AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

Selected best practices and suggestions for improvement for clinicians and health system managers

Hospital-Acquired Complication **15**

THIRD AND FOURTH DEGREE PERINEAL LACERATION DURING DELIVERY

	HOSPITAL-ACQUIRED COMPLICATION	RATE[a]
1	Pressure injury	10
2	Falls resulting in fracture or intracranial injury	4
3	Healthcare-associated infections	135
4	Surgical complications requiring unplanned return to theatre	20
5	Unplanned intensive care unit admission	na[b]
6	Respiratory complications	24
7	Venous thromboembolism	8
8	Renal Failure	2
9	Gastrointestinal bleeding	14
10	Medication complications	30
11	Delirium	51
12	Persistent incontinence	8
13	Malnutrition	12
14	Cardiac complications	69
15	Third and fourth degree perineal laceration during delivery (per 10,000 vaginal births)	358
16	Neonatal birth trauma (per 10,000 births)	49

a per 10,000 hospitalisations except where indicated
b na = national data not available

This hospital-acquired complication includes the diagnoses of third and fourth degree perineal lacerations with and without instrumentation.*

Why focus on third and fourth degree perineal laceration?

Each year, women giving birth in Australian hospitals collectively experience a large number of third or fourth degree perineal lacerations. In 2015–16, 5,639 such lacerations were recorded in Australian public hospitals.[1] This was equivalent to a rate of 358 perineal lacerations for vaginal birth per 10,000 hospitalisations in 2015–16.[1]

Third and fourth degree perineal lacerations cause persistent and distressing physical and psychological symptoms, including perineal pain, sexual and urinary problems, faecal urgency and incontinence of both flatus and stool. If these injuries are not recognised and repaired promptly, they can have serious long-term consequences for women's lives.[2] Third and fourth degree perineal lacerations also prolong length of stay in hospital.

Reductions in perineal laceration rates are being achieved in some hospitals through preventive initiatives.[3] The rate for third and fourth degree perineal lacerations at Principal Referral Hospitals† was 358 per 10,000 hospitalisations for vaginal birth in 2015–16. ‡[2] If all Principal Referral Hospitals above this rate reduced their rate to 358 per 10,000 hospitalisations for vaginal birth, then 447 third and fourth degree perineal lacerations in Principal Referral Hospitals would have been prevented, and more when other types of facilities are considered.[1]

* The specifications for the hospital-acquired complications list providing the codes, inclusions and exclusions required to calculate rates is available on the Commission's website.

† Hospitals were classified in the Principal Referral Hospitals peer group for these purposes according to the Australian Institute of Health and Welfare's former definition of major city hospitals with more than 20,000 acute weighted separations and regional hospitals with more than 16,000 acute weighted separations.

‡ This rate differs from the rate described in the Second Australian Atlas of Healthcare Variation. The rate in the Atlas is a three-year average and includes data from all private and public hospitals.

What is considered best practice for preventing perineal lacerations?

All hospital-acquired complications can be reduced (but not necessarily eliminated) by the provision of patient care that mitigates avoidable clinical risks to patients.

The **health service organisation** providing birthing services to women

- Has clear clinical guidelines for the prevention, recognition and management, including follow-up, of third and fourth degree perineal lacerations.

Clinicians caring for patients at risk of perineal laceration

- Provide care during labour and delivery in accordance with best practice guidelines.

The National Safety and Quality Health Service (NSQHS) Standards (second edition), in particular the Comprehensive Care Standard[4], support the delivery of safe patient care.

The advice contained in the hospital-acquired complication fact sheets aligns with the criteria in this standard, which are as follows:

- Clinical governance structures and quality-improvement processes supporting patient care
- Developing the comprehensive care plan
- Delivering the comprehensive care plan
- Minimising specific patient harms.

Clinical governance structures and quality-improvement processes

to support best practice in perineal laceration prevention and management

Health service organisations need to ensure systems are in place to prevent third and fourth degree perineal laceration through effective clinical governance and quality improvement.

The NSQHS Standards (2nd ed.) describe actions that are relevant to the prevention and management strategies outlined below. These actions are identified in brackets.

