EPISIOTOMY AND PERINEAL TRAUMA ASSESSMENT AND REPAIR GUIDELINE

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Brief Summary of Document:	To provide safe care and management for women who have sustained perineal trauma following birth.
Scope	All women who have a vaginal birth and sustain perineal trauma whilst on Labour Ward, freestanding and alongside MLUs and in a home/ community environment within the Health Board. 'The term "woman/women" in the context of this document is used as a biologically based term and is not intended to exclude trans and non-binary people who do not identify as women.'

To be read in conjunction with:	655 Operative Vaginal Delivery Guideline 640 Management of 3rd and 4th Degree Tears (Obstetric Anal Sphincter Injuries OASIS) Guideline
Patient Information:	

Owning group	Obstetric Guideline and Audit Group

Reviews and updates		
Version no:	Summary of Amendments:	Date Approved:
1	Guideline	21.08.2019

Glossary of terms

Term	Definition
AWNCPfNL	All Wales Normal Care pathway for Normal Labour
CLC	Consultant led care
MLC	Midwife led care
FHR	Fetal heart rate
TENS	Transcutaneous Electrical Nerve Stimulation

Keywords	Perineal trauma, first degree tear, second degree tear, third degree tear

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1. Aim of Guideline

The aim of this guideline is to provide guidance in the area of assessment and repair of perineal trauma to ensure that adequate assessment of the extent of the trauma is identified and to provide a consistently high standard of perineal repair.

2. Objectives

The aim of this guideline will be achieved by the following objective:

- to ensure adequate assessment of the extent of the trauma, provide a high standard of perineal repair and reduce maternal morbidity.

3. Scope

- All women who are assessed as having sustained perineal trauma following birth.
- Practitioners including obstetricians and midwives who are appropriately trained gain further confidence and competence to enhance their optimum standard of care.

4. Introduction

Definitions of perineal or genital trauma caused by either tearing or episiotomy.

Degree	Trauma
Intact	No trauma to the vaginal area or perineum noted. No suturing required
Grazes	Superficial splits of the vaginal walls/labia or perineal skin, these rarely requiring suturing.
Labial	Superficial lacerations to the labia rarely require suturing in isolation. If bilateral labial lacerations are noted suturing should be commenced to prevent fusing of the skin
First	Superficial lacerations to the vaginal and perineal skin only. Suturing to be considered and assessed on an individual basis.
Second	Injury to the posterior vaginal wall, subcutaneous fat, perineal skin and superficial muscle (bulbo-cavernosus and superficial transverse perinei) and deep muscle. But not involving the anal sphincter; includes damage resulting from an Episiotomy
Third	Injury to the perineum involving the anal sphincter muscles 3a: less than 50% of external anal sphincter thickness torn 3b: more than 50% of external anal sphincter thickness torn 3c: Internal sphincter torn
Fourth	Complete disruption of the external and internal anal sphincter complex and the anal epithelium
Buttonhole Tear	This tear involves the anal mucosa with intact anal sphincter muscles. It should be documented separately. Non recognition may cause recto-vaginal fistulae.

5. Management

5.1. Assessing Perineal Trauma: General Principles

- This should be offered, when available, to women to encourage mobility and normalisation.
- Explain to the woman what is planned and why
- Document consent for assessment of perineum
- Ensure that a second person is in attendance during assessment – this can be a healthcare support worker or midwifery/ medical
- Offer inhalational analgesia
- Ensure good lighting
- Position the woman so that she is comfortable and so that the genital structures can be seen clearly.
- Perform the initial examination gently and with sensitivity. It may be done in the immediate period after birth.
- If genital trauma is identified after birth, offer further systematic assessment, including a rectal examination.
- Further explanation of what is planned and why
- Confirmation by the woman that tested effective local or regional analgesia is in place
- Visual assessment of the extent of perineal trauma to include the structures involved, the apex of the injury and assessment of bleeding.
- A rectal examination should be undertaken to assess whether there has been any damage to the external or internal anal sphincter if there is any suspicion that the perineal muscles are damaged.
- Ensure that the timing of this systematic assessment does not interfere with mother–baby bonding unless the woman has bleeding that requires urgent attention.
- All relevant healthcare professionals should attend training in perineal/genital assessment and repair, and ensure that they maintain these skills.
- Advise the woman that in the case of first-degree trauma, the wound should be sutured in order to improve healing, unless the skin edges are well opposed.
- Advise the woman that in the case of second-degree trauma, the muscle should be sutured in order to improve healing.
- Complete the perineal assessment section for all women and appropriately document in the Labour and Delivery Record and highlight that no suturing is required; this will then indicate that the perineal repair section is not applicable.
- All women with intact perineums should still be given advice on bladder care, postnatal pain relief, extent of trauma i.e. grazes, diet including fibre, pelvic floor exercises and postnatal hygiene advice.
- **Seek advice from a more experienced midwife or obstetrician if there is uncertainty about the nature or extent of the trauma.**

