

health • care • people

MATERNITY & NEONATAL

Queensland Maternity and Neonatal **Clinical Guideline**

Perineal care



Queensland Government

health • care • people

Document title:	Perineal care
Publication date:	April 2012
Document number:	MN12.30-V1-R17
Document supplement	The document supplement is integral to and should be read in conjunction with this guideline
Replaces document:	New guideline
Author:	Queensland Maternity and Neonatal Clinical Guidelines Program
Audience:	Health professionals in Queensland public and private maternity services
Review date:	April 2017
Endorsed by:	Queensland Maternity and Neonatal Clinical Guidelines Program Statewide Maternity and Neonatal Clinical Network Queensland Health Patient Safety and Quality Executive Committee
Contact:	Email: MN-Guidelines@health.qld.gov.au URL: www.health.qld.gov.au/qcg

Disclaimer

These guidelines have been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach.

Information in this guideline is current at time of publication.

Queensland Health does not accept liability to any person for loss or damage incurred as a result of reliance upon the material contained in this guideline.

Clinical material offered in this guideline does not replace or remove clinical judgement or the professional care and duty necessary for each specific patient case.

Clinical care carried out in accordance with this guideline should be provided within the context of locally available resources and expertise.

This Guideline does not address all elements of standard practice and assumes that individual clinicians are responsible to:

- Discuss care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes the use of interpreter services where necessary
- Advise consumers of their choice and ensure informed consent is obtained
- Provide care within scope of practice, meet all legislative requirements and maintain standards of professional conduct
- Apply standard precautions and additional precautions as necessary, when delivering care
- Document all care in accordance with mandatory and local requirements



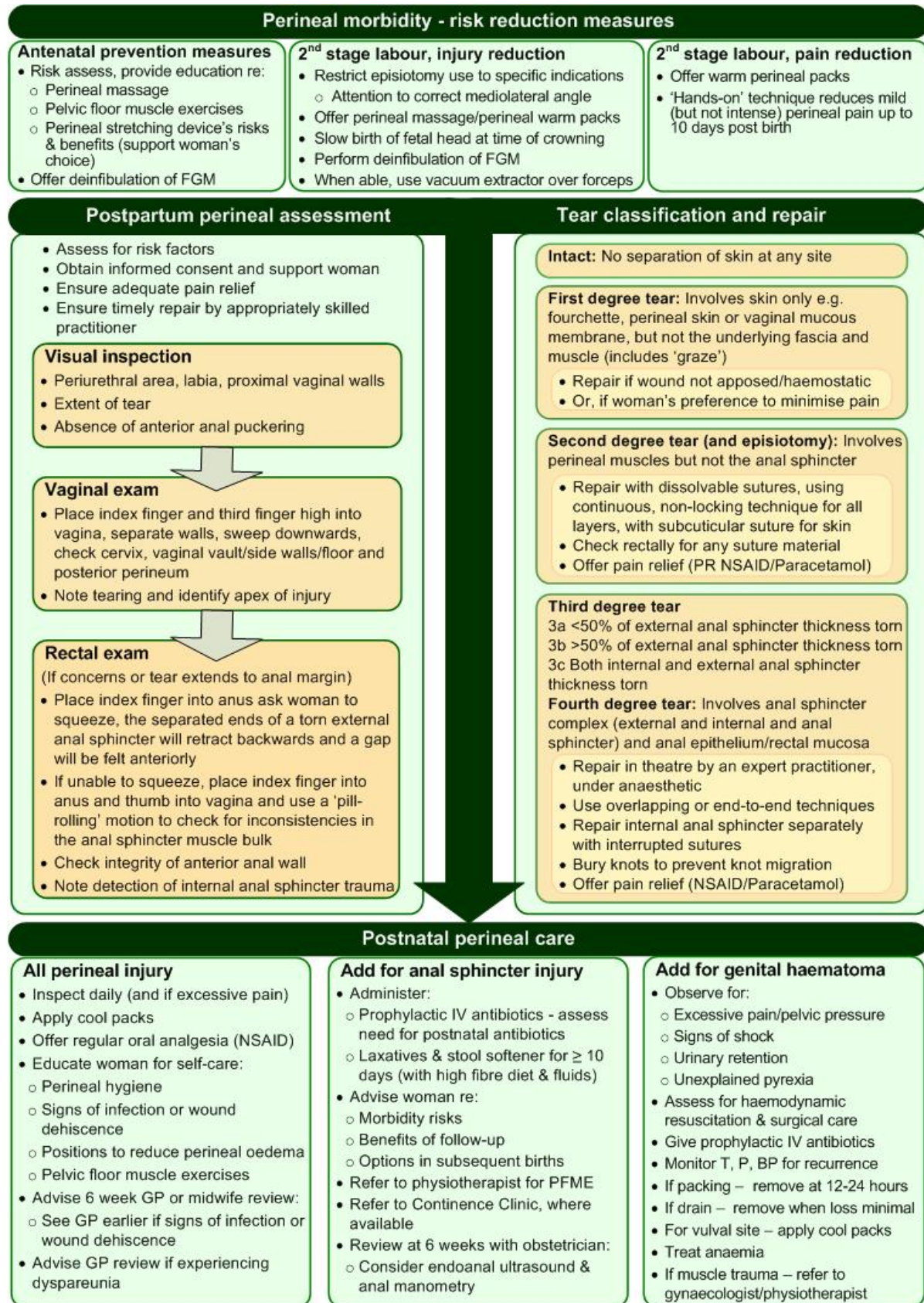
This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 2.5 Australia licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/2.5/au/>

© State of Queensland (Queensland Health) 2010

In essence you are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute the authors and abide by the licence terms. You may not alter or adapt the work in any way.

