health • care • people

MATERNITY & NEONATAL

Queensland Maternity and Neonatal **Clinical Guideline**

Supplement: Perineal care

Queensland Government

health • care • people

Table of Contents

1 Introduction 3
1.1 Funding 3
1.2 Conflict of interest 3
1.3 Guideline review 3
2 Methodology 3
2.1 Topic identification 3
2.2 Scope 4
2.3 Clinical questions 4
2.4 Exclusions 4
2.5 Search strategy 4
2.6 Consultation 5
2.7 Endorsement 5
2.8 Publication 6
3 Levels of evidence 6
3.1 Summary recommendations 7
4 Implementation 8
4.1 Guideline resources 8
4.2 Suggested resources 8
4.3 Implementation measures 8
4.3.1 Program measures 8
4.3.2 District Health Service measures 8
4.4 Clinical quality measures 9

List of Tables

Table 1. Summary of change 3
Table 2. PICO Framework 4
Table 3. Major guideline development processes 5
Table 4. Levels of evidence 6
Table 5. Summary recommendations 7

1 Introduction

This document is a supplement to the Queensland Maternity and Neonatal Clinical Guideline Perineal care. It provides supplementary information regarding guideline development, makes summary recommendations, suggests measures to assist implementation and quality activities and summarises changes (if any) to the guideline since original publication. Refer to the guideline for abbreviations, acronyms, flow charts and acknowledgements.

1.1 Funding

The development of this guideline was supported with funding from Queensland Health, Centre for Healthcare Improvement. The Clinical Lead and Working Party including consumer representatives participated on a voluntary basis; however the consumer representative on the Steering Committee was paid a sitting fee.

1.2 Conflict of interest

No conflict of interest was identified

1.3 Guideline review

The Maternity and Neonatal Clinical Guidelines are reviewed every 5 years or earlier if significant new evidence emerges. Table 1 provides a summary of changes made to the guidelines since original publication.

Table 1. Summary of change

Publication date	Identifier	Summary of major change
April 2012	MN12.30-V1-R17	First publication

2 Methodology

The Queensland Maternity and Neonatal Clinical Guideline Program (the Program) follows a rigorous process of guideline development. This process was endorsed by the Queensland Health Patient Safety and Quality Executive Committee in December 2009. The guidelines are best described as "evidence informed consensus guidelines" and draw from the evidence base of existing national and international guidelines and the expert opinion of the working party.

2.1 Topic identification

The topic was identified as a priority by the Statewide Maternity and Neonatal Clinical Network at a forum in 2009.

2.2 Scope

The scope of the guideline was determined using the PICO Framework (Population, Intervention, Comparison, Outcome) as outlined in Table 2.

Table 2. PICO Framework

PICO	
Population	Women planning for or experiencing vaginal birth
Intervention	• Identify a standardised classification system for perineal injury • Identify antenatal and intrapartum measures that reduce the risk of perineal morbidity • Develop a systematic approach to perineal assessment • Identify best clinical practice for the assessment, treatment and care of perineal injuries • Identify a follow up regime that optimises the return of women's perineal function
Comparison	N/a
Outcome	• Women receive best practice antenatal care to reduce the risk of perineal morbidity • Women receive best practice perineal care that optimises perineal outcomes

2.3 Clinical questions

The following clinical questions were generated to inform the guideline scope and purpose:

- Are some women at greater risk of perineal injury?
- Can risk reduction measures be used to prevent perineal injury and how effective are they?
- What are the specific childbirth needs of women with infibulated genital mutilation?
- What is best practice for the care of women experiencing varying types of perineal injury?
- What are the major complications of perineal injury and how will they be detected and managed in the community?

2.4 Exclusions

- Women having an elective caesarean section
- Reproductive tract trauma and repair including:
    - Lower uterine segment tears
    - Cervical tears
- Step by step instructions on:
    - Performing perineal infiltration and episiotomy (will include principles only)
    - Perineal repair (will include principles only)
- Comprehensive psychosocial and cultural care of women who have experienced female genital mutilation and risk reporting for female infants
- Subsequent assessment and management of dyspareunia and urinary/faecal/flatulent incontinence

2.5 Search strategy

A search of the literature was conducted during March 2011 using multiple techniques including search and review of:

- Known guideline sites (e.g. Royal Australian and New Zealand College of Obstetricians and Gynaecologists, National Guideline Clearing House, Royal College of Obstetrician and Gynaecologists, Society of Obstetricians and Gynaecologists of Canada, American Academy of Pediatrics)
- Synthesised evidence (e.g. UpToDate, Cochrane reviews)
- Full text and summaries of relevant literature (e.g. identified using Cinahl, PubMed)
- Individual case reports, studies and trials identified in the literature
- Relevant reference lists

2.6 Consultation

Major consultative and development processes occurred between July 2011 and February 2012. These are outlined in Table 3.

