Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

Management of 3rd and 4th Degree Tears (Obstetric Anal Sphincter Injuries OASIS) Guideline

Guideline Number:	640	Supersedes:		Classification	Clinical

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2		Obstetric written documentation review group	04/06/2019	04/06/2019	01/05/2022

Brief Summary of Document:	To ensure appropriate management of third and fourth degree tears To ensure appropriate information given to women after a third or fourth degree tear both after birth and in future pregnancies
Scope	Medical and midwifery staff involved in the care and management of women who sustain a 3rd or 4th degree tear '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:	RCOG: The Management of 3rd and 4th Degree Perineal tears https://www.rcog.org.uk/globalassets/documents/guidelines/gtg-29.pdf NICE NG121: Intrapartum Care for Woman with Existing Medical or Obstetric Complications and their babies https://www.nice.org.uk/search?q=intrapartum%20care NICE CG190: Intrapartum Care for Healthy women and Babies https://www.nice.org.uk/guidance/cg190

Owning committee/group	Obstetric Guideline and Audit Group

Reviews and updates		
Version no:	Summary of Amendments:	Date Approved:
1	New Guideline	14.09.2017
2	Review and addition of RCOG guidance on repair information for women in subsequent pregnancies	4/6/2019

Glossary of terms

Term	Definition
OASIS	Obstetric Anal Sphincter Injuries
OP	Occipito-posterior

Keywords	Management of third and fourth degree tears Patient information Postnatal Patient information subsequent pregnancies

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1. AIM OF GUIDELINE

The aim of this guideline is to ensure:

- Appropriate management of third and fourth degree perineal tears.

2. OBJECTIVES

The aim of this guideline will be achieved by:

- Correct identification of perineal trauma
- Correct repair of perineal trauma – specifically 3rd and 4th degree tears
- Correct information for women immediately postnatal
- Correct information for women in subsequent pregnancies

3. SCOPE

- All maternity clinicians caring for women who have sustained a 3rd/ 4th degree tear in an Obstetric unit, Midwife led units, at home/ in a community setting.

4. INTRODUCTION

- Midwives and obstetricians should examine all women after birth to assess level of perineal trauma.
- Where a third or fourth degree tear is suspected or is obvious women should be referred to a doctor experienced in anal sphincter repair or by a trainee under supervision.
- When assessing the perineum examination should be also be done to exclude 'buttonholing'.

5. DEFINITION

- **First degree:** Laceration of vaginal epithelium or perineal skin
- **Second degree:** Involvement of the perineal muscles but not the anal sphincter
- **Third degree:** Disruption of anal sphincter muscles and this should be further subdivided into three different grades:
- **Grade 3a:** less than 50% thickness of external sphincter torn
- **Grade 3b:** more than 50% thickness of external sphincter involved
- **Grade 3c**: both external anal sphincter internal sphincter torn
- **Fourth degree:** Injury to perineum involving the anal sphincter complex and anorectal mucosa

- **Rectal mucosal tear:** (buttonhole) without involvement of the anal sphincter is rare and not included in the above classification. However if not recognised and repaired may lead to rectovaginal fistula.

Potential risk factors for third and fourth degree tears.

- Asian ethnicity
- Nulliparity
- Birth weight greater than 4kg
- Shoulder dystocia
- Occipito-posterior position
- Prolonged second stage
- Instrumental delivery

Perineal protection

- The NICE Intrapartum care guideline found no difference between 'hands poised' and 'hands on' the perineum as prevention of third and fourth degree tears.
- More recently there have been interventional studies using programmes which have successfully reduced OASIS rates, all of which have described manual perineal protection/'hands on' techniques.

These include:
1. Left hand slowing down the delivery of the head.
2. Right hand protecting the perineum.
3. Mother NOT pushing when head is crowning (communicate).
4. Think about episiotomy (risk groups and correct angle).

- The best method of perineal support/protection is unclear.
- The Ritgen manoeuvre(delivering the fetal head, using one hand to pull the fetal chin from between the maternal anus and the coccyx and the other on the fetal occiput to control speed of delivery) no betterthan 'standard care' (not specifically defined but it included perineal protection/'hands on').