For permissions beyond the scope of this licence contact: Intellectual Property Officer, Queensland Health, GPO Box 48, Brisbane Qld 4001, email ip_officer@health.qld.gov.au, phone (07) 3234 1479. For further information contact Queensland Maternity and Neonatal Clinical Guidelines Program, RBWH Post Office, Herston Qld 4029, email MN-Guidelines@health.qld.gov.au phone (07) 3131 6777.

Flow Chart: Perineal care



Abbreviations

ACHS	Australian Council of Healthcare Standards
CT	Computed tomography
FGM	Female genital mutilation
IAP	Intraabdominal pressure
IV	Intravenous
NSAID	Non-steroidal anti-inflammatory drugs
PFME	Pelvic floor muscle exercises

Definition of terms

Crowning	When the widest part of the fetal head (biparietal diameter) has passed through the pelvic outlet. ¹
Deinfibulation	A surgical procedure to reverse infibulation, i.e. to open the vaginal introitus. ²
Dyspareunia	Pain on vaginal penetration and/or pain on intercourse or orgasm.
Fourchette	The labia minora extend to approach the midline as low ridges of tissue that fuse to form the fourchette.
Hands-on	The accoucheur's hands are used to put pressure on the baby's head in the belief that flexion, will be increased, and to support ('guard') the perineum, and to use lateral flexion to facilitate the delivery of the shoulders ³ – modification includes use of the modified Ritgen's manoeuvre. ⁴
Hands-poised (or off)	The accoucheur keeps hands poised, prepared to put light pressure on the baby's head in case of rapid expulsion but not to touch the head or perineum and allows spontaneous delivery of the shoulders ³ – modification includes hands-on to birth the shoulders. ^{5,6}
Infibulation	A type of female genital mutilation that involves the excision of part or all of the external genitalia and stitching/narrowing of the vaginal opening. ²
Obstetrician	Local facilities may as required, differentiate the roles and responsibilities assigned in this document to an "obstetrician" according to their specific practitioner group requirements; for example to general practitioner obstetricians, specialist obstetricians, consultants, senior registrars and obstetric fellows.
Pelvic floor muscle exercises	Exercises aimed at strengthening abdomino-pelvic and pelvic floor muscles.
Pelvic floor muscle training	A program of exercises used to rehabilitate the function of the pelvic floor muscles.
Perineal injury	Includes perineal soft tissue damage, tearing and episiotomy.
Perineal tears	Includes perineal tearing but not injury such as bruising, swelling, surgical incision (episiotomy).
Reinfibulation	A procedure that reinstates infibulation. ²
Restrictive use episiotomy	Where episiotomy is not used routinely during spontaneous vaginal birth but only for specific conditions (e.g. selective use in instrumental deliveries or if fetal compromise). ⁷
Modified Ritgen's manoeuvre	Lifting the fetal chin anteriorly by using the fingers of one hand placed between anus and coccyx, and thereby extending the fetal neck, while the other hand is placed on the fetal occiput to control the pace of expulsion of the fetal head. The modification in the manoeuvre is used during a uterine contraction rather than between contractions. ⁸
Sitz bath	Warm bath to which salt has been added. ⁹
Slow birth of fetal head	Refers to measures taken to prevent rapid head expulsion at the time of crowning (e.g. counterpressure to the head (as needed) and minimising active pushing, it does not include measures such as fetal head flexion or the Ritgen manoeuvre).

Table of Contents

1	Introduction.....	6
1.1	Definition of perineal injury	6
1.2	Perineal tear classification	6
1.3	Counselling of women	7
1.4	Clinical training	7
2	Risk factors for anal sphincter injury	8
3	Antenatal risk reduction.....	8
3.1	Digital perineal massage	9
3.2	Pelvic floor muscle exercises.....	9
3.3	Perineal stretching device.....	10
3.4	Deinfibulation for female genital mutilation.....	11
4	Intrapartum risk reduction.....	12
4.1	Intrapartum clinical measures.....	12
4.1.1	Perineal techniques for the second stage of labour	13
4.2	Intrapartum interventions	14
4.3	Uncorroborated clinical measures	15
5	Postpartum perineal examination and repair	16
5.1	Perineal examination	16
5.1.1	Systematic perineal assessment	16
5.2	Perineal repair	17
6	Puerperal genital haematoma	18
6.1	Diagnosis of puerperal haematoma.....	18
6.2	Treatment and care of puerperal haematoma	19
7	Postpartum perineal care	20
7.1	Minimising pain and the risk of infection.....	20
7.2	Promoting perineal recovery.....	21
7.3	Follow-up	22
7.3.1	Prognosis following repair of anal sphincter injury	22
	References	23
	Appendix A: Pelvic floor muscle exercises	28
	Appendix B: Female genital mutilation classification and country.....	29
	Acknowledgements.....	30

List of Tables

Table 1.	Types of perineal injury	6
Table 2.	Types of perineal tearing	6
Table 3.	Digital perineal massage	9
Table 4.	Pelvic floor muscle exercises	9
Table 5.	Perineal stretching device	10
Table 6.	Care considerations for female genital mutilation	11
Table 7.	Intrapartum clinical measures.....	12
Table 8.	Second stage of labour perineal techniques	13
Table 9.	Intrapartum interventions.....	14
Table 10.	Uncorroborated clinical measures.....	15
Table 11.	Systematic perineal assessment.....	16
Table 12.	Perineal repair	17
Table 13.	Diagnosis of puerperal genital haematoma.....	18
Table 14.	Care of puerperal genital haematoma.....	19
Table 15.	Postnatal measures to reduce perineal pain and infection risk.....	20
Table 16.	Postnatal measures to promote perineal recovery.....	21
Table 17.	Post perineal repair follow-up	22

