



**Aneurin Bevan University Health Board**

# **Guideline for the Management of *OBSTETRIC ANAL SPHINCTER INJURY***

*N.B. Staff should be discouraged from printing this document. This is to avoid the risk of out of date printed versions of the document. The Intranet should be referred to for the current version of the document.*

---

Status: Issue 3

Issue date: 5 November 2020

Approved by: Maternity Services Clinical  
Effectiveness Forum  
Owner: Maternity services

Review by date: 5 November 2023  
Policy Number: ABUHB/Maternity/0152

**Contents:**

<b>Introduction</b> .....	<b>3</b>
<b>Policy Statement</b> .....	<b>3</b>
<b>Aims</b> .....	<b>3</b>
<b>Objectives</b> .....	<b>3</b>
<b>Scope</b> .....	<b>3</b>
<b>Roles and Responsibilities</b> .....	<b>3</b>
<b>Training</b> .....	<b>3</b>
<b>Main Guideline</b> .....	<b>4</b>
<b>References</b> .....	<b>8</b>
<b>Appendices</b> .....	<b>9</b>

DRAFT

## **Introduction**

This document should act as guideline for the management of third and fourth degree perineal trauma. The views expressed in these guidelines are evidence based from NICE and RCOG guidelines and reflect professional opinion. They are designed to support safe and effective practice.

## **Policy Statement**

A partnership in care, which offers women the optimum opportunity for good maternal and fetal outcomes. Considering at all times the maintenance of dignity and self esteem of the woman.

Cross reference to relevant Standards for Health Services Wales.

## **Aims**

To provide support for clinical decision making.

## **Objectives**

These guidelines are designed to support safe and effective practice.

## **Roles and Responsibilities**

Multidisciplinary communication and documentation is essential.

## **Training**

Staff are expected to access appropriate training where provided. Further training needs will be identified through appraisal and clinical supervision.

## **Monitoring and Effectiveness**

Local service Improvement Plan will guide monitoring and effectiveness.

## **Guideline**

### **THE MANAGEMENT OF *OBSTETRIC ANAL SPHINCTER INJURY*** **(*OASI*)**

#### **Background**

Incidence: overall, in the UK, 2.9% (range 0-8%). 6.1% in primiparae, 1.7% in multiparae women.

Risk factors include:

- Nulliparity
- Shoulder dystocia
- Birthweight >4kg
- Occipito-posterior position
- Prolonged second stage of labour
- Instrumental delivery
- Asian ethnicity

However, it can occur with no risk factors

Prevention:

Medio-lateral episiotomies should be considered for all instrumental deliveries at an angle of 60 degrees away from the midline when the perineum is distended.

The evidence is conflicting *for elective episiotomies in preventing OASI*  
*Perineal protection at crowning and warm compress in second stage reduces the incidence of OASI*

#### **Identification**

All women having a vaginal delivery are at risk of sustaining a *OASI*. They should, therefore, all be examined systematically, including a digital rectal examination, to assess the severity of damage *and rule out isolated rectal buttonhole tear*.

## Classification

1 <sup>st</sup> degree tear	Injury to perineal skin and/or vaginal mucosa only
2 <sup>nd</sup> degree tear	Injury to perineum involving perineal muscles but not involving the anal sphincter
3 <sup>rd</sup> degree tears: injury to perineum involving the anal sphincter complex:	
3a	<50% of external sphincter thickness torn
3b	>50% of external sphincter thickness torn
3c	Both external and internal anal sphincters torn
4 <sup>th</sup> degree tear	Injury to perineum involving the anal sphincter complex (external and internal anal sphincter) and anorectal mucosa

Buttonhole: tear involves only rectal mucosa with an intact anal sphincter complex. (NB if not recognised and repaired, this type of tear may lead to a rectovaginal fistula).

