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Swansea Bay University
Health Board

Guideline for Management and Repair of Perineal Trauma

Author:	Labour Ward Forum
Specialty:	Maternity
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1. OBJECTIVE

To provide evidence-based guidelines for midwives/doctors in management and 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 1999)

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.

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 their practical assessment 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 (2014)

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 scarring 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).
- 4.2 **X ray detectable swabs must be used when undertaking any perineal, vaginal or rectal inspection or repair and all swabs must be checked, counted and recorded in the records.**

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

- 4.3 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.
- 4.4 If the trauma is complex, may need regional / general anaesthetic.
- 4.5 **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 examination / repair required including the anaesthetic, suture material and technique used.
- A post examination/repair summary including as appropriate, haemostasis, vaginal pack in situ, swabs/needles 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. If the woman is in a midwifery led setting and there is uncertainty about the nature or extent of the trauma transfer the woman (with her baby) to obstetric-led care.
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

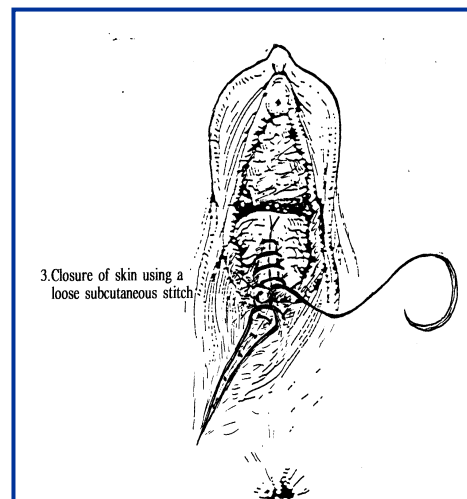
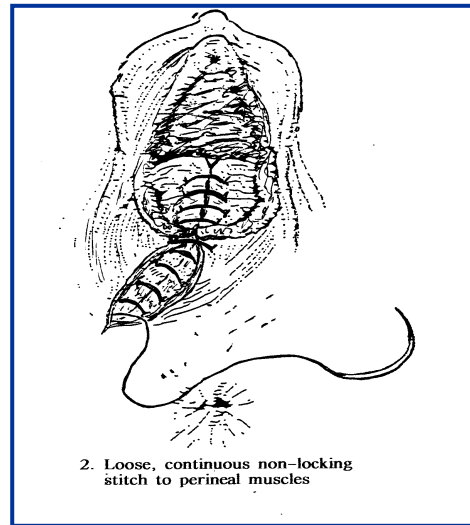
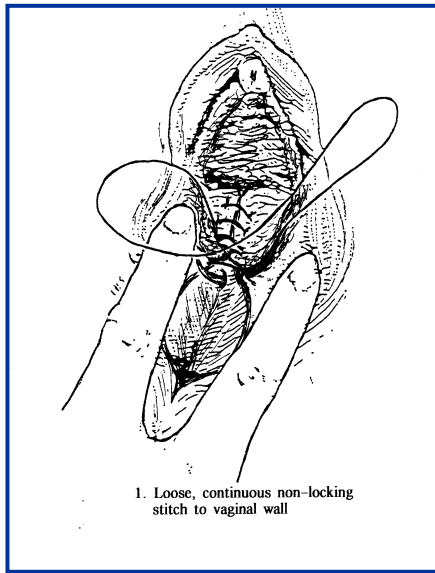
1. Suture pack
2. X-ray detectable swabs
2. Sterile gown and glove
3. Suture material – *Vicryl Rapide 2/0* on a 35mm tapercut needle
4. Sterile 10/20ml syringe and 21g needle
5. Local anaesthetic (Lignocaine Hydrochloride Injection BP 1% - 10 – 20 mls)
6. Light for visibility

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 X ray detectable swabs, needles, instruments and tampon if used are checked and accounted for prior to suturing	5. To ensure all swabs, needles and instruments are 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 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. Evaluate effectiveness of anaesthetic before commencing 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. Identify the apex of the vaginal trauma and insert the first stitch 5 - 10 mm above this point.	9. To ensure haemostasis of any bleeding vessels which may have retracted beyond the apex.
10. 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.	10. To appose the edges of traumatised vaginal mucosa and muscle without causing shortening or narrowing of the vagina.
11. Ensure that each stitch reaches the trough of the traumatised tissue.	11. To close dead space, achieve haemostasis and prevent paravaginal haematoma formation.