1 Introduction

Perineal injury is the most common maternal morbidity associated with vaginal birth.¹⁰ Anal sphincter injury is a major complication that can significantly affect women's quality of life.¹¹ In Queensland in 2010¹²:

- Genital tract trauma affected 71.5% of women giving birth vaginally
- The majority of tears were minor, involving only the perineal skin or underlying muscles
- Where trauma was reported, 2.4% involved the anal sphincter
- For women birthing vaginally the overall risk of anal sphincter injury (3rd and 4th degree tears) was 1.7%

1.1 Definition of perineal injury

Anatomically the perineum extends from the pubic arch to the coccyx and is divided into the anterior urogenital triangle and the posterior anal triangle.¹³ Types of perineal injuries are defined in Table 1.

Table 1. Types of perineal injury

Type	Definition
Anterior perineal injury	Injury to the labia, anterior vagina, urethra or clitoris ¹³
Posterior perineal injury	Injury to the posterior vaginal wall, perineal muscles or anal sphincter that may include disruption to the anal epithelium ¹³
Episiotomy	A surgical incision intentionally made to increase the diameter of the vulval outlet to aid delivery ¹³
Female genital mutilation	A cultural or non-therapeutic procedure that involves partial or total removal of female external genitalia and/or injury to the female genital organs ¹⁴

1.2 Perineal tear classification

Perineal injuries sustained during childbirth are most often classified by the degree to which the perineum tears. The perineal tear definitions in Table 2 are aligned with the Australian Council on Healthcare Standards (ACHS) Obstetric Clinical Indicators (Version 6, 2010).¹¹

Table 2. Types of perineal tearing

Type	Definition
Intact	No tissue separation at any site ¹⁵
First degree	Injury to the skin only ^{11,16} (i.e. involving the fourchette, perineal skin and vaginal mucous membrane; but not the underlying fascia and muscle ¹⁷ sometimes referred to as a 'graze')
Second degree	Injury to the perineum involving perineal muscles but not involving the anal sphincter ^{11,13,17}
Third degree	Injury to perineum involving the anal sphincter complex ^{11,16} : <ul style="list-style-type: none"> • 3a: Less than 50% of external anal sphincter thickness torn • 3b: More than 50% of external anal sphincter thickness torn • 3c: Both internal and external anal sphincter torn
Fourth degree	Injury to perineum involving the anal sphincter complex (external and internal anal sphincter) and anal epithelium ^{11,16} (i.e. involving anal epithelium and/or rectal mucosa)

1.3 Counselling of women

To reduce the risk of morbidity and to promote collaborative care:

- Inform women antenatally of the overall risks of perineal injury associated with vaginal birth [refer to Section 1]
- Provide antenatal and intrapartum counselling to women who may be at increased risk of anal sphincter injury
- Provide emotional support, reassurance and adequate information prior to undertaking repair procedures¹⁰
 - Encourage presence of women's preferred support person(s)
 - Encourage women to report ineffective pain relief
- Give written information and fully inform women, particularly when there is anal sphincter injury, about^{16,18}:
 - The nature and extent of the injury
 - Details of short and any long term morbidity and treatment
 - Benefits and importance of required follow up
- Counsel women undergoing deinfibulation and seek involvement from health care professionals experienced in the care of women with female genital mutilation [also refer to Section 3.4]
- Utilise interpreter services for women from a non-English speaking background
- Document outcomes of discussions in the woman's record
- For counselling of women prior to discharge refer to Section 7

1.4 Clinical training

Appropriately trained health care professionals are more likely to provide a consistently high standard of perineal assessment and repair.^{7,16,19} Perineal assessment training is important because:

- Increased vigilance, particularly in the presence of risk factors, can double the detection rate of severe perineal injury and reduce associated morbidity¹⁶
- Failure to detect and repair anal sphincter tears has resulted in a poorer outcome for those women, and occasionally, recourse to litigation for substandard care^{16,20}

Recommendations for staff training include:

- Midwifery and medical education and skills training on antenatal and intrapartum risk reduction measures [refer to Sections 2 and 4] to minimise perineal morbidity^{8,21}
- Audiovisual aids¹⁰ with information on the principles of recognition and management of perineal trauma^{18,20,22}
- Surgical skills workshops with the use of models^{10,18}
- Case scenarios and perineal repair simulation exercises^{10,18}
- As part of obstetric training, formal training (as per the Royal Australian and New Zealand College of Obstetrics and Gynaecology credentialing processes) in anal sphincter repair techniques¹⁶
- Physiotherapists – attendance at an accredited course in pelvic floor muscle assessment and rehabilitation
- Use of local procedures to set a minimum standard for staff training, competency development and recognition of previous skills training in perineal assessment and repair

2 Risk factors for anal sphincter injury

Knowledge of anal sphincter injury risk factors is not generally useful in the prevention or prediction of anal sphincter injury.¹⁶ However, risk factor awareness when combined with thorough perineal examination may increase detection rates.¹⁶ Risk factors for third and fourth degree tears include:

- Primiparity^{16,23-27} including vaginal birth after primary caesarean section^{28,29}
- Asian ethnicity^{23,27,30}
- Infibulation of genitalia^{7,31}
- Previous anal sphincter disruption³²
- Induction of labour^{16,23,29}
- Persistent fetal occipitoposterior position^{16,27,29}
- Augmented labour²³
- Epidural analgesia^{16,23,29}
- Second stage longer than 1 hour^{16,24}
- Episiotomy^{23,24,26,28}, particularly midline^{16,33}
- Instrumental delivery^{23,27,28,33} particularly forceps^{16,24-26}
- Shoulder dystocia^{16,23,28}
- Birth weight over 4 kg^{16,23,28,33}

