

# THIRD AND FOURTH DEGREE TEARS

## DEFINITION

A **third degree tear** is an injury to the perineum involving the anal sphincter complex and can be classified in three types:

- 3a:** Less than 50% of the External Anal Sphincter (EAS) thickness torn.
- 3b:** More than 50% of the EAS thickness torn.
- 3c:** Both the EAS and the Internal Anal Sphincter (IAS) torn.

A **fourth degree tear** is an injury to the perineum involving the anal sphincter complex (external and internal) and the rectal mucosa.

### NOTE:

If there is any doubt about the degree of third degree tear it is advisable to classify it to the higher degree<sup>1,2,3</sup>

## RISK FACTORS

Risk factors for third-degree tears have been identified in a number of retrospective studies.<sup>3</sup> Taking an overall risk of 1% of vaginal births, the following factors are associated with an increased risk of a third or fourth degree tear:

- birth weight over 4 kg
- persistent occipito posterior position
- nulliparity
- nutritional status
- induction of labour
- epidural analgesia
- second stage longer than 1 hour
- shoulder dystocia
- midline episiotomy
- Instrumental birth, ie. forceps
- Position, ie. squatting
- With increased parity use of birthing stool
- Lithotomy

## PREVENTATIVE FACTORS

- Episiotomy technique, when indicated, at 60 degrees at crowning<sup>4,5</sup>
- Management of epidural, waiting 1 hour for passive descent prior to active second stage
- Position for birth, i.e. lateral (avoid supine)
- Use of perineal protection/support
- Application of warm compresses during second stage
- Good communication

### NOTE:

All women having a vaginal birth are at risk of sustaining obstetric anal sphincter injuries (OASIS) or an isolated rectal buttonhole tear.

All women following a vaginal birth should have a systematic examination of the vagina, perineum and a digital rectal examination to assess the severity of damage particularly prior to suturing.<sup>3</sup>

Any suspicion of a third or fourth degree tear should be referred to an Obstetric Registrar or Consultant for assessment.

## PRINCIPLES OF REPAIR

1. It is recommended that repair is carried out in the operating theatre under regional or general anaesthesia as this provides:
  - appropriate assistance
  - aseptic conditions
  - appropriate instruments
  - adequate light
  - correct processes around swab counts and
  - effective pain relief for the woman so that the anal sphincter is relaxed enabling repair without tension to the tissue.
2. All repairs should be carried out either by:
  - Consultant Obstetrician
  - Competency Certified Registrar
  - Registrar/SHO directly supervised by a Consultant Obstetrician

The repair should be documented on perineal injury repair record (Ref 8645).
3. The woman should be informed about:
  - The nature of the injury
  - The need for prophylactic antibiotics and laxatives
  - The importance of community follow up at 6 weeks and 6 months after birth (Refer to Canterbury Community HealthPathways <https://canterbury.communityhealthpathways.org/54082.htm> )
  - The importance of early reporting of any symptoms of incontinence or pain

**PROCEDURE FOR REPAIR**

1. The anal mucosa should be repaired with either continuous or interrupted 2/0 or 3/0 vicryl. Figure of eight sutures should be avoided as it takes longer to dissolve and may cause discomfort and can cause ischaemia.
2. Sphincter muscles should be repaired with 2/0 or 3/0 PDS<sup>3</sup>. Women should be informed that it may take a long time for these sutures to dissolve (more than 6 weeks) and that they may be aware of the knots around the anus.
3. The repair of a full thickness EAS (3a or 3b) and IAS 3c can be repaired using an overlap or an end to end (approximation) method <sup>2,3</sup> with equivalent outcomes.
4. If it is recognised that the internal anal sphincter is partially torn (3a, 3b), the edges should be grasped and end to end technique used.
5. The remainder of the repair is carried out as for a second degree tear or episiotomy.
6. A rectal examination is performed after the suturing to ensure sutures are not inadvertently inserted into the rectal mucosa. If sutures are identified they should be removed<sup>3</sup>.
7. Document the repair, including completing the diagram if needed on the perineal injury repair record ([Ref.8645](#)).