5.2. Assessment and Management of Grazes and Labial Tears

- Complete the perineal assessment section for all women and document accordingly in the Labour and Delivery Record. If suturing is required it should be clearly highlighted and then progress onto the perineal repair section of the notes.
- Currently grazes and labial tears are assessed on an individual basis, is there is no bleeding and the skin edges are well opposed there is no need to suture.
- Please note bilateral labial tears will need to be sutured to avoid the skin apposing to each other.

- If there is a requirement to suture gain verbal consent and document technique in the Labour and Delivery Record under the heading 'perineal assessment and repair'.

5.3. Assessment and Management of First Degree Tear

- Complete perineal assessment section for all women and document accordingly in the Labour and Delivery Record or the AWNCPfNL.
- Document if suturing is required. If no suturing is indicated this should be clearly documented.
- Advise the woman that in the case of first-degree trauma, the wound should be sutured in order to improve healing, unless the skin edges are well opposed.
- If there is a requirement to suture, gain verbal consent and document technique in the Labour and Delivery Record or AWNCPfNL under the heading 'Perineal Assessment and Repair'.
- In the case of a first degree tear suturing is to be considered and assessed on an individual basis.

5.4. Assessment and Repair of Episiotomy and Secondary Degree Tear

- Complete perineal assessment section for all woman as appropriate and document in the Labour and Delivery Record/ AWNCPfNL and highlight if suturing is required.
- All second degree tears and episiotomies are to be sutured.
- Discuss the need to suture with the mother and gain verbal consent and document technique in the Labour and Delivery Record/ AWNCPfNL.
- If the woman declines ensure she has been given a clear rational of the benefits of suturing and document the conversation within the Labour and Delivery Record/ AWNCPfNL.
- Advise the woman that in the case of second-degree trauma, the muscle should be sutured in order to improve healing.

5.5. Perineal Trauma Repair: General Principles

- All relevant healthcare professionals must have attended training in perineal/genital assessment and repair and ensure that they maintain these skills.
- **Ensure that a second person is in attendance during the repair procedure– this can be a healthcare support worker or midwifery/ medical**
- Ensure that tested effective analgesia is in place, using infiltration with up to 20 ml of 1% lidocaine or equivalent
- Top up the epidural or insert a spinal anaesthetic if necessary - infiltrate with local anaesthetic even if epidural in situ
- **If the woman reports inadequate pain relief at any point, address this immediately**
- **Check all equipment and all count swabs and needles before and after the procedure**.
- **It is the responsibly of the clinician undertaking the procedure to ensure that the counts are done, correct and are performed with a nominated second checker. If another practitioner takes over during the procedure, then a recount must take place. The count should be documented and include the name of the second checker**
- Repair perineal trauma using aseptic techniques
- **Insertion of swabs in the vagina is not advised. However, if necessary the tape should be secured by a clamp to the sterile drape and the swab removed at the end of the procedure**
- Carry out a rectal examination after completing the repair to ensure that suture material has not been accidentally inserted through the rectal mucosa.
- Ensure that difficult trauma is repaired by an experienced practitioner in theatre under regional or general anaesthesia.

- If a vaginal pack is used this must be clearly documented on the Perineal Repair proforma in the Labour and Delivery Record/ AWNCPfNL
- After completion of the repair, document an accurate detailed account covering the extent of the trauma, the method of repair and the materials used.
- Offer rectal non-steroidal anti-inflammatory drugs routinely after perineal repair of first and second-degree trauma provided these drugs are not contraindicated
- Give the woman information about the extent of the trauma, pain relief, diet, hygiene and the importance of pelvic-floor exercises
- Ensure that the assessment and management of Perineal Tears documentation in the Labour and Delivery Record and AWNCPfNL is completed and signed by 2 practitioners.