3 Antenatal risk reduction

Offer all women information and antenatal education on measures that may have a protective effect against perineal morbidity. This includes measures that protect against:

- Perineal injury (incidence or severity)
- Perineal pain, and/or
- Pelvic floor dysfunction

Inform women also about the importance of reducing the incidence of episiotomy which confers an increased risk of second degree or worse tear in a subsequent birth.³⁴

Undertake perineal assessment early in the antenatal period (e.g. by detailed history taking, visual inspection) and consult with an obstetrician if a history of anal sphincter trauma or genital mutilation is identified.

3.1 Digital perineal massage

Table 3. Digital perineal massage

Digital perineal massage	
Risks/benefits ³⁵	<ul style="list-style-type: none"> • Injury incidence – massage makes no measurable difference to the overall rate of perineal tearing • Injury severity – massage does reduce the rate of perineal injury requiring suturing (mainly episiotomy) in primigravidae: <ul style="list-style-type: none"> ○ Optimal frequency for massaging is 3 times per fortnight ○ <i>More frequent massaging decreases this protective effect</i> • Massage may cause transient discomfort in the first few weeks • Massaging in the presence of infection (e.g. genital herpes, thrush) may damage the vaginal mucosa and or cause infection to spread • Perineal pain (not related to episiotomy) is less likely to be reported by women at 3 months postpartum if they performed massage
Technique	<ul style="list-style-type: none"> • Commence massage at or near 35 weeks³⁵ and perform no more than 3 times per fortnight • Gently insert thumbs or 1-2 fingers, 3-5 cm into the vagina, and firmly sweep in a downward and side to side motion for 5 minutes, using a natural oil for lubrication³⁶ (avoid nut based oils if known allergies) • Warn of associated painful burning sensation which diminishes over time³⁶ • Advise not to massage if genital herpes or vaginal infection present • Most women consider partner's involvement as positive^{35,36}
Recommendations:	
<ul style="list-style-type: none"> • Inform women about the technique and the likely benefit of perineal massage³⁵ • Include information in antenatal education classes 	

3.2 Pelvic floor muscle exercises

The strengthening of the pelvic floor muscles [refer to Table 4] in the antenatal period can reduce women's risk of experiencing postnatal incontinence.³⁷

Table 4. Pelvic floor muscle exercises

Pelvic floor muscle exercises	
Risks/benefits	<ul style="list-style-type: none"> • Intensive antenatal pelvic floor muscle exercises (PFME): <ul style="list-style-type: none"> ○ Reduce urinary incontinence in late pregnancy and the postpartum period^{37,38} ○ Protect against postnatal faecal incontinence³⁷ ○ May be more beneficial for women with risk factors (e.g. large baby, previous forceps birth³⁷) • For full benefit women need to adhere to exercise regime which requires education, support and supervision³⁹
Technique	<ul style="list-style-type: none"> • No standardised program³⁹ [refer to Appendix A for an example program] • Offer multifaceted PFME antenatal education that includes³⁹: <ul style="list-style-type: none"> ○ Two antenatal sessions that demonstrate PFME ○ Aids to encourage adherence (e.g. reminder strategies) ○ An information booklet ○ A time efficient home training program • Include a physiotherapist in antenatal care and/or education
Recommendation:	
Provide women with antenatal education regarding PFME and encourage adherence throughout pregnancy. ³⁷⁻³⁹	

3.3 Perineal stretching device

Women may choose to purchase and use a perineal stretching device (Epi-No[®]) [refer to Table 5] to stretch the vagina and perineal tissues in preparation for fetal expulsion.⁴⁰

Table 5. Perineal stretching device

Perineal stretching device	
Risks/benefits	<p>Three studies⁴⁰⁻⁴² involving primiparous/primigravidae women show the device:</p> <ul style="list-style-type: none"> • May be associated with bleeding, pain, contractions and dislocation of the balloon device in the vagina during training • Is not associated with vaginal infection if hygiene instructions are followed⁴⁰ • Injury incidence – reduces the likelihood of an episiotomy in high episiotomy-use settings^{40,41} • Increases the incidence of intact perineum^{40,42} not fully explained by a reduction in episiotomy rate <ul style="list-style-type: none"> ○ Does not consistently affect the overall rate of perineal tearing⁴⁰⁻⁴² • Possibly may reduce severity of perineal trauma⁴¹ (very small study, n=32) • Has no observed negative influence on the pelvic floor (i.e. bladder neck mobility, pelvic floor contraction strength)⁴⁰
Technique⁴²	<ul style="list-style-type: none"> • Commence between 37 weeks and term • Perform technique for 15 minutes daily for 14 consecutive days • Insert balloon device into lower vagina • Pump-up gently until balloon is firm and then until a feeling of distension (with no pain) • Use vaginal muscles to control expulsion • Use guiding hand as necessary • Wash device with soap and water after use
Recommendations:	
<ul style="list-style-type: none"> • There is insufficient high quality evidence to promote the general use of this stretching device • Encourage women to continue to perform perineal digital massage and PFME 	

3.4 Deinfibulation for female genital mutilation

Perineal assessment is recommended for women who come from countries where female genital mutilation (FGM) is performed [refer to Appendix B]. Infibulated genital mutilation increases the risk of perineal injury³¹ and requires specialised care during childbirth

NB: Women with FGM may suffer from post traumatic stress disorder³¹ and experience flashbacks to the original FGM procedure during painful obstetric procedures.^{2,31,43} Detailed review of psychosocial care during pregnancy and childbirth is beyond the scope of this guideline.