## Repair

General principles:

Repair of a OASI should be conducted by an appropriately trained clinician or by a trainee under supervision in theatre under regional/general anaesthesia. Figure of eight sutures should be avoided for anal sphincter complex and anorectal mucosa as they are haemostatic in nature and may cause tissue ischaemia. A digital rectal examination should be performed after any perineal repair to ensure that sutures have not been inadvertently inserted through the anorectal mucosa. If a suture is identified it should be removed.

How to suture *OASI*

1. Suturing is carried out in the operating theatre, under regional/general anaesthesia.
2. Use the specially prepared perineal pack. (Third degree pack).
3. Identify the anatomy and suture as below (see appendix 1 for detailed repair of sphincter)
  - a. Anorectal mucosa – continuous or interrupted with 3-0 Polyglactin (Vicryl)
  - b. Internal anal sphincter – end-to-end repair with interrupted or mattress sutures using 3-0 *Polydioxine(PDS)* or 2-0- *polyglactin( Vicryl)*.

- c. External anal sphincter – if full thickness either overlapping or end-to-end repair; if partial thickness (all 3a and some 3b tears) end-to-end repair using 3-0 PDS
  - d. Bury anal sphincter complex surgical knots beneath the superficial perineal muscles
4. Digital rectal examination to ensure that sutures have not been inadvertently inserted through the anorectal mucosa. If a suture is identified it should be removed.

1. Cefuroxime 1.5gi.v and Metronidazole 500mg.i.v (at repair) with Cefalexin 500mg tds and Metronidazole 400mg tds for 1 week.
2. 10 days of lactulose *10mls* Twice daily
3. Document perineal repair – ORMIS theatre op-note and complete OASI proforma (Appendix 4). Documentation should include an accurate detailed account covering the extent of the trauma, the anatomical structures involved, method of repair and suture materials used.
4. Debrief woman and provide written information (appendix 2)
5. Refer all women for pelvic floor physiotherapy (appendix 3)
6. Follow-up 6-12 weeks.

### **Potential complications / Risk Management**

When torn, the ends of the muscle fibres of the external anal sphincter tend to retract under the skin. Failure to recognise the extent of the trauma and to achieve complete repair can lead to long term sequelae such as faecal incontinence or rectovaginal fistula. Tissue is often oedematous and bleeding immediately post-delivery making identification of muscle and repair difficult. Partial damage to the anal sphincter can have as much impact on future continence as complete disruption.

### **Post-operative management**

- Debrief the woman and explain the nature of the injury and the repair performed, including prognosis that 60-80% of women are asymptomatic 12 months following delivery. Support this with written documentation (appendix 2).
- 7 days of broad-spectrum antibiotics to reduce the risk of post-operative infections and dehiscence.
- A post-operative laxative for 10 days, is recommended to reduce the risk of wound dehiscence. Bulking agents are no longer recommended. Stress the need to avoid constipation – encourage fluids/fibre intake etc.

- Refer for pelvic floor physiotherapy and encourage women to actively participate (appendix 3 for referral).
- Postnatal follow-up ( *virtual/face to face*) 6 weeks post-partum **with own consultant**, if persistent symptoms then refer to *Pelvic physiotherapy and Urogyn team*.
- Advice on hygiene – especially following defecation.
- Advise women of potential for faecal incontinence – encourage women to report any incidence as soon as possible. Where 4th degree tear occurs women are advised to remain in hospital until bowels open.
- Advise women that the effect of the repair may deteriorate over time (even as late as 12 months later) so women must be advised to report any future deterioration to their GP.
- If a woman is experiencing incontinence or pain at follow-up, referral to a specialist gynaecologist or colorectal surgeon should be considered.

### **Subsequent pregnancies**

Options should be discussed at the post-natal check or at booking for the subsequent pregnancy. All women should be counselled about the mode of delivery and this should be clearly documented. This should include counselling regarding the option of an elective caesarean for women who are symptomatic or have abnormal endoanal ultrasonography and/or manometry.