- However, the positive effects of perineal support suggest that this should be promoted as opposed to 'hands off' or 'poised', in order to protect the perineum and reduce the incidence of third and fourth degree tears

- A Cochrane review has found the application of warm compresses during the second stage of labour to have a significant effect on reducing OASIS.

- A Cochrane review showed that perineal massage undertaken by the woman or her partner was associated with an overall reduction in the incidence of trauma requiring suturing.

Management of third and fourth degree tears

Once identified it should be repaired by a doctor with appropriate/relevant qualification in repairing third and fourth degree tears.

FULL EXTENT OF THE INJURY SHOULD BE EVALUATED BY A CAREFUL VAGINAL AND RECTAL EXAMINATION IN LITHOTOMY POSITION IN THEATRE, UNDER SPINAL OR ADEQUATE LOCAL ANALGESIS AND THE TEAR SHOULD BE CLASSIFIED AS ABOVE

The Obstetric Registrar should inform the Consultant when a woman has sustained a fourth degree tear. The Consultant can then make the decision regarding who should undertake the repair, and advise on the appropriate technique for repair

USE THE PERINEAL REPAIR PACK, WHICH HAS BEEN SPECIALLY PREPARED FOR THIS PURPOSE AND REPAIR SHEET

6. PRINCIPLES OF REPAIR

- General or regional (spinal,epidural,caudal) anaesthesia is necessary.

- The repair should be carried out in the operating theatre where there is access to good lighting.
- An assistant should be available.

- Consider short term indwelling catheter

Method of Repair (only general principles are outlined)
Third and fourth degree tear repair sheet MUST be completed by the doctor undertaking repair (Appendix 1)

- The torn anorectal mucosa should be repaired with sutures using either the continuous or interrupted technique. Whichever technique is used, figure of eight sutures should be avoided during repair of the anal mucosa as they can cause ischaemia.
- Where the torn internal anal sphincter (IAS) can be identified, it is advisable to repair this separately with interrupted or mattress sutures without any attempt to overlap the IAS.
- For repair of a full thickness external anal sphincter (EAS) tear, either an overlapping or an end-to-end (approximation) method can be used with equivalent outcomes.
- For partial thickness (all 3a and some 3b) tears, an end-to-end technique should be used.
- When obstetric anal sphincter repairs are being performed, the burying of surgical knots beneath the superficial perineal muscles is recommended to minimise the risk of knot and suture migration to the skin.

A rectovaginal examination should be performed to confirm complete repair and to ensure that all tampons or swabs have been removed.
All swabs needles and instruments must be counted pre and post repair by two clinicians and this must be recorded on the 3rd/4th Degree tear Proforma.
The insertion of any vaginal pack must be clearly recorded on the Proforma.

- Antibiotics should be prescribed for all women
- Routine prescribing of laxatives is not required
- Datix to be completed and number recorded in register.

Choice of suture materials

- 3-0 polyglactin should be used to repair the anorectal mucosa as it may cause less irritation and discomfort than polydioxanone (PDS) sutures
- When repair of the EAS and/or IAS muscle is being performed, either monofilament sutures such as 3-0 PDS or modern braided sutures such as 2-0 polyglactin can be used with equivalent outcomes

7. Follow up care

- Before leaving postnatal ward all women should be made aware of the type of third /fourth degree tear sustained (preferably visual)
- Receive written information on third and fourth degree tears (RCOG and Physiotherapy)
- Referred to the women's health physiotherapy team.

7.1 Subsequent pregnancies

- Women identified in subsequent pregnancies should receive *Information for women identified in pregnancy as having had a previous third or fourth degree tear* (Appendix 2).

- Assessment should be made of any urinary or bowel symptoms that may contraindicate a vaginal birth i.e. Women who are symptomatic or have abnormal endoanal ultrasonography and/or manometry.