**POST REPAIR MANAGEMENT AND FOLLOW UP**

1. Antibiotic prophylaxis should be given
  - IV amoxicillin/clavulanate 1.2 g STAT at repair, followed by
  - Oral amoxicillin/clavulanate 625mg TDS for 3-5 days

*For patients with mild Penicillin allergy:*

  - IV cefazolin 1 g (or IV cefuroxime 750 mg) and IV metronidazole 500 mg STAT at repair, followed by
  - Oral cefaclor 500 mg TDS and metronidazole 200 mg QID for 3-5 days

*For patients with severe Penicillin allergy:*

  - IV clindamycin 600 mg and IV gentamicin 5-7 mg/kg STAT at repair, followed by
  - Oral clindamycin 300 mg QID and ciprofloxacin 500 mg BD for 3-5 days
2. Analgesia should be prescribed:
  - Rectal diclofenac 100mg and paracetamol 1.5g STAT at completion of repair
  - Oral non-steroidal anti-inflammatory and paracetamol as required
  - Avoid opioids as this may cause constipation
3. A stool softener should be prescribed – lactulose 10mls BD for 10 days<sup>4</sup>. Kiwicrush or Sodium docusate tablets are an acceptable alternative.
4. Ice therapy, to decrease swelling for first 48-72 hours. Apply an ice pack in a sanitary pad to the perineum for 20 minutes every 3-4 hours.
5. Referral to the physiotherapist ([Ref.7304](#)) should be made on arrival to the Maternity Ward where the woman should remain an inpatient for 24 hours. If not reviewed by the

- physiotherapist prior to discharge, ensure referral has been made and the physiotherapist will make phone contact with the woman to ascertain if an appointment is necessary.
6. On admission to the Maternity Ward record on Floview and flag.
  7. Post birth the obstetrician performing the repair should ensure that the woman has a full understanding of the implications of the tear and the plans for subsequent community follow up.
  8. The woman should be provided with a leaflet 'Third or Fourth Degree Perineal Tear' ([Ref.7210](#)). The discharge letter to the LMC and GP should contain information regarding the grade of perineal injury and repair.
  9. The woman should be assessed by her LMC at the usual 4 to 6 week check to ensure perineum healing, pain resolved and no faecal incontinence. The 6 week checklist ([Ref.6742](#)) is completed by the LMC and if issues are identified a referral is made to the Physiotherapy Department.
  10. If no referral is required, the woman is reviewed by the GP or practice nurse at six months post birth ([Ref.6678](#)). The woman is advised to contact the GP or practice nurse if this doesn't happen automatically. If issues are identified a referral is made for a non-acute gynaecology assessment.

## THIRD AND FOURTH DEGREE TEARS AUDIT STANDARDS

Collection of data for audit may include:

- Number of third and fourth degree tears as a percentage of vaginal deliveries
- Review of documented systemic examination of the vagina, perineum and rectum prior to suturing of the obstetric anal sphincter injury.
- Proportion repaired in theatre, type of analgesia, suture material and method of repair.

## REFERENCES

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3. RANZCOG. OASI Care Bundle [Internet]. UK: Royal College of Obstetricians and Gynaecologists; 2017 [cited 11 March 2019]. Available from: <https://www.rcog.org.uk/OASICareBundle>
4. RCOG (2015) Third and fourth degree perineal tears, Management (Green Top Guideline No. 29). [Internet]. UK: Royal College of Obstetricians & Gynaecologists; June 2015 [cited 11 March 2019]. Available from: <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg29/>
5. Sultan AH, Monga AK, Kumar D, Stanton SL. Primary repair of obstetric sphincter rupture using overlap technique. 9 May 1999. British Journal of Obstetrics Gynaecology, 106 (4) :318-23

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1. Fitzpatrick M et al (2000). A randomized clinical trial comparing primary overlap with approximation repair of third degree obstetric tears. American Journal of Obstetric & Gynaecology, Nov;183(5): 1220-4
2. Mahony R et al (2004) Randomized, clinical trial of bowel confinement vs. laxative use after primary repair of a third degree obstetric anal sphincter tear. Dis Colon Rectum. Jan;47(1):12-7. Epub 2004 Jan 14.
3. <https://www.cdhb.health.nz/wp-content/uploads/59865cd9-glm0062-progress-in-labour.pdf>

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Third and Fourth Degree Tears

Maternity Guidelines

Christchurch Women's Hospital

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**APPENDIX C 3<sup>RD</sup> AND 4<sup>TH</sup> DEGREE TEAR 6 WEEK CHECKLIST AND 6 MONTH RECALL FORMS**

**Canterbury**  
District Health Board  
Te Poari Hauora o Waitaha  
CHRISTCHURCH WOMEN'S HOSPITAL  
MATERNITY OUTPATIENTS

SURNAME: \_\_\_\_\_ NH: \_\_\_\_\_  
FIRST NAME: \_\_\_\_\_ DOB: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ POSTCODE: \_\_\_\_\_  
(or enter patient label)