The role of prophylactic episiotomy is unclear, with no definitive evidence that episiotomy reduces the risk of *OASI*. Therefore, an episiotomy should only be performed if clinically indicated.

### **RISK MANAGEMENT**

*DATIX*

*Patient debriefing and patient information leaflet ( APPENDIX 2)*

## References

1. Royal College of Obstetricians and Gynaecologists, 2015. Green-top Guideline No.29: The management of third- and fourth-degree perineal tears. RCOG Press, London
2. NICE clinical guidelines No. 190, 2014. Intrapartum care: Care of healthy women and their babies during childbirth, London UK.
3. *Information for you (RCOG) Care of third -or fourth- degree tear that occurred during childbirth (OASI) published 29/10/2019*

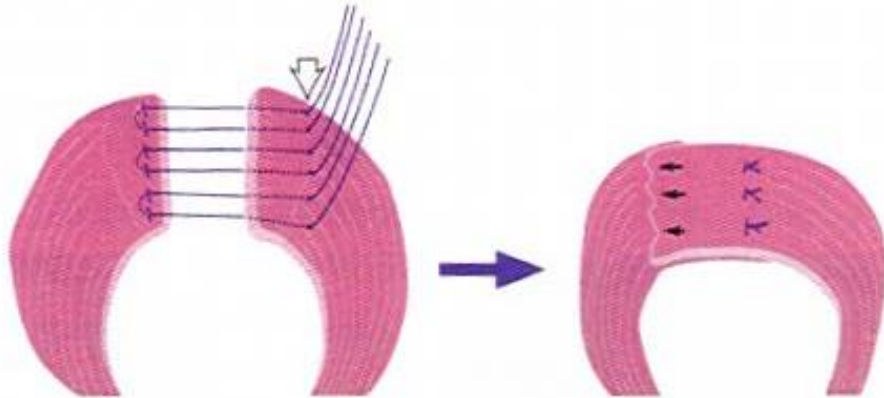
DRAFT



## Appendix 1

### Repair of sphincter

- The external anal sphincter is grasped with Allis tissue forceps, muscle is mobilised and pulled across. Suture with end-to-end technique for all partial thickness (all 3a and some 3b tears); if full thickness either overlapping or end-to-end repair are appropriate using 3-0 PDS/2-0 *Polyglactin(Vicryl)*



**Fig. 5.** Diagrammatic illustration to demonstrate the technique of overlap repair of the external anal sphincter. As illustrated, the first suture is inserted about 1.5 cm from the torn edge of the muscle (open arrow) and carried through to within 0.5 cm of the edge of the other arm of external sphincter. A second row of sutures (small arrows) is inserted to attach the loose end of the overlapped muscle.

- The internal anal sphincter is grasped with Allis forceps and repaired end to end with interrupted or mattress sutures using 3-0 PDS/ 2-0 Polyglactin(Vicryl)
- Anorectal mucosa is repaired with interrupted or continuous **3/0** Vicryl.
- The vaginal mucosa is sutured with continuous 2-0 vicryl rapide
- The perineal body muscles are sutured with 2-0 vicryl rapide, taking care to bury the knots of the anal sphincter complex repair beneath the superficial perineal muscles to minimize the risk of knot migration.
- Perineal skin is approximated if needed with 2-0 vicryl rapide subcuticular suture.
- Digital rectal examination should be carried out after completing the repair to ensure sutures have not been inadvertently inserted through the anorectal mucosa. If a suture is identified it should be removed.

## Appendix 2—Patient information leaflet

# A third- or fourth-degree tear during birth (also known as obstetric anal sphincter injury – OASI) (RCOG)

## About this information

This information is for you if you want to know more about third- or fourth-degree perineal tears (also known as obstetric anal sphincter injury – OASI). It may be helpful if you are a relative or friend of someone who is in this situation.

## What is a perineal tear?

Many women experience tears to some extent during childbirth as the baby stretches the vagina. Most tears occur in the perineum, the area between the vaginal opening and the anus (back passage).