- A previous third degree tear is not a contraindication to birth in the midwife led unit or at home. Women should be aware of the possibility of reoccurrence and that if there is a reoccurrence transfer to the obstetric unit would be required for repair.
- The following may reduce the potential for a repeated third or fourth degree tear:
    - Left lateral for birth
    - Warm compress
    - Non-directed pushing

    - **There is no evidence that prophylactic episiotomy prevents a recurrence of sphincter rupture**.
    - An episiotomy should only be performed if there are predisposing factors such as big baby, OP position, shoulder dystocia, fibrotic scarring and inelastic perineum.

8. Auditable Standards

- Compliance with completion of 3rd/4th Degree Tear Proforma
- Datix Incident Reporting of all 3rd/ 4th Degree Perineal tears in line with the Health Board Maternity Trigger list

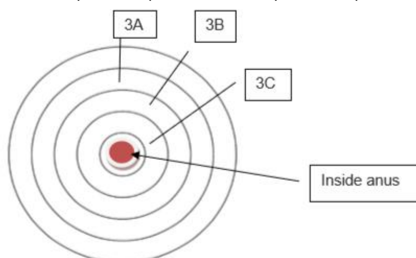
9. References

- Aasheim V, Nilsen AB, Lukasse M, Reinar LM.(2011) Perineal techniques during the second stage of labour for reducing perineal trauma. Cochrane Database Syst Rev (12):CD006672.
- Beckmann MM, Stock OM.(2013) Antenatal perineal massage for reducing perineal trauma. Cochrane Database Syst Rev (4):CD005123.
- Kettle C, Hills R K, Jones P, Darby L, Gray R, Johanson R. (2002) Continuous versus interrupted perineal repair with standard or rapidly absorbed sutures after spontaneous vaginal birth: a randomised controlled trial. Lancet: 359; 2217-23.
- NICE (2007) Intrapartum care: care of healthy women and their babies during childbirth Nice clinical guideline 55 NICE:Manachester
- RCOG (2015) The management of third and fourth degree perineal tears Green top guideline No 29 RCOG:London
- Thakar R, Sultan AH. (2003) Management of obstetric anal sphincter. The Obstetrician & Gynaecologist 2003: 5; 2-78.
- Sultan AH, Thakar R. (2002) Lower genital tract and anal sphincter trauma. Best Pract Res Clin Obstet Gynaecol: 16; 99-116.

10. APPENDIX 1 – Third and fourth degree repair sheet

Addressograph		Date Time Anaesthesia Location	 Spinal/Epidural/Both GA Theatre Room
Parity	Nullip/Mutip	Position at birth	OP/OA/OT SP/SA/ST
Mode of delivery	SVD/Forceps/Ventouse/Both	IOL	Yes/No
Indication of instrumental		Birth weight (G)	
Length of 2nd stage	Hours Minutes	Episiotomy	Yes/No
Shoulder dystocia	Yes/No	Previous 3rd 4th degree tear	Yes/No

Type of tear 3a (<50% EAS) / 3b (>50% EAS) / 3c (EAS &IAS) / 4th (Anal mucosa involvement)



	Repair	**Suture material**
External anal sphincter	Overlap/other	3/0 PDS/Other
Internal anal sphincter	Interrupted/Other	3/0 PDS/Other
Anal mucosa	Interrupted/Other	3/0 Vicryl/Other (Knots in lumen)
Vaginal mucosa	Interrupted/Continuous/Other	2/0 Vicryl rapide/other
Perineal body	Interrupted/Other	2/0 Vicryl rapide/other
Perineum	Interrupted/Continuous/Other	2/0 Vicryl rapide/other

Following repair (Compulsory)

PV done	Yes	PR done	Yes
EBL	mls	Pack	Yes/No
Swabs used	number	Needles used	number

Datix completed YES/NO **Datix number**

Name Signature & Grade **Date** **TIME**

Postnatal management - Confirm prescribed on patient drug chart

	Drug	**Dose**	**Duration**	**Signature**
Antibiotics	Cefuroxime	1.5G IV	Stat	
	Metronidazole	500mg IV	Stat	
	Cephradine	500mg oral TDS	1 week	
	Metronidazole	400mg oral TDS	1 week	
Stool softeners	Lactulose	10ml oral	10 days	
	Fybogel	1 sachet bd	10 days	
Analgesics	Voltarol	50mg TDS oral	1 week	
	Paracetamol	1G QDS oral	1 week	