12. Visualise the needle at the trough of the trauma each time it is inserted.	12. To prevent sutures being inserted through the rectal mucosa and– a recto-vaginal fistula may form if this occurs.
13. Bring the needle through the tissue underneath the hymenal ring and continue to repair the deep and superficial muscles using a loose continuous stitch.	13. To realign the perineal muscles, close the dead space, achieve haemostasis and minimise the risk of haematoma formation.
14. Reverse the stitching direction at the inferior aspect of the trauma and place the stitches loosely in the 5-10mm apart.	14. To appose skin edges and complete the perineal repair.
15. Do not pull the stitches too tight.	15. To prevent discomfort from over-tight sutures if reactionary oedema and swelling occurs.
16. 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.	16. To secure the stitches.
17. Inspect the repaired perineal trauma.	17. To ensure the trauma has been sutured correctly and that haemostasis has been achieved. Check that there is no excessive bleeding from the uterus.
18. Insert two fingers gently into the vagina.	18. To confirm that the introitus and vagina has not been stitched too tight.
19. Perform a rectal examination.	19. To confirm that no sutures have penetrated the rectal mucosa.
20. Cleanse and dry the perineal area. Apply a sterile pad.	20. To minimise infection.
21. Check and record number of swabs, needles, instruments and tampon following the procedure and document in records.	21. To confirm that all equipment and materials used are complete and accounted for following the procedure, with another member of staff.
22. Support the woman into a position of her choice and explain about the repair.	22. To ensure that the woman is made comfortable following the procedure.
23. Complete the appropriate documentation i.e. either suturing section on normal labour pathway or ABMU suturing proforma	23. 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

7.0 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.

REFERENCES

1. NICE recommendations for Intrapartum care for healthy women and their babies. NICE clinical guideline 190; published 2014, updated Feb 2017
2. Royal College of Midwives 2012 **Evidence Based Guidelines for Midwifery-Led Care in Labour**- suturing the perineum
3. Sultan AH. Editorial: Obstetric perineal injury and anal incontinence. *Clin Risk* 1999; 5: 193–6.
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Appendix 1 – Perineal Tear Proforma

	Bwrdd Iechyd Prifysgol Bae Abertawe Swansea Bay University Health Board	Patient Label Please
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First / Second degree Perineal Tear / Episiotomy / Labial tear (please circle)

Date:/...../.....

Verbal Consent obtained – Yes / No

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

Findings and Repair Technique

Rectal examination undertaken prior to repair: YES / 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	Interrupted / Subcutaneous

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

1st signature: _____

2nd signature: _____

Post procedure rectal examination undertaken YES / NO

Estimated Blood Loss

PR Voltarol:

YES/NO

Postoperative Management

Signature: _____

Designation: _____

Women & Child Health

Checklist for Clinical Guidelines being Submitted for Approval by Labour Ward Forum

Title of Guideline:	Guideline for the Management and Repair of Perineal Trauma
Name(s) of Author:	Labour Ward Forum
Chair of Group or Committee supporting submission:	Labour Ward Forum
Issue / Version No:	3
Next Review / Guideline Expiry:	September 2024
Details of persons included in consultation process:	Labour Ward Forum
Brief outline giving reasons for document being submitted for ratification	Revised/updated guideline for suturing of perineal trauma.
Name of Pharmacist (mandatory if drugs involved):	n/a
Please list any policies/guidelines this document will supercede:	n/a
Keywords linked to document:	Trauma, perineal, suturing
Date approved by :Labour ward forum	September 15 th 2021
File Name: Used to locate where file is stores on hard drive	Npt_fs2, guidelines and policies ratified, maternity/incidents stats, ratified obstetric policies