5.6 Recommendations on Methods of Perineal Repair

- There is high-level evidence that a continuous non-locked suturing technique for repair of perineal muscle is associated with less short-term pain. More women who were repaired with a continuous non-locked technique were also satisfied with their perineal repair and felt back to normal at 3 months.
- A two-stage repair (where the skin is opposed but not sutured) is associated with no differences in the incidence of repair breakdown but is associated with less dyspareunia at 3 months. There is some evidence that it is also associated with less short-term perineal pain when compared with skin repair undertaken using chromic catgut sutures.
- Continuous subcuticular skin repair is associated with less short-term pain when compared with interrupted skin repair.
- If the skin is opposed after suturing of the muscle in second-degree trauma, there is no need to suture it.
- If the skin does require suturing, use a continuous subcuticular technique.
- Undertake perineal repair using a continuous non-locked suturing technique for the vaginal wall and muscle layer.

5.6.1 Materials for perineal repair

- Use an absorbable synthetic suture material to suture the perineum**.**

6. Communication

- Maternal wishes and concerns should be discussed and recorded
- The benefits of perineal repair and the assessment process should be explained.
- Consent should be sought prior to any interventions.
- The woman should be included in the decision making process regarding her care.

7. Education and Training

Health professionals undertaking assessment and repair of perineal trauma performing must have attended training in perineal/genital assessment and repair and ensure that they maintain these skills.

8. Auditable standards

A full explanation regarding trauma classification, verbal consent for repair and anaesthetic used for repair will be documented on the Perineal Repair proforma in the Labour and Delivery Record and the AWNCPfNL. Assessments will be aimed to be performed hourly

Grading of perineal trauma is to be documented and illustrated on the diagram on the Perineal Repair proforma in the Labour and Delivery Record and the AWNCPfNL.

Swab, needle and instrument count must be checked and documented pre and post repair procedure and signed by two health care professionals

All second opinions provided during assessment and repair will be recorded, signed and timed on the Perineal Repair proforma in the Labour and Delivery Record and the AWNCPfNL.

9. References

- Kettle C, Hills RK, Ismail KMK. Continuous versus interrupted sutures for repair of episiotomy or second degree tears. Cochrane Database of Systematic Reviews. 2007; Issue 4 Art. No.: CD000947. DOI: 10.1002/14651858.CD000947.pub2.
- Lundquist M et al 2000. Is it necessary to suture all vaginal lacerations after a delivery? Birth 27(2):79-85.
- National Institute for Health and Care Excellence. (2014). Intrapartum care for healthy women and babies (CG190) London: NICE
- NICE CG190: Intrapartum Care for Healthy Mother's and Babies

9. Appendix 1 - INTRAPARTUM CTG CLASSIFICATION

INTRAPARTUM CTG CLASSIFICATION *To be performed hourly as a minimum*					
Risk factors *(Please tick where applicable)*	**<37 weeks**	**>41 weeks**	**IUGR**	**SROM > 24 hrs**	**APH**
	Meconium liquor	**Oxytocin infusion**	**Pyrexia**	**Hyperstimulation**	**Epidural**
	Slow rate of progression	**Uterine Scar**	**Evidence of SEPSIS**	**Multiple pregnancy**	**Breech presentation**
CLASSIFICATION	**NORMAL**	**SUSPICIOUS**	**PATHOLOGICAL**		
Baseline *(Please tick)*	• 110 – 160 bpm	• Lacking at least one characteristic of normality but with no pathological features	• <100 bpm		
Variability *(Please tick)*	• 5 -25 bpm		• Reduced variability • Increase variability • Sinusoidal pattern		
Decelerations *(Please tick)*	• Non-repetitive decelerations		• Repetitive late or prolonged decelerations for > 30 min (or >20min if reduced variability) • Deceleration >5 min		
Interpretation *(Please tick)*	No hypoxia/acidosis	Low probability of hypoxia/acidosis	High probability of hypoxia/acidosis		
Clinical management *(Please tick)*	No intervention necessary to improve fetal oxygenation state	• Action to correct reversible cause if identified • Close monitoring or adjunctive methods	• Immediate action to correct reversible causes with adjunctive methods • If this is not possible expedite delivery • In acute situations immediate delivery should accomplished		
Management					
Reviewed by *(Print name)*			*FRESH EYES minimum every 2 hrs. (2 clinicians required)*		
Date and time					