Small, skin-deep tears are known as first-degree tears and usually heal naturally. Tears that are deeper and affect the muscle of the perineum are known as second-degree tears. These usually require stitches.

An episiotomy is a cut made by a doctor or midwife through the vaginal wall and perineum to make more space to deliver the baby.

**What is a third- or fourth-degree tear(OASI)?** For some women the tear may be deeper. A tear that also involves the muscle that controls the anus (the anal sphincter) is known as a third-degree tear. If the tear extends further into the lining of the anus or rectum it is known as a fourth-degree tear

## What is a rectal buttonhole?

This is a rare injury and occurs when the anal sphincter is not torn, but there is a hole between the back passage and the vagina. This means that wind and faeces may be passed through the vagina instead of via the anus. This is not normal, and if you experience this you should see your healthcare professional urgently

## How common are third- or fourth-degree tears(OASI)?

Overall, a third- or fourth-degree tear occurs in about 3 in 100 women having a vaginal birth. It is slightly more common with a first vaginal birth, occurring in 6 in

100 women, compared with 2 in 100 women who have had a vaginal birth previously

## What increases my risk of a third- or fourth-degree tear?

These types of tears usually occur unexpectedly during birth and most of the time it is not possible to predict when it will happen. However, it is more likely if:

this is your first vaginal birth

you are of South Asian origin

your second stage of labour (the time from when the cervix is fully dilated to birth) is longer than expected.

you require forceps or a ventouse to help the delivery of your baby – see RCOG patient information *Assisted vaginal birth (ventouse or forceps)* ([www.rcog.org.uk/en/patients/patient-leaflets/assisted-vaginal-birth-ventouse-or-forceps](http://www.rcog.org.uk/en/patients/patient-leaflets/assisted-vaginal-birth-ventouse-or-forceps))

one of the baby's shoulders becomes stuck behind your pubic bone, delaying the birth of the baby's body, which is known as shoulder dystocia – see RCOG patient information *Shoulder dystocia*

([www.rcog.org.uk/en/patients/patient-leaflets/shoulder-dystocia](http://www.rcog.org.uk/en/patients/patient-leaflets/shoulder-dystocia))

you have a large baby (over 4 kg or 8 pounds and 13 ounces)

you have had a third- or fourth-degree tear before.

## Could anything have been done to prevent this type of tear?

In most instances, a third- or fourth-degree tear cannot be prevented because it cannot be predicted. However, applying a warm compress to the perineum while you are pushing does appear to reduce the chance of a third- or fourth-degree tear. Your midwife or obstetrician may protect the perineum as your baby's head is delivering and this may also help prevent a tear.

It is unclear whether an episiotomy will prevent a third- or fourth-degree tear from occurring during a normal vaginal birth. An episiotomy will only be performed if necessary, and with your consent.

If you have an assisted birth (ventouse or forceps), you are more likely to have an episiotomy as it may reduce the chance of a third- or fourth-degree tear occurring.

## What will happen if I have a third- or fourth-degree tear?

If a third- or fourth-degree tear is suspected or confirmed, this will usually be repaired in the operating theatre. Your doctor will talk to you about this and you will be asked to sign a consent form. You will need an epidural or a spinal anaesthetic, although occasionally a general anaesthetic may be necessary.

You may need a drip in your arm to give you fluids until you feel able to eat and drink. You are likely to need a catheter (tube) in your bladder to drain your urine. This is usually kept in until you are able to walk to the toilet.

After the operation you will be:

- offered pain-relieving drugs such as paracetamol, ibuprofen or diclofenac to relieve any pain
- advised to take a course of antibiotics to reduce the risk of infection because the stitches are very close to the anus

advised to take laxatives to make it easier and more comfortable to open your bowels. Once you have opened your bowels and your stitches have been checked to see that they are healing properly, you should be able to go home.