Table 3. Major guideline development processes

Process	Activity
Clinical lead	• The nominated Clinical Lead was approved by the Program Steering Committee
Consumer participation	• Consumer participation was invited from a range of consumer focused organisations who had previously accepted an invitation for on-going involvement with the Program
Working party	• An EOI for working party membership was distributed via email to Queensland clinicians and stakeholders (~1700) in August 2011 • The working party was recruited from responses received • Working party members who participated in the working party consultation processes are acknowledged in the guideline • Working party consultation occurred in a virtual group via email
Statewide consultation	• Consultation was invited from Queensland clinicians and stakeholders (~1700) in October 2011 • Feedback was received primarily via email • All feedback was compiled and provided to the clinical lead and working party members for review and comment

2.7 Endorsement

The guideline was endorsed by:

- The Program Steering Committee in February 2012
- Queensland Maternity and Neonatal Clinical Network in February 2012
- Queensland Health Patient Safety and Quality Executive Committee in April 2012

2.8 Publication

The guideline and guideline supplement were published on the Program website in April 2012
The guideline can be cited as:

> Queensland Maternity and Neonatal Clinical Guidelines Program. Perineal care Guideline No. MN12.30-V1-R17. Queensland Health 2012

The guideline supplement can be cited as:

> Queensland Maternity and Neonatal Clinical Guidelines Program. Supplement: Perineal care Guideline No. MN12.30-V1-R17. Queensland Health 2012.

3 Levels of evidence

The levels of evidence identified in the National Health and Medical Research Council (NHMRC), Levels of evidence and grades for recommendations for developers of guidelines (2009) were used to inform the summary recommendations. Levels of evidence are outlined in Table 4. Summary recommendations are outlined in Table 5.

Note that the '**consensus**' definition* in Table 4 is different from that proposed by the NHMRC and instead relates to forms of evidence not identified in the NHMRC's level of evidence and / or the clinical experience of the guideline's clinical lead and working party.

Table 4. Levels of evidence

Levels of evidence	
I	Evidence obtained from a systematic review of all relevant randomised controlled trials.
II	Evidence obtained from at least one properly designed randomised controlled trial**.**
III-1	Evidence obtained from well-designed pseudo randomised controlled trials (alternate allocation or some other method).
III-2	Evidence obtained from comparative studies including systematic review of such studies with concurrent controls and allocation not randomised (cohort studies), case control studies or interrupted time series wit ha control group**.**
III-3	Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without parallel control group.
IV	Evidence obtained from case series, either post-test or pre-test and post-test.
Consensus*	Best practice informed by other forms of evidence and /or clinical experience of the guideline working party.

3.1 Summary recommendations

The working party and clinical lead have agreed to the following summary recommendations and levels of evidence (refer to Table 5).