Woman informed of nature of tear – YES/NO

RCOG patient information third and fourth degree tear during birth leaflet given to woman – YES/NO

Prior to discharge

Bowels opened	YES/NO
Physio referral	YES/NO
Gynae OPD (6/52)	YES/NO

Name Signature & Grade **Date** **TIME**

11. APPENDIX 2 –RCOG leaflet for women

RCOG leaflet for women https://www.rcog.org.uk/en/patients/patient-leaflets/third--or-fourth-degree-tear-during-childbirth/

12. APPENDIX 3 Patient advice for third and fourth degree perineal tears

2019 Physiotherapy Patient Advice for Third and Fourth Degree Tears.docx

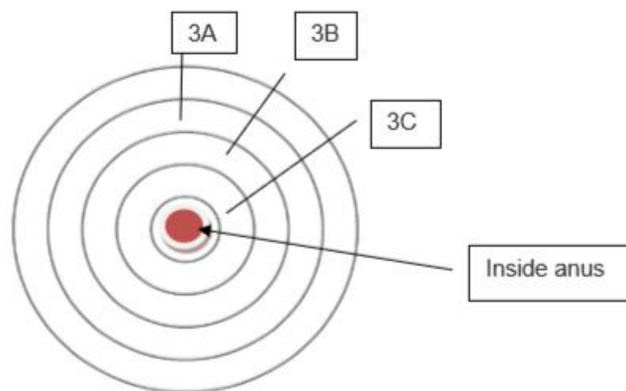
APPENDIX 4

Information for mothers who have had a previous third degree tear

We are aware that you sustained a third degree tear of the muscles around your anal sphincter at a previous delivery so are providing you with this information for your current pregnancy. If you have any questions please ask your midwife or doctor.

Introduction

This type of tear is relatively common, complicating about one birth in every 30 (3%), and is most likely to happen if your second stage of labour had been very quick, if your baby weighed over 4kg, if he or she is born facing upwards (face to pubes) and especially if you needed help with forceps or a ventouse. Most tears of this type are classified as 3A or 3B. The anal sphincter is made up of concentric rings of muscle fibres which encircle the anus, and if a few outermost fibres are torn this is '3A', if up to half are torn this is '3B', if more than half is torn '3C' and if it tears right into the anus, a 4th degree tear is diagnosed. This is very rare.



Most tears of this type are recognised at the time of birth, and are repaired successfully, with no long-term problems. A few mothers have long term issues, probably no more than 1 in 100, which need advice from a colorectal surgeon. This handful of women will be advised to consider a planned Caesarean birth, particularly if they needed additional corrective surgery at a later date.

Maternity Information

The chance of a third degree tear occurring at the next, or subsequent births, is about 1 in 15, which means that 93% of women will not have this type of tear at their next birth. There is no evidence that an episiotomy reduces the chance of a tear occurring. When the time comes to have your baby, you may wish to consider a home birth or the Midwifery Led Unit as places of birth. Talk to your midwife and/or doctor about what giving birth at home or in the midwife led unit may mean for you.

There are a few things that your midwife can support you with during your birth to try to reduce the chances of another significant tear. These include:

• Being in a left lateral (lying on left side) or kneeling position rather than semi-recumbent or squatting position.

• Having a warm compress gently held against your perineum as the baby is being born to help the skin to stretch.
• Trying to avoid a rapid birth by having good communication with the midwife caring for you and having her fingers gently resting on the top of the baby's head as it is born to try to slow down the birth. Please talk to your midwife about these.

If you are in the 7% of mothers who get a third degree tear, you will be transferred to theatre for this to be repaired under a regional anaesthetic (either epidural or spinal), regardless of where you give birth. This is to ensure we can repair you properly and comfortably.