## Will I be able to breastfeed?

Yes. None of the treatments offered will prevent you from breastfeeding

## What can I expect afterwards?

After having any tear or an episiotomy, it is normal to feel pain or soreness around the tear or cut for 4-6 weeks after giving birth, particularly when walking or sitting. Passing urine can also cause stinging. Continue to take your painkillers when you go home.

Most of the stitches are dissolvable and the tear or cut should heal within a few weeks, although this can take longer. The stitches can irritate as healing takes place but this is normal. You may notice some stitch material fall out, which is also normal.

*You may be able to feel the stitches around the anus for up to 3 months.*

To start with, some women feel that they pass wind more easily or need to rush to the toilet to open their bowels. Most women make a good recovery, particularly if the tear is recognised and repaired at the time: 6-8 in 10 women will have no symptoms a year after birth.

## What can help me recover?

Keep the area clean. Have a bath or a shower at least once a day and change your sanitary pads regularly (wash your hands both before and after you do so). This will reduce the risk of infection.

You should drink at least 2-3 litres of water every day and eat a healthy balanced diet (fruit, vegetables, cereals, wholemeal bread and pasta). This will ensure that your bowels open regularly and will prevent you from becoming constipated.

Strengthening the muscles around the vagina and anus by doing pelvic floor exercises can help healing. It is important to do pelvic floor exercises as soon as you can after birth. You should be offered physiotherapy advice about pelvic floor exercises to do after surgery.

Looking after a newborn baby and recovering from an operation for a perineal tear can be hard. Support from family and friends can help.

## When should I seek medical advice after I go home?

You should contact your midwife or general practitioner if:

your stitches become more painful or smelly – this may be a sign of an infection  
you cannot control your bowels or flatus (passing wind).  
If you have bleeding from the site of perineal tear.

Talk to your GP if you have any other worries or concerns. You can be referred back to the hospital before your follow-up appointment if you wish.

## What do I need to know about my bowels?

*Opening your bowels should not affect your stitches. For the first few days after your third- or fourth-degree tear is repaired, control of your bowels may not be as good as before you had your baby. It is important to eat well and drink plenty of water to help avoid constipation. You should drink at least 2 litres of water every day and eat a healthy balanced diet (for instance fruit, vegetables, cereals and wholemeal bread).*

*When opening your bowels, the best position to sit in is with your feet on a stool to raise your knees above your hips (see image). This helps straighten out your bowels. Try to relax and rest your elbows on your knees. Bulge out your tummy by taking big abdominal breaths – this will help to expel your faeces without straining.*



*Take your time and do not rush.*

## What is anal incontinence?

Anal incontinence is when you have problems controlling your bowels. Symptoms include sudden, uncontrollable urges to open your bowels and not being able to control passing wind. You may also soil yourself or leak faeces. Most third- or fourth-degree tears heal completely, but some women may experience these symptoms. It is important to talk about any concerns you have. Women with anal incontinence will be referred to a specialist team for treatment, which may include physiotherapy or surgery.

## What should I expect when getting back to normal daily activities?

*If you have had a third- or fourth-degree tear, you should avoid strenuous activity or heavy lifting for 4–6 weeks. After 4–6 weeks, you can gradually increase your general activity.*

*Support from family and friends can really help you while your body gradually adjusts and gets better. If you continue to experience symptoms after 6 months, see your healthcare professional.*

*Following a perineal tear, if you are developing anxiety, have low mood or feel that you need additional support, you should talk to your healthcare professional.*

## When can I have sex?

In the weeks after having a vaginal birth, many women feel sore, whether they've had a tear or not. If you have had a tear, sex can be uncomfortable for longer. You should wait to have sex until the bleeding has stopped and the tear has healed. This may take several weeks. After that you can have sex when you feel ready to do so.

A small number of women have difficulty having sex and continue to find it painful. Talk to your doctor if this is the case so that you can get the help and support you need. It is possible to conceive a few weeks after your baby is born, even before you have a period. You may wish to talk with your GP or midwife about contraception or visit your local family planning clinic to discuss this.