**3<sup>rd</sup> & 4<sup>th</sup> Degree Perineal Tear – 6 Week Checklist**

**PATIENT DETAILS**

Contact numbers Home: \_\_\_\_\_ Mobile: \_\_\_\_\_  
Date and time: \_\_\_\_\_ @ \_\_\_\_\_ am / pm  
LMC \_\_\_\_\_ Phone: \_\_\_\_\_  
Date of delivery  Gravida  Parity  3<sup>rd</sup> degree  4<sup>th</sup> degree

**PRESENTING DETAILS**

All women should be provided with the following patient information leaflets:  
• Ref.7210 Third or fourth degree perineal tear  
• Ref.8044 Pelvic floor muscle exercises

<b>Perineum</b>	Pain	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Not healed	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Unable to contract pelvic floor	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Pelvic floor</b>	Heaviness	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Dragging	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Bulging	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Bowel incontinence</b>	Urgency	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Flatus	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Liquid stool	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Firm stool	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Urinary incontinence</b>	Leakage	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Urge incontinence	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is your client concerned about any of these issues?		<input type="checkbox"/> Yes <input type="checkbox"/> No

**FOLLOWING CHECK**

- Is a referral to Physiotherapy Department required for further advice and/or assessment?  Yes  No
- If answer is yes, please fax this form to (03) 364 0442

Please advise your client she will be placed on the GP recall system for 6 months and will be contacted by the medical practice to complete the follow-up process. The woman should be advised if this does not happen for any reason, to make an appointment with their GP or practice nurse at this time.

**RECOMMENDATION**

3<sup>rd</sup> degree or 4<sup>th</sup> degree tear – recommend obstetric assessment next pregnancy to discuss mode of birth.

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature: \_\_\_\_\_ Designation: \_\_\_\_\_

Ref:6742 Authored by: CWM/MOPD Page 1 of 1 January 2020

[\(Ref.6742\)](#)

**Canterbury**  
District Health Board  
Te Poari Hauora o Waitaha  
CHRISTCHURCH WOMEN'S HOSPITAL  
MATERNITY OUTPATIENTS

SURNAME: \_\_\_\_\_ NH: \_\_\_\_\_  
FIRST NAME: \_\_\_\_\_ DOB: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_ POSTCODE: \_\_\_\_\_  
(or enter patient label)

**3<sup>rd</sup> and 4<sup>th</sup> Degree Perineal Tear Checklist – 6 Month Recall**

**PRESENTING DETAILS**

Date and time: \_\_\_\_\_ @ \_\_\_\_\_ am / pm Delivery date: \_\_\_\_\_  
 Gravida  Parity  3<sup>rd</sup> degree  4<sup>th</sup> degree

<b>Urinary incontinence</b>	Leakage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes – when?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Cough <input type="checkbox"/> Sneeze <input type="checkbox"/> Exercise <input type="checkbox"/> Rushing to toilet	
	Other symptoms? (urgency/frequency)	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Bowel incontinence</b>	Leakage?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Solid <input type="checkbox"/> Loose <input type="checkbox"/> Flatus	
	Passing a stool	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Easy	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Pain	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Feels complete	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Stool type: <input type="checkbox"/> Hard/dry <input type="checkbox"/> Soft/formed <input type="checkbox"/> Loose/Diarrhoea	
<b>Intercourse</b>	Intercourse attempted?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Pain	<input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes – At entrance	<input type="checkbox"/> Yes <input type="checkbox"/> No
	– Deep	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Leakage – Urine	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Leakage – Faeces / wind	<input type="checkbox"/> Yes <input type="checkbox"/> No

If 'YES' to any of the questions above: Do these symptoms bother you?  Yes\*  No

If 'yes' we recommend further follow up

Either

- Appointment with your GP for further discussion and/or
- Refer to Gynaecological outpatients (includes gynaecologist and physiotherapist)
- Refer to private pelvic floor Physiotherapist

or

- Direct referral to Gynaecological Outpatients

Do you have any questions/comments?  Accepted  Declined

Recommendation to see GP offered?  Accepted  Declined

Please fax completed form to (03) 364 0442 (place in woman's notes)

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature: \_\_\_\_\_ Designation: \_\_\_\_\_

Ref:6678 Authored by: Cheryl Miskell MSc Dip MOPD February 2020

[\(Ref.6678\)](#)

**APPENDIX C PATIENT INFORMATION SHEETS**

Third or Fourth Degree Perineal Tear [\(Ref.7210\)](#).

Pelvic Floor Muscle Exercises [\(Ref.8044\)](#)