Table 6. Care considerations for female genital mutilation

Considerations	Good practice points
Communication	<ul style="list-style-type: none"> • Use terminology such as 'female cutting' and avoid terminology that may be perceived as endorsing this practice (e.g. 'Sunna'²) • Have a kind, culturally sensitive, non-judgemental manner^{2,31} • Use approved interpreter services (female, unknown to woman and family)² • Include woman's preferred support person(s) (do not use as an interpreter)² • Offer social worker support
Antenatal care	<ul style="list-style-type: none"> • Seek advice from an obstetrician, midwife or other practitioner experienced in the care and counselling of women with FGM^{31,43}; refer as needed • Offer mental health referral as needed³¹ • Offer late 2nd trimester deinfibulation as an elective procedure^{7,31,44}: <ul style="list-style-type: none"> ○ Consider psychological needs when deciding anaesthesia ○ Use visual aids to explain anatomical changes ○ Discuss post surgery changes to flow of urine⁴⁴, menses and leukorrhoea • Inform women that during birth: <ul style="list-style-type: none"> ○ Vaginal assessment, catheterisation and fetal scalp clip application may be difficult^{7,44} ○ There is an increased risk of spontaneous tearing⁷ ○ Anterior episiotomy is required in 90% of cases³¹ ○ Gender of care providers is subject to availability of skilled staff ○ Reinfibulation is not offered due to associated health risks and legislative restrictions⁴³ <ul style="list-style-type: none"> ▪ Offer referral to expert counselling services to reduce risk of non-medical reinfibulation • It is important that the FGM type and mutual decisions about deinfibulation, birth plans and perineal resuturing are documented by the obstetrician³¹ <ul style="list-style-type: none"> ○ As far as possible, attend antenatally before the start of labour
Intrapartum care	<ul style="list-style-type: none"> • Consider IV access³¹ • If vaginal examinations are distressing than offer an epidural to reduce the risk of psychological harm³¹ • If anterior midline episiotomy required³¹: <ul style="list-style-type: none"> ○ Ensure adequate anaesthesia to reduce risk of traumatic flashbacks; either regional³¹ or local^{2,31} <ul style="list-style-type: none"> ▪ Weigh risks and benefits of anaesthesia ▪ Consider timing and accessibility ○ Catheterise first if possible, then ○ Start at the posterior end and cut along the vulval excision scar ○ Be vigilant at the anterior end so as not to cut into a buried clitoris⁴⁴ or urethral meatus² • Perform deinfibulation prior to assessing the need for posterior episiotomy² <ul style="list-style-type: none"> ○ For posterior episiotomy avoid midline cutting due to increased risk of anal sphincter injury and cultural restrictions²
Postnatal care	<ul style="list-style-type: none"> • Repair requires control of bleeding, placing subcuticular sutures on each side of the incision⁴⁴, apposing raw edges and preventing spontaneous reinfibulation³¹ • Ensure adequate postnatal analgesia³¹ • Arrange 6 week postnatal follow up with an obstetrician

4 Intrapartum risk reduction

The following clinical measures [refer to Table 7] and interventions [refer to Table 9] are shown to influence the risk of perineal injury and/or pain.

4.1 Intrapartum clinical measures

Table 7. Intrapartum clinical measures

Clinical measures	Risks and benefits
Maternal position	<ul style="list-style-type: none"> • A systematic review (of studies with variable quality), comparing positions in the second stage of labour showed that⁴⁵ <i>in relation to perineal morbidity</i>: <ul style="list-style-type: none"> ○ Upright positions versus supine positions: <ul style="list-style-type: none"> ▪ Reduced reports of severe pain at birth ▪ Reduced rates of episiotomies and assisted vaginal deliveries ▪ Increased the rate of second degree tears ▪ Had no effect on the rate of third or fourth degree tears ○ Use of birth stools/chairs versus supine positions: <ul style="list-style-type: none"> ▪ Reduced the rate of episiotomies ▪ Increased the rate of second degree tears • A more recent lower level study suggests the need for perineal suturing is²⁹: <ul style="list-style-type: none"> ○ Less in the hands-knees and left lateral (with regional anaesthetic) positions ○ Associated with semi-recumbent positions
Pushing techniques	<ul style="list-style-type: none"> • Refer to Table 10, Uncorroborated clinical measures • A longer period of active pushing is linked to increased perineal pain at time of hospital discharge in women with nil or minor trauma⁴⁶ <ul style="list-style-type: none"> ○ Encourage women to commence active pushing in response to their own urges, when maternal/fetal wellbeing evident • Slowing the birth of the fetal head at the time of crowning may reduce the risk of perineal trauma⁴⁷ i.e. by: <ul style="list-style-type: none"> ○ Discouraging active pushing at this time, or ○ Using maternal effort between contractions when attempting fetal head delivery¹⁵
Hands-on and hands-poised (or off) techniques	<ul style="list-style-type: none"> • Both techniques incorporate the use of counter pressure to the fetal head to prevent rapid head expulsion⁴⁸ • Neither hands-poised (or off) or hands-on (with or without modification) reduces the overall rate of perineal trauma or the risk of severe perineal tears⁴⁸ <ul style="list-style-type: none"> ○ The modified 'Ritgen' manoeuvre compared to standard hands-on technique has no significant effect on the incidence of 3rd and 4th degree tears⁴⁸ • Hands-on reduces 'mild' perineal pain for up to 10 days post birth with no significant effect on 'moderate' or 'severe' pain levels³ • Hands-poised (or off) results in fewer episiotomies⁴⁸ • Hands-poised (or off) is used in water birth to minimise tactile stimulation • Technique used requires women's informed consent
Perineal techniques	<ul style="list-style-type: none"> • Refer to Table 8. Second stage of labour perineal techniques
Recommendations:	
<ul style="list-style-type: none"> • Evidence currently does not support specific pushing techniques or positions <i>for the protection of the perineum</i> during active pushing, therefore encourage women to: <ul style="list-style-type: none"> ○ Adopt comfortable positions⁴⁵ ○ Be guided by their own urge to push⁷ • High level evidence reports no significant difference between the hands-on or hands-poised (or off) technique in reducing the incidence or severity of perineal tears⁴⁸ • To prevent rapid head expulsion at the time of crowning consider⁴⁸: <ul style="list-style-type: none"> ○ Minimising active pushing ○ Applying counter pressure to the fetal head 	