Policies, procedures and protocols

Health service organisations ensure policies, procedures and/or protocols are consistent with national evidence-based guidelines for the risk assessment, prevention, management and follow-up of perineal lacerations. **(1.27, 5.1a)**

Best-practice screening and management

Health service organisations:

- Agree on the process and criteria for third and fourth degree perineal laceration risk assessment **(5.4, 5.7)**
- Inform the clinical workforce of risk assessment requirements **(5.1c)**
- Identify a format for prevention plans for high-risk patients **(5.4)**
- Identify a management plan format for patients with a third or fourth degree perineal laceration **(5.7, 5.10)**
- Implement a system of follow-up. **(5.13e)**

Identification of key individuals/ governance groups

Health service organisations identify an individual or a governance group that is:

- Responsible for monitoring compliance with the organisation's labour and delivery policies, procedures and protocols **(1.7b, 5.2a)**
- Responsible for presenting data on the performance of third and fourth degree perineal laceration prevention, management and follow-up systems to the governing body. **(1.9, 5.2c)**

Training requirements

Health service organisations:

- Identify workforce training requirements **(1.20a)**
- Train relevant staff on the use of risk assessment, prevention and third and fourth degree perineal laceration management and follow-up plans **(1.20b, 1.20c)**
- Ensure workforce proficiency is maintained. **(1.20d, 1.22, 1.28b)**

Monitoring the delivery of care

Health service organisations ensure mechanisms are in place to:

- Report perineal lacerations **(1.9, 5.2)**
- Identify performance measures and the format and frequency of reporting **(1.8a)**
- Set performance measurement goals **(1.8a)**
- Collect data on compliance with policies **(1.7b)**
- Collect data about perineal laceration risk-screening activities including whether risk assessment is leading to appropriate action **(1.8, 5.1b, 5.2)**
- Identify gaps in systems for risk assessment for third and fourth degree perineal laceration **(5.2)**
- Collect data on incidence of third and fourth degree perineal laceration **(1.28b, 1.9, 5.2)**
- Provide timely feedback and outcomes data to staff. **(1.9)**

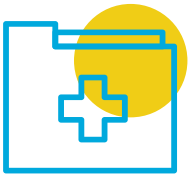
Quality-improvement activities

Health service organisations:

- Implement and evaluate quality improvement strategies to reduce the frequency and harm from third and fourth degree perineal laceration **(5.2)**
- Use audits of patient clinical records and other data to:
  - identify opportunities for improving perineal laceration prevention plans **(5.2)**
  - identify gaps and opportunities to improve the use of perineal laceration prevention plans (such as increasing the number of at risk patients who have perineal laceration prevention plans implemented) **(5.2)**
  - monitor the overall effectiveness of systems for prevention and management of third and fourth degree perineal lacerations **(5.2)**
- Use audits of patient clinical records, transfer and discharge documentation and other data to:
  - identify opportunities for improving third and fourth degree perineal laceration management plans **(5.2)**
  - assess compliance with third and fourth degree perineal laceration management and follow-up plan requirements **(5.2)**
  - identify strategies to improve the use and effectiveness of third and fourth degree perineal laceration management plans. **(5.2)**

Equipment and devices

Health service organisations facilitate access to relevant equipment for the prevention and management of perineal lacerations**. (1.29b)**



Developing the patient's comprehensive care plan

to support best practice in perineal laceration prevention and management

Clinicians should partner with patients and carers in assessing risk, in providing appropriate information to support shared decision making, and in planning care that meets the needs of patients and their carers.

Identifying risk factors for perineal lacerations

Clinicians assess for risk factors associated with obstetric lacerations which include[2,3,5]:

- Birth weight over 4kg
- Persistent occipito-posterior position
- Nulliparity
- Induction of labour
- Operative vaginal delivery, including forceps delivery
- Maternal age 25–34 years
- Epidural analgesia (ensure that patients are not overly anesthetised)
- Second stage longer than one hour
- Shoulder dystocia
- Midline episiotomy
- Mothers of Asian ethnicity
- Large head circumference of baby
- Previous severe perineal laceration
- Use of oxytocin
- Delivery with stirrups.

Implement risk assessment screening

Clinicians use relevant screening processes at presentation to assess the risk of third and fourth degree perineal laceration and requirements for prevention strategies.

Clinical assessment

Clinicians comprehensively assess:

- Conditions
- Medications
- Obstetric history
- Risks identified through screening process.