## Your follow-up appointment

You may be offered a follow-up appointment at the hospital 6–12 weeks after you have had your baby to check that your stitches have healed properly. You will be asked questions about whether you have any problems controlling your bowels. You may be referred to a specialist if you do.

You will also have the opportunity to discuss the birth and any concerns that you may have.

## Can I have a vaginal birth in the future?

Most women go on to have a straightforward birth after a third- or fourth-degree tear.

However, there is an increased risk of this happening again in a future pregnancy. Between 5 and 7 in 100 women who have had a third- or fourth-degree tear will have a similar tear in a future pregnancy.

You may wish to consider a vaginal delivery if you have recovered well and do not have any symptoms. If you continue to experience symptoms from the third- or fourth-degree tear, you may wish to consider a planned caesarean section.

You will be able to discuss your options for future births at your follow-up appointment or early in your next pregnancy. Your individual circumstances and preferences will be taken into account.

Appendix 4

**Perineal tear: Third & Fourth Degree Repair Sheet**

Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Operator: \_\_\_\_\_  
 Assistant: \_\_\_\_\_  
 Anaesthetist: \_\_\_\_\_  
 Scrub Nurse: \_\_\_\_\_  
 Anaesthetic: LA / Spinal / Epidural / CSE / GA  
 Location: Theatre / Delivery room

Addressograph

Parity: Primip / Multip	IOL: Yes / No
Mode of Delivery: SVD / Forceps / Ventouse / Both Other	Position at delivery: OP / OA / OT /
Indication (if instrumental):..... Birthweight:.....kg	
Length of 2 <sup>nd</sup> stage:..... hrs.....mins	Episiotomy: Yes / No
Shoulder Dystocia: Yes / No	Prev 3 <sup>rd</sup> /4 <sup>th</sup> degree tear: Yes / No

**Classification: 3a** (<50% EAS) / **3b** (>50% EAS) / **3c** (EAS & IAS) / **4<sup>th</sup>** (Anal mucosa involvement) / Other

<b>Repair:</b>	<b>Identified Y/N</b>	<b>Suture material:</b>	
External anal sphincter Other	Identified Y/N	Overlap / End to End / Other	3.0 PDS /
Internal anal sphincter	Identified Y/N	Interrupted / Continuous / Other	3.0 PDS / Other
Anal Mucosa		Interrupted / Continuous / Other	3.0 Vicryl / Other
Vaginal Mucosa Other		Interrupted / Continuous / Other	2.0 Vicryl rapide /
Perineal Body		Interrupted / Continuous / Other	2.0 Vicryl rapide / Other
Perineum Other		Interrupted / Sub-cuticular / Other	2.0 Vicryl rapide /

<b>Following Repair:</b>	PV done: Yes / No	PR done: Yes / No
Catheter: Yes / No	Remove at:.....	
Pack: Yes / No	Remove at:.....	
Swabs & Needles correct: Yes / No	Signature.....	
EBL.....ml		
-----		
<b>Postnatal Management:</b>	<u>Prescribed / Arranged:</u>	
Antibiotic Cover	Cefuroxime 1.5g iv & Metronidazole iv (at repair)	Yes / No
No		
Cefalexin 500mg tds (1 week)		Yes / No
Metronidazole 400mg tds (1 week)		Yes / No
Stool Softeners	Lactulose 10mls bd (10 days)	Yes / No
Analgesia	Voltarol 50mg po tds (1 week) prn	Yes / No
Paracetamol 500mg – 1gm po qds (1 week)		Yes / No
Follow up	Pelvic floor pathway commenced	Yes / No
-----		
<b>Risk Management:</b>	Woman informed of nature of tear	Yes / No
Information leaflet given to patient		Yes / No
If 3b or more, critical incident form completed		Yes / No

.....Signature, Name & Grade  
 (Supervision Yes / No)



DRAFT