4.1.1 Perineal techniques for the second stage of labour

Discuss with women during pregnancy the following intrapartum perineal techniques which are recently reported to significantly reduce the incidence of severe perineal trauma.⁴⁸ **Respect women's right to decline these techniques** as:

- The perineum is particularly sensitive to touch during birth
- Women may value avoiding invasive vaginal procedures (e.g. perineal massage) over reducing risk of perineal injury

Table 8. Second stage of labour perineal techniques

Techniques	Description
Perineal warm packs	<ul style="list-style-type: none"> • Packs applied during the second stage of labour reduce the risk of third and fourth degree tears⁴⁸ and intrapartum perineal pain (has a continuing effect for 1-2 days post birth)^{15,49} <p>Technique</p> <ul style="list-style-type: none"> • Use standard hospital perineal pad⁴⁹ • Ensure safe temperature prior to application⁵⁰ by: <ul style="list-style-type: none"> ○ Adding 300mls of boiling water to 300mls of cold tap water (pour cold water first) – replace water entirely every 15 minutes or as needed ○ DO NOT 'top up' or add hot water as this increases the risk of burning • Check the woman is able to discriminate between cold (e.g. apply cool pack or ice first) and then, if cold felt, apply warm pack to perineum • DO NOT use when skin has reduced thermal sensitivity (e.g. epidural) • Warn the woman about the risk of overheating and to report any discomfort • Apply lightly, without undue pressure, and check skin after each application • Stop at the woman's request or if discomfort expressed
Perineal massage	<ul style="list-style-type: none"> • Use of perineal massage when compared to 'hands-off' or 'care as usual' is associated with a significant reduction in the risk of third and fourth degree tears⁴⁸ <p>Technique^{15,51}</p> <ul style="list-style-type: none"> • Use a sterile, water-soluble lubricant to reduce friction <ul style="list-style-type: none"> ○ Do not use chlorhexidine based creams⁵² • Gently insert 2 gloved fingers just inside the woman's vagina and move from side to side • Lateral strokes should last 1 second in each direction and apply mild downward pressure (toward the rectum) • The amount of downward pressure is dictated by the woman's response • Avoid strokes that are rapid or involve sustained pressure • Massage during contractions (consider use between pushes), regardless of maternal position • Stop at the woman's request or if discomfort expressed
<p>Recommendations:</p> <p>In the second stage of labour:</p> <ul style="list-style-type: none"> • Offer women with normal skin sensation perineal warm packs to reduce the risk of 3rd and 4th degree tears⁴⁸ and to reduce perineal pain^{15,50} • Offer women perineal massage to reduce the risk of 3rd and 4th degree tears⁴⁸ • Ensure perineal techniques are only performed with women's informed consent 	

4.2 Intrapartum interventions

Table 9. Intrapartum interventions

Interventions	Risks and benefits
Epidural	<ul style="list-style-type: none"> • Makes no difference per se to the rates of perineal trauma requiring suturing when compared to no epidural or no analgesia⁵³ • Increases risk of instrumental delivery which is a risk factor for anal sphincter injury^{53,54} • More recent, lower level evidence suggests epidural used in combination with forceps and episiotomy may increase the overall risk of anal sphincter tearing in primigravidae women⁵⁴ <ul style="list-style-type: none"> ○ No study found that included multiparous women
Episiotomy	<ul style="list-style-type: none"> • In 2009 the National episiotomy rate for vaginal births was reported as 12.7% with the Queensland rate being 12.6%⁵⁵ • The ACHS recommended target episiotomy rate is simply 'low'¹¹ <p>Technique principles:</p> <ul style="list-style-type: none"> • Obtain the woman's informed consent and document • Administer and check that analgesia is effective prior to procedure • Cut an episiotomy by starting at the fourchette and directing the incision away from the perineal midline at an angle of 45 to 60 degrees⁷ so as to reduce the risk of anal sphincter injury^{7,16} <p>Restricted episiotomy use:</p> <ul style="list-style-type: none"> • Applies criteria to the use of episiotomy (e.g. fetal compromise, selective use in instrumental vaginal birth⁷) • Requires the use of clinical judgement • Increases anterior perineal tears (minimal morbidity)¹⁷ • Decreases¹⁷: <ul style="list-style-type: none"> ○ Posterior perineal injury ○ Severe perineal trauma ○ Need for suturing ○ Healing complications at 7 days postpartum • May have beneficial effects on the incidence and persistence of postpartum perineal pain⁴⁶ • Reduces the rate of episiotomy in the first birth which decreases the risk of perineal trauma in subsequent births^{34,56}
Instrumental vaginal birth	<ul style="list-style-type: none"> • Forceps compared to Ventouse are associated with higher risk of⁵⁷: <ul style="list-style-type: none"> ○ Episiotomy ○ 3rd and 4th degree tears with or without episiotomy ○ Vulval and vaginal trauma ○ Flatus incontinence or altered continence ○ Requirement for general anaesthetic • The lower the fetal head on application of forceps or vacuum the less risk of anal sphincter tears²⁸ • Other clinical factors may influence the operator's choice of instrument⁵⁷
<p>Recommendations:</p> <ul style="list-style-type: none"> • Implement a restrictive-use episiotomy policy^{7,58} • Perform an episiotomy if there is a clinical need such as selective use in instrumental births or for suspected fetal compromise⁷ • Cut a mediolateral episiotomy when indicated – start with the angle of the open scissors at the fourchette and cut away from the midline at an angle of 45 to 60 degrees^{7,16,57} • Use a vacuum extractor rather than forceps for assisted vaginal delivery when clinically possible⁵⁷ 	