Table 5. Summary recommendations

Recommendations		Grading of evidence
1	Appropriately trained health care professionals are more likely to provide a consistently high standard in perineal assessment and perineal repair.[1]	**Consensus**
2	Women should be made aware of the likely benefit of perineal massage and provided with information on how to massage.[2]	**I**
3	A pelvic floor muscle training programme of sufficient dose might be important both for women at potentially increased risk of postnatal incontinence and in a population-based approach to prevention of postnatal incontinence with the use of antenatal pelvic floor muscle training.[3]	**I**
4	The current evidence on the effectiveness of various delivery positions is inconclusive. In light of this, it is suggested that women should be encouraged to deliver in whichever position is most comfortable for them.[4]	**I**
5	The use of warm compresses on the perineum [during the second stage of labour] is associated with a decreased occurrence of perineal trauma.[5]	**I**
6	There is a significant effect towards favouring perineal massage versus hands off to reduce third- and fourth-degree perineal tears.[5]	**I**
7	Hands off (or poised) versus hand on show no effect on third- and fourth-degree tears, but hands off has a significant effect on the reduced rate of episiotomy.[5]	**!**
8	There is [clear] evidence to support the restrictive use of episiotomy compared with routine use of episiotomy.[6]	**I**
9	Mediolateral episiotomy compared with midline episiotomy may be more effective at decreasing the incidence of third- and fourth-degree tears.[7,8]	**Consensus**
10	For situations in which there is no clear clinical indication for a specific instrument, findings support the use of vacuum extraction as the first line method for assisted birth.[9]	**I**
11	Clinicians' decisions whether to suture or not [first- / second-degree tears] can be based on their clinical judgement and the women's preference after informing them about the lack of long-term outcomes and the possible chance of a slower wound healing process, but possible better overall feeling of well-being if left un-sutured.[10]	**I**
12	Continuous suturing techniques for perineal closure, compared to interrupted methods, are associated with less short-term pain; [when] continuous technique is used for all layers (vagina, perineal muscles and skin) compared to perineal skin only, reduction in pain is even greater[11]	**I**
13	Limited data show that compared to immediate primary end-to-end repair of obstetric anal sphincter injuries early primary overlap repair appears to be associated with lower risk for faecal urgency and anal incontinence symptoms.[12]	**I**
14	There is only a limited amount of evidence to support the effectiveness of cooling treatments applied to the perineum following childbirth to relieve perineal pain.[13]	**I**
15	Non-steroidal anti-inflammatory drugs [via] rectal suppository are associated with less pain up to 24 hours after birth, and less additional analgesia is required.[14]	**I**
16	[Oral] Paracetamol at either 500mg or 1000mg is effective as an analgesic [for perineal pain following childbirth].[15]	**I**
17	Data suggests that prophylactic antibiotics help to prevent perineal wound complications following third or fourth-degree perineal tears,[however], results should be interpreted with caution as they are based on one small trial.[16]	**II**
18	Pelvic floor muscle training (muscle-clenching exercises) helps women with all types of [urinary] incontinence, although women with stress incontinence who exercise for three months or more benefit most.[17]	**I**
19	Inform women about the nature of the perineal injury; the required treatment, follow-up and possible effects on future pregnancies.[1]	**Consensus**

4 Implementation

This guideline is applicable to all Queensland public and private maternity facilities. It can be downloaded in Portable Document Format (PDF) from www.health.qld.gov.au/qcg

4.1 Guideline resources

The following guideline components are provided on the website as separate resources:

- Flow chart for perineal care
- Female genital mutilation classification and country
- Principles of pelvic floor muscle exercises

4.2 Suggested resources

During the development process stakeholders identified additional resources with potential to compliment and enhance guideline implementation and application. The following resources have not been sourced or developed by the Program but are suggested as complimentary to the guideline:

- Patient information sheet about antenatal measures that reduce the risk of perineal morbidity including perineal massage and pelvic floor muscle exercises
    - With versions for women who are culturally and linguistically diverse
- Local workplace instructions on step-by-step techniques for perineal infiltration and cutting a mediolateral episiotomy
- Local workplace instructions for perineal repair
- Patient information sheet about care, treatment, follow-up and potential effect on future pregnancies of perineal tears sustained during childbirth
    - With versions for women who are culturally and linguistically diverse

4.3 Implementation measures

Suggested activities to assist implementation of the guideline are outlined below.

4.3.1 Program measures

- Notify Chief Executive Officer and relevant stakeholders
- Monitor emerging new evidence to ensure guideline reflects contemporaneous practice
- Capture user feedback
- Record and manage change requests
- Conduct satisfaction survey within 2 years of publication
- Review guideline in 2017

4.3.2 District Health Service measures

- Table the guideline at the local Patient Safety and Quality Committee meeting
- Replace all other guidelines on this topic with the current version of this guideline
- Promote the introduction of the guideline to relevant health care professionals (e.g. at staff forums, clinical handovers, incorporate into orientation packages
- Provide perineal risk reduction measures, perineal examination and repair education and training through:
    - Multidisciplinary (obstetric and midwifery) training programs
    - Inservice or professional development training
- Develop or access suggested resources as identified in this guideline

4.4 Clinical quality measures

The following clinical quality measures are suggested:

- Compare the incidence of genital tract trauma among primiparous and multiparous women with other Queensland maternity facilities using perinatal data collection criteria, relevant Variable Life Adjusted Display (VLADs) and/or ACHS classifications
- Audit women's satisfaction with pain relief provided during perineal repair
- Audit time interval between initial perineal examination and perineal repair
- Audit documented systematic examination of the vagina, perineum and rectum prior to suturing of injury
- Audit proportion of women who sustained obstetric anal sphincter injury and
  (a) had the injury repaired in theatre, and
  (b) the qualification (or level) of the surgeon undertaking the repair
- Audit number of staff who have received training in detection and repair of perineal injury
- Audit number of women with obstetric anal sphincter injury who were (a) given and (b) attended postnatal follow up appointments
- Audit proportion of women with obstetric anal sphincter injury who were
  (a) referred to, and
  (b) attended physiotherapist review

References

1. Royal College of Obstetrics and Gynaecologists (RCOG). The management of third and fourth degree perineal tears. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); Guideline; no. 29. 2007.