Clinicians document risks in the clinical record.

Informing patients with a high risk

Clinicians provide information for women with high risk and their carers about third and fourth degree perineal laceration prevention, management and follow-up.

Planning in partnership with patients and carers	Clinicians inform women and their partners and carers about the purpose and process of developing a third and fourth degree perineal laceration management plan and invite them to be involved in its development.
Collaborating and working as a team	Obstetric staff and midwives work collaboratively to perform third and fourth degree perineal laceration risk assessment and clinical assessment.
Documenting and communicating the care plan	Clinicians document in the clinical record and communicate the: • Findings of the screening process • Findings of the clinical assessment process • Birth plan.

Delivering comprehensive care

to prevent and manage third and fourth degree perineal laceration

Safe care is delivered when the individualised care plan, that has been developed in partnership with patients, carers and family, is followed.

Collaborating and working as a team	Obstetricians and midwives work collaboratively to deliver third and fourth degree perineal laceration prevention and management.
Delivering perineal laceration prevention strategies in partnership with patients and carers	Clinicians work in partnership with women and carers to use the comprehensive care plan to deliver third and fourth degree perineal laceration prevention strategies where clinically indicated using evidence-based care bundles.
Delivering third and fourth degree perineal laceration management in partnership	Clinicians work in partnership with patients and carers to ensure women who have third and fourth degree perineal laceration are managed according to best-practice guidelines.
Monitoring and improving care	Clinicians should: • Monitor the effectiveness of these strategies in preventing third and fourth degree perineal laceration and reassess the patient if third or fourth degree perineal laceration occurs • Review and update the care plan if it is not effective or is causing side effects • Engage in reviewing clinical outcomes, identifying gaps and opportunities for improvement.

Additional resources

Aasheim V, Nilsen ABV, Lukasse M, Reinar LM. Perineal techniques during the second stage of labour for reducing perineal trauma. Cochrane Database of Systematic Reviews. 2011; (12).

Department of Health Western Australia. Intrapartum Care: Management of Perineal Trauma. Perth 2015.

Government of South Australia. Clinical Guideline: Perineal care. Adelaide 2015.

National Institute for Health and Care Excellence. Intrapartum care for healthy women and babies. Clinical Guideline 190. 2014.

Queensland Clinical Guidelines. Maternity and Neonatal Clinical Guideline: Perineal Care 2015. (MN12.30-V2-R17).

Royal College of Midwives (AU). Evidence Based Guidelines for Midwifery-Led Care in Labour: Care of the Perineum. 2012.

Royal College of Obstetricians and Gynaecologists. OASI Care Bundle. Royal College of Obstetricians and Gynaecologists (UK). The Management of Third and Fourth Degree Perineal Tears. Green-top Guideline No 29. 2015.

van Limbeek S, Davis D, Currie M, Wong N. Non-surgical intrapartum practices for the prevention of severe perineal trauma: a systematic review protocol. JBI Database of Systematic Reviews and Implementation Reports [Internet]. 2016; 14(4):[30–40 pp.].

Note on data

The data used in this sheet are for hospital-acquired complications recorded during episodes of care in Australian public hospitals in 2015–16. Data are included where hospitals were able to identify that the complication had arisen during an admission using the condition onset flag. Figures reported by the Independent Hospital Pricing Authority (IHPA) may differ due to the IHPA's methodology, which applies different inclusion/exclusion criteria.

References

1. Independent Hospital Pricing Authority (AU). Activity Based Funding Admitted Patient Care 2015–16, acute admitted episodes, excluding same day.
2. Australian Commission on Safety and Quality in Health Care. Second Australian Atlas of Healthcare Variation. Sydney: ACSQHC; 2017. Available from: https://www.safetyandquality.gov.au/atlas/atlas-2017/.
3. American Academy of Family Physicians. Third and fourth degree perineal lacerations. Advanced Life Support in Obstetrics (ALSO)2012.
4. Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards (second edition). Sydney 2017.
5. Royal College of Obstetricians and Gynaecologists (UK). The Management of Third and Fourth Degree Perineal Tears. Green-top Guideline No 29 [Internet]. 2015. Available from: https://www.rcog.org.uk/globalassets/documents/guidelines/gtg-29.pdf.

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