4.3 Uncorroborated clinical measures

Current levels or quality of clinical evidence do not support the following measures to *significantly reduce perineal morbidity*.

Table 10. Uncorroborated clinical measures

Period	Uncorroborated clinical measures
Antenatal	<ul style="list-style-type: none"> • Raspberry leaf tea or extract^{59,60}: <ul style="list-style-type: none"> ○ Insufficient evidence to recommend a safe standard for use ○ Unable to specify if the 'raspberry tea extract' used in the published evidence is consistent with other available products of the same name in terms of: <ul style="list-style-type: none"> ▪ Part of the plant used ▪ Preparation methods ▪ Manufacturing processes ▪ Equivalent dry weight ▪ Dose of active components⁶¹
Intrapartum	<ul style="list-style-type: none"> • Water birth^{62,63} • Perineal lubrication¹⁵ • Hyaluronidase injection⁶⁴ • Valsalva over spontaneous pushing techniques⁶⁵ – quality research needed regarding potential effects on pelvic floor structure and function • Delayed pushing versus immediate pushing for nulliparous women with epidural anaesthesia⁶⁶ • Midwifery led-care⁶⁷ • Continuous one on one support⁶⁸
Postnatal	<ul style="list-style-type: none"> • Perineal ultrasound to treat perineal pain or dyspareunia⁶⁹ • Topical anaesthetics for perineal pain⁷⁰ • Sitz baths⁷¹ • Herbal remedies (e.g. arnica) topical or ingested^{60,71}: <ul style="list-style-type: none"> ○ Insufficient evidence to recommend a safe standard for use ○ Unable to specify if the 'herbal remedies' used in the published evidence is consistent with other available products of the same name (as above)⁶¹ • Ray lamps

NB: The use of perineal 'donut' cushions is not recommended due to possible formation of dependent perineal oedema which increases the risk of perineal wound breakdown

5 Postpartum perineal examination and repair

Accurate diagnosis and effective care of perineal injuries requires systematic perineal assessment⁷² [refer to Table 11] and best practice repair techniques [refer to Table 12].

5.1 Perineal examination

Maternal considerations:

- Ensure privacy and cultural sensitivity
- Provide support to the woman and her baby:
 - Encourage the woman's preferred support person(s) to be present
- Gain co-operation through informed consent⁷³:
 - Discuss the need to perform vaginal and rectal examinations
- Ensure adequate pain relief⁷³ prior to and during the procedure (e.g. nitrous gas, epidural):
 - Note that 16% of women report severe pain levels during perineal procedures⁷⁴

Procedural practice points:

- Optimise visualisation through lighting and maternal positioning (e.g. dorsal or lithotomy):
 - Ensure maternal comfort⁷³
- Ensure procedure is performed by an experienced practitioner trained in perineal assessment and alert to risk factors¹⁶ [refer to Section 2]
- Undertake a systematic assessment of perineal structures using an aseptic technique [refer to Section 5.1.1]
- Refer to a more experienced clinician if there is doubt as to the extent of the injury⁷³
- Discuss findings and treatment with the woman at the conclusion of the procedure⁷⁵
- Document assessment techniques and findings^{73,75}

5.1.1 Systematic perineal assessment

- In the event of instrumental birth or extensive perineal trauma have a medical practitioner trained in recognition and management of perineal tears perform perineal assessment¹⁶
- Midwives require sufficient assessment skills to be able to reliably identify and refer severe perineal trauma, if in any doubt refer for medical review
- Visual examination alone often results in underestimation of the degree of trauma⁷³

Table 11. Systematic perineal assessment

Systematic perineal assessment ⁷³	
Visual examination	<ul style="list-style-type: none"> • Check the periurethral area, labia and proximal area of the vaginal walls • Check if the perineal tear extends to the anal margin or anal sphincter complex • Check for absence of anal puckering around the anterior aspect of the anus (between 9 and 3 o'clock) as may suggest anal sphincter trauma
Vaginal examination	<ul style="list-style-type: none"> • Establish extent of the tearing by inserting the index and third fingers high into the vagina, separate the vaginal walls before sweeping downward to reveal the cervix, vaginal vault, side walls, floor and the posterior perineum • Identify the apex of the injury, using vaginal retractors if required
Rectal examination	<ul style="list-style-type: none"> • Insert the index finger into the anus and ask the woman to squeeze: <ul style="list-style-type: none"> ○ The separated ends of a torn external anal sphincter will retract backwards and a distinct gap will be felt anteriorly • When regional analgesia affects muscle power, assess for gaps or inconsistencies in the muscle bulk of the sphincter by placing the index finger in the anal canal and the thumb in the vagina and palpate by performing a 'pill-rolling motion' • Assess the anterior rectal wall for overt or occult tears by palpating and gently stretching the rectal mucosa with the index finger • Note that it is often difficult to determine if the internal anal sphincter is damaged. Careful inspection by an expert medical practitioner is required