2. Beckmann MM, Garret AJ. Antenatal perineal massage for reducing perineal trauma. Cochrane Database of Systematic Reviews 2006; Issue 1. Art. No.: CD005123. DOI: 10.1002/14651858. CD005123.pub2.

3. Hay-Smith J, Morkved S, Fairbrother KA, Herbison GP. Pelvic floor muscle training for prevention and treatment of urinary and faecal incontinence in antenatal and postnatal women. Cochrane Database for Systematic Reviews 2008; Issue 4. Art. No.: CD007471. DOI: 10.1002/14651858.CD00741.

4. Gupta JK, Hofmeyr GJ, Smyth RMD. Position in the second stage of labour for women without epidural anaesthesia. Cochrane Database for Systematic Reviews 2004; Issue 1. Art. No.: CD002006. DOI:10.1002/14651858.CD002006.pub2.

5. Aasheim V, Nilsen ABVika, Lukasse M, Reinar L. Perineal techniques during the second stage of labour for reducing perineal trauma. Cochrane Database of Systematic Reviews 2011; Issue 3. Art. No.: CD006672. DOI:10.1002/14651858.CD006672.pub2.

6. Carroli G, Migini L. Episiotomy for vaginal birth. Cochrane Database for Systematic Reviews 2009; Issue 1. Art. No.: CD000081. DOI: 10.1002/14651858.CD000081.pub2.

7. Kettle C, Tohill S. Perineal Care. BMJ Clinical Evidence. 2011; 4:1401.

8. National Institute of Clinical Excellence. Antenatal care: Routine care for the healthy pregnant woman. Clinical Guidline 62. London. 2008.

9. O'Mahoney F, Hofmeyr GJ, Menon V. Choice of instruments for assisted vaginal delivery. Cochrane Database of Systematic Reviews. 2010; Issue 11. Art. No.: CD0055455. DOI: 10.1002/14651858.CD005455.pub2.

10. Elharmeel SMA, Chaudary Y, Tan S, Scheermeyer E, Hanafy A, van Driel ML. Surgical repair of spontaneous perineal tears that occur during childbirth versus no intervention. Cochrane Database of Systematic Reviews 2011; Issue 8. Art. No.: CD008534. DOI: 10.1002/14651858.CD008534.pub2.

11. 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.

12. Fernando RJ, Sultan AH, Kettle C, Thakar R, Radley S. Methods of repair for obstetric anal sphincter injury. Cochrane Database of Systematic Reviews. 2006; Issue 3 Art. No.: CD002866.DOI: 10.1002/14651858.CD002866.pub.

13. East CE, Henshall NE, Marchant P, Wallace K. Local cooling for relieving pain from perineal trauma sustained during childbirth. Cochrane Database of Systematic Reviews 2007; Issue 4. Art No.: CD006304. DOI: 10.1002/14651858.CD006304.pub2.

14. Hedayati H, Parsons J, Crowther CA. Rectal analgesia for pain from perineal trauma following childbirth. Cochrane Database of Systematic Reviews 2003; Issue 3. Art. No.: CD003931. DOI: 10.1002/14651858.CD003931.pub2.

15. Chou D, Abalos E, Gyte GM, Gulmezoglu K. Paracetamol / acetaminophen (single administration) for perineal pain in the early postpartum perineal period. Cochrane Database of Systematic Reviews 2010; Issue 3. Art. No. CD008407. DOI: 10.1002/14651858.CD008407.pub2.

16. Buppasiri P, Lumbiganon P, Thinkhamrop J, Thinkhamrop B. Antibiotic prophylaxis for third- and fourth-degree perineal tear during vaginal birth. Cochrane Database for Systematic Reviews 2010; Issue 11. Art. No.: CD005125. DOI: 10.1002/14651858.CD005125.pub3.

17. Dumoulin C, Hay-Smith J. Pelvic floor muscle training versus no treatment, or inactive control measures, for urinary incontinence in women. Cochrane Database of Systematic Reviews. 2010; Issue 1.Art. No.: CD005654. DOI: 10.1002/14651858.CD005654.