10. Appendix 2 – HYPOXIA

Hypoxia	Features	Management
No Hypoxia	• **Baseline appropriate for G.A.** • **Normal variability and cycling** • **No repetitive decelerations**	• **Consider whether the CTG needs to continue.** • **If continuing the CTG perform routine hourly review. (see CTG Assessment Tool below)**
Evidence of Hypoxia		
Chronic Hypoxia	• Higher baseline than expected for G.A. • Reduced variability and/ or absence of cycling • Absence of accelerations • Shallow decelerations • Consider the clinical indicators: reduced fetal • movements, thick meconium, bleeding, • evidence of chorioamnionitis, postmaturity, IUGR	• Avoid further stress • Expedite delivery, if delivery is not imminent
Gradually Evolving Hypoxia	**Compensated** • Rise in the baseline (with normal variability and stable baseline) preceded by decelerations and loss of accelerations	• Likely to respond to conservative interventions (see below) • Regular review every 30-60 minutes to assess for signs of further hypoxic change, and that the intervention resulted in an improvement. • Other causes such as reduced placental reserve MUST be considered and addressed accordingly.
	Decompensated • Rise in the baseline (with normal variability anstable baseline) preceded by decelerations and loss of accelerations	• Needs urgent intervention to reverse the hypoxic insult (remove • prostaglandin pessary, stop oxytocin infusion, tocolysis) • Delivery should be expedited, if no signs of improvement are seen
Subacute Hypoxia	• More time spent during decelerations than at the baseline • May be associated with saltatory pattern(increased variability)	**First Stage** • Remove prostaglandins/stop oxytocin infusion • If no improvement, needs urgent tocolysis • If still no evidence of improvement within 10-15 minutes, review situation and expedite delivery **Second Stage** • Stop maternal active pushing during contractions until improvement is noted. • If no improvement is noted, consider tocolysis if delivery is not imminent or expedite delivery by operative vaginal delivery
Acute Hypoxia	**Prolonged Deceleration (> 3 minutes)**	**Preceded by reduced variability and lack of cycling or reduced variability within the first 3 minutes** **IMMEDIATE DELIVERY IS THE SAFEST OPTION** **Preceded by normal variability and cycling and normal variability during the first 3 minutes of the deceleration (see 3-minute rule above)** **Exclude the 3 accidents (i.e. cord prolapse, placental abruption, uterine rupture - if an accident is suspected prepare for immediate delivery)** • **Correct reversible causes** • **If no improvement by 9 minutes or any of the accidents diagnosed immediate delivery by the safest and quickest route**
Unable to Ascertain fetal wellbeing (Poor signal quality, uncertain baseline, possible recording of the maternal heart rate)	• Escalate to senior team • Consider Adjunctive Techniques, if appropriate • Consider the application of FSE to improve signal quality	

11. Appendix 3 - Troubleshooting for Intrapartum Continuous Fetal Heart Recording

Troubleshooting for Intrapartum Continuous Fetal Heart Recording	
Problem	**Action**
No fetal heart rate before the CTG is commenced	• The Registrar and Coordinator should be • informed immediately • A portable US machine should be brought to the bedside. • Visualise fetal heart beating with ultrasound. • Confirm fetal life • Reposition US transducer
Erratic recording, loss of contact with external transducer	• Perform Leopold's manoeuvres to locate fetal back • Reposition US transducer over fetal back • Readjust belt and apply enough gel over US transducer • If recording still suboptimal, locate fetal heart with ultrasound and reposition US transducer • If membranes ruptured and there are no contraindications, apply fetal scalp electrode.
Erratic or no recording with FSE	• Confirm presence of fetal heart beat with ultrasound or auscultation using pinard or sonicaid • Check that FSE wire is attached to the leg plate • Check FSE connection to fetus and replace it if detached • Check that external monitor is discontinued • Transcutaneous Electrical Nerve Stimulation (TENS) may interfere with the acquisition of FHR signal. • Call Obstetric middle grade and give full history and labour events to this point. • Consider expediting delivery if fetal wellbeing cannot be adequately confirmed