5.2 Perineal repair

In addition to perineal examination considerations, perineal repair requires:

Maternal considerations:

- Gain informed consent for the repair¹³, discuss functional and/or cosmetic changes
- Time as soon as practicable after birth – balance risk of infection and blood loss with support of uninterrupted skin-to-skin contact post birth⁷

Procedural practice points:

- Ensure adequate topical⁷⁶, local, regional or general anaesthetic
- Ensure operator is competent in repair techniques or has direct expert supervision
- Refer to local workplace instructions for detailed procedural instruction
- Ensure availability of an appropriate selection of suture materials^{13,16}
- Count/document needles, radio-opaque swabs or packs before and after procedure⁷⁵
- Document: consent, anaesthetic, suture technique/materials, estimated blood loss, post-repair haemostasis and rectal assessment, advice given, date/time and operator's ID

Table 12. Perineal repair

Degree of injury	Good practice points
1st degree repair	<ul style="list-style-type: none"> • Suturing is not required if haemostasis is evident¹⁰ and anatomical structures are apposed, unless suturing is preferred by the woman to reduce pain⁷⁷ • Repair skin with continuous subcuticular sutures or consider surgical glue⁷⁸ • Re clitoral tears – large volumes of local anaesthetic can damage nerve supply
2nd degree repair	<ul style="list-style-type: none"> • Limited evidence comparing outcomes of suturing versus non-suturing⁷⁹: <ul style="list-style-type: none"> ○ Suturing improves short term healing in first 5 days⁷² and up to 6 weeks post birth⁸⁰ – with comparable healing after this point^{72,81} ○ Lack of data on long term outcomes i.e. dyspareunia or incontinence⁷⁹ ○ No difference in pain scores^{72,79} yet non-suturing is associated with: <ul style="list-style-type: none"> ▪ Less use of analgesia^{72,81}, less reports of negative influence on breastfeeding⁸¹, earlier return to feeling 'normal', starting PFME⁷² • Ensure informed decision⁷⁹, if repair declined offer care as per Section 7 • To facilitate healing use: <ul style="list-style-type: none"> ○ Rapid absorbing synthetic suture (e.g. 2.0 Vicryl Rapide[®])^{7,77} ○ Continuous, non-locking suture technique for all layers (skin, vagina, perineal muscles) with a subcuticular stitch^{77,82} or glue⁸³, for the skin • Undertake rectal examination post repair to exclude suture penetration⁷³
3rd and 4th degree repair	<ul style="list-style-type: none"> • Anal sphincter repair is to be carried out or directly supervised by an expert practitioner (obstetrician)¹⁶ to minimise risk of morbidity (e.g. fistula formation) • Will usually require transfer to operating theatre, except in exceptional cases • Use of an operating theatre for repair ensures¹⁶: <ul style="list-style-type: none"> ○ Aseptic technique ○ Access to optimal lighting and equipment ○ Adequate instrumentation and assistance • Use of regional or general anaesthetic enables¹⁶: <ul style="list-style-type: none"> ○ Anal sphincter relaxation ○ Retrieval of retracted torn ends ○ Approximation of the torn sphincter without tension • Use an over lapping or end-to-end method for primary repair^{16,84}: <ul style="list-style-type: none"> ○ At 12 months the overlapping method has lower incidence of faecal urgency and lower faecal incontinence scores^{15,54,81} • Repair: <ul style="list-style-type: none"> ○ Internal anal sphincter separately with interrupted sutures using a fine suture size (e.g. 3-0 PDS (polydioxanone) or 2-0 Vicryl[®] (polyglactin)¹⁶) ○ External anal sphincter with either PDS or Vicryl[®]¹⁶ ○ Anal epithelium with interrupted 2-0 Vicryl[®] (polyglactin) suture with the knots tied in the anal lumen ○ For long acting or non-absorbable suture materials, bury knots beneath superficial perineal muscle to prevent knot migration to skin¹⁶
Deinfibulation	<ul style="list-style-type: none"> • Refer to Table 6. Care considerations for women with FGM

6 Puerperal genital haematoma

Up to 87% of haematomas are associated with sutured perineal injuries; others can occur with an intact perineum.⁸⁵ Indirect injury can occur from radial stretching of the birth canal as the fetus passes through.⁸⁵

6.1 Diagnosis of puerperal haematoma

Timely diagnosis [refer to Table 13] can reduce the risk of maternal morbidity or death.

Table 13. Diagnosis of puerperal genital haematoma

Considerations	Good practice points
Presentation	<p>Presentation is dependent on the haematoma site, volume and rate of formation⁸⁵:</p> <ul style="list-style-type: none"> • Hallmark symptom is excessive pain or pain that is persistent over a few days⁸⁵ • Pain location varies according to the haematoma site⁸⁵: <ul style="list-style-type: none"> ○ Perineal pain may indicate a vulval/vulvovaginal haematoma ○ Rectal or lower abdominal pain may indicate a paravaginal haematoma ○ Abdominal pain may indicate a supravaginal haematoma ○ Shoulder tip pain may or may not be present⁸⁶ • The woman may have⁸⁵: <ul style="list-style-type: none"> ○ Signs of hypovolaemia or symptoms of shock disproportionate to the revealed