.
- A daily assessment of the perineum and support of the mother will be documented in the post-natal notes.

5. PRINCIPLES OF REPAIR

1. Suture as soon as possible following delivery to reduce bleeding and risk of infection.

2. Informed consent must be obtained from the woman prior to undertaking the repair and documented in the records.

3. Ensure adequate lighting.

4. If an epidural is in place contact anaesthetist for an appropriate analgesia top up prior to suturing.

5. The woman's dignity and comfort must be maintained throughout the procedure.

6. Perineal repair should be performed by an appropriately trained, competent midwife or doctor. Those who have not been assessed to be competent should be supervised by an experienced clinician.

7. Further assistance should be obtained if practitioners find they are outside the sphere of their ability or they identify that initial classification is greater than expected. Suturing should stop and a senior clinician requested.

6. TECHNIQUE

Equipment/Materials

1. Suture pack (any swabs including if tampon used must be X- ray detectable)
2. Sterile gown and glove
3. Suture material – *Vicryl Rapide* 2/0 on a 35mm tapercut needle
4. Sterile 10/20ml syringe and 21g needle
5. Local anaesthetic (Lignocaine Hydrochloride Injection BP 1% - 10 – 20 mls)
6. Light for visibility

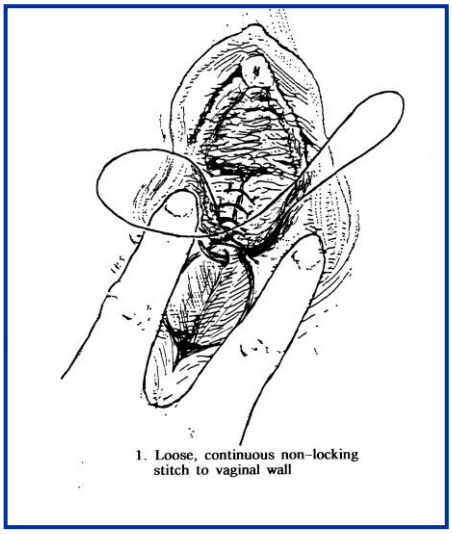
Continuous method of perineal repair

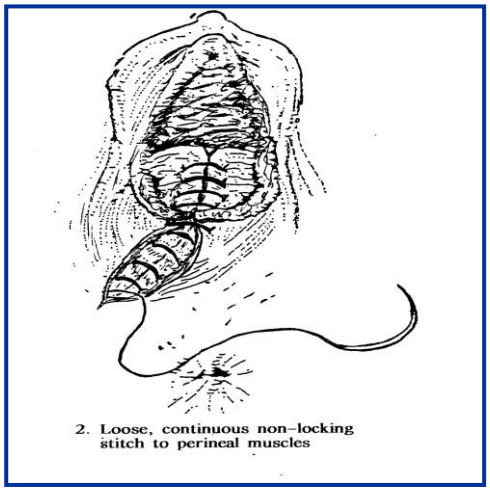
Action	Rationale
1. Explain the procedure to the woman, and her partner.	1. To reassure the woman and confirm consent.
2. Check maternal base line observations and PV blood loss.	2. To ensure that the woman's general condition is stable prior to commencing the repair.
3. Assess the extent of perineal trauma and perform a per rectal examination prior to suturing	3. To ensure there is no anal sphincter injury
4. Ensure that the woman is in an appropriate position.	4. To ensure that the whole perineal area is accessible.
5. Ensure any swabs including surgical tampon if used have an X-Ray detectable marker and along with needles, and instruments are all checked and accounted for prior to suturing.	5. To ensure all swabs, tampon if used, needles and instruments accounted for.

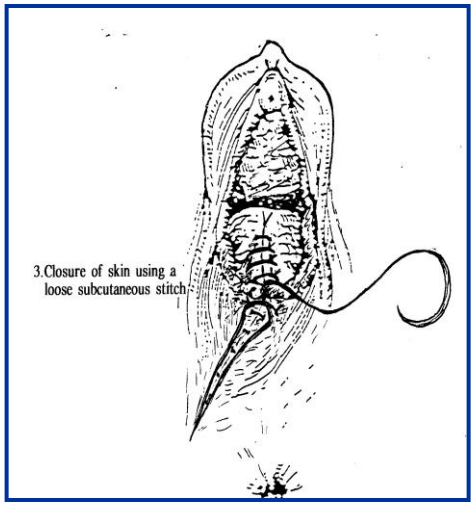
6. Cleanse the vulva and perineal area. Drape the area with sterile lithotomy towel.	6. To minimise risk of infection.
7. Identify anatomical landmarks. These may include hymenal remnants, and different shades of tissue.	7. To aid the operator to correctly align and approximate the traumatised tissue. Misalignment may cause long-term morbidity such as dyspareunia.
8. If epidural in situ ensure top up is given by anaesthetist and that the analgesia is effective prior to commencing the suturing. If no epidural in place lignocaine 1% will be required. Draw back the plunger of the syringe prior to injecting 10-20mls of local anaesthetic (lignocaine) slowly into the traumatised tissue, ensuring even distribution.	8. To ensure effective analgesia prior to suturing To check that the lignocaine is not accidentally injected into a blood vessel and to provide effective anaesthesia to facilitate a pain free
9. If it is deemed necessary to insert a swab or surgical tampon into vagina to absorb blood during suturing the tail/tape must be exposed outside the vagina and a surgical clip applied and attached to drape.	9. Improve visability of the area for suturing for clinician Surgical clip applied to tail/tape to reduce risk of retained swab/tampon **Caution to be had when using a surgical tampon that it is not concealing an ongoing haemorrhage**
10. Identify the apex of the vaginal trauma and insert the first stitch 5 - 10 mm above this point.	10. To ensure haemostasis of any bleeding vessels which may have retracted beyond the apex.
11. Suture posterior vaginal trauma using a loose continuous non-locking stitch. Continue to the hymenal remnants taking care not to make the stitches too wide.	11.To appose the edges of traumatised vaginal mucosa and muscle without causing shortening or narrowing of the vagina.
12. Ensure that each stitch reaches the trough of the traumatised tissue.	12. To close dead space, achieve haemostasis and prevent paravaginal haematoma formation.
13. Visualise the needle at the trough of the trauma each time it is inserted.	13. To prevent sutures being inserted through the rectal mucosa and– a recto-vaginal fistula may form if this occurs.

14. Bring the needle through the tissue underneath the hymenal ring and continue to repair the deep and superficial muscles using a loose continuous stitch.	14. To realign the perineal muscles, close the dead space, achieve haemostasis and minimise the risk of haematoma formation.
15. Reverse the stitching direction at the inferior aspect of the trauma and place the stitches loosely 5-10mm apart.	15. To appose skin edges and complete the perineal repair.
16. Do not pull the stitches too tight.	16. To prevent discomfort from over-tight sutures if reactionary oedema and swelling occurs.
17. Complete the subcutaneous repair to the hymenal ring, swing the needle under the tissue into the vagina and complete the repair using a terminal loop knot.	17. To secure the stitches.
18. To remove swab or tampon from vagina if used during perineal repair.	18. to prevent a patient safety risk if swab or tampon unintentionally retained.
19. Inspect the repaired perineal trauma.	19. To ensure the trauma has been sutured correctly and that haemostasis has been achieved. Check that there is no excessive bleeding from the uterus.
20 Insert two fingers gently into the vagina.	20. To confirm that the introitus and vagina has not been stitched too tight.
21. Perform a rectal examination.	21. To confirm that no sutures have penetrated the rectal mucosa.
22. Cleanse and dry the perineal area.	22. To minimise infection.
22. Check and record number of swabs, needles, surgical tampon if used and instruments following the procedure and document in records. This is a two person check with signatures	22. To confirm that all equipment and materials used are complete and accounted for following the procedure.
23. Place the woman in the position **used** of her choice.	23. To ensure that the woman is made comfortable following the procedure.
24. Complete the appropriate documentation i.e. either suturing section on normal labour pathway or CTMUHB suturing proforma	24. To fulfill statutory requirements and to provide an accurate account of the repair.

Continuous Technique for closure of vagina, perineal muscles and skin







On completion of perineal repair the woman should be given advice regarding:-

- Extent of trauma
- Methods of pain relief
- Personal hygiene
- Diet
- Rest
- Pelvic floor exercise
- Avoidance of constipation
- Who to contact in case of long term perineal pain/dyspareunia or incontinence

7. Analgesia

NSAID rectal suppositories are associated with less pain up to 24 hours after birth and less additional analgesia is required. Check patient allergies and medical status for appropriate prescriptions of analgesia.

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Appendix 1 – Perineal Tear Proforma

GIG CYMRU NHS WALES Bwrdd Iechyd Prifysgol Cwm Taf Morgannwg University Health Board	Patient Label Please

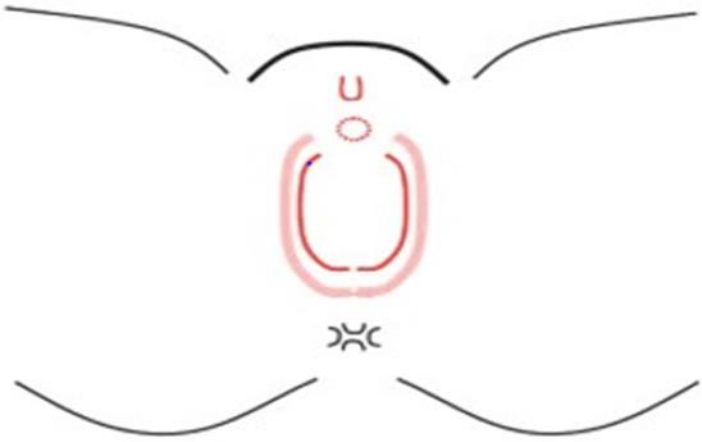
First / Second degree Perineal Tear / Episiotomy / Labial tear/ Other (please circle)
It is advisable to suture complex tears in theatre
All tears 3a and above refer to repair of third and fourth degree tears guidelines and proforma

Date: ……/……/……... **Time:**

Anaesthesia: **Location:** **Repaired by:**	Spinal/GA Epidural/Local Operating Theatre Delivery Room	**<u>Delivery Details</u>** Mode of delivery: Birth Weight: Birth Centile: Time of delivery: Time of Repair:

<u>Findings and Repair Technique</u>

Rectal examination to repair: YES / undertaken prior NO



	Extent of Injury Classification	Suture Material	Method of Repair
Vaginal Mucosa	1°	Vicryl Rapide 2/0	Continuous locking / Continuous non-locking
Muscle	2°	Vicryl Rapide 2/0	Continuous / Interrupted
Skin		Vicryl Rapide 2/0	Subcutaneous / Interrupted

Labial Tear		Vicryl Rapide 2/0	Subcutaneous / Interrupted

	Swabs	Needles	Tampon
Pre-procedure count	_____	_____	_____
Additional swabs/needles used	_____	_____	_____
Post – procedure count	_____	_____	_____

Post procedure rectal examination undertaken YES / NO

Measured Blood Loss mls

Perineal Repair Details

Please tick boxes to indicated if action was completed

Full explanation about type of tear given ☐

Full explanation about proposed procedure given ☐

Womens verbal consent for repair obtained ☐

If no consent to repair, advise re healing given ☐

Assisted to position appropriate for suturing ☐

Local Anaesthetic given: Lidocaine 1% _____ mls

Given by: _____ Time: _____

Standard: Suturing commenced within 1 hour of completion of third stage

Yes / No If no, provide reason for delay:

Postoperative Management

Analgesia prescribed	Yes / No	PR Voltarol:	YES / NO
PN Thromboprophylaxis required	Yes / No		
Antibiotics prescribed	Yes / No		
Foleys Catheter Inserted	Yes / No	Catheter removal	Date / Time _____
Vaginal Pack Inserted	Yes / No	Pack removal	Date / Time _____
Object retained armband applied	Yes / No		

1st signature: _____ **2nd signature: _____**

Designation: _____ **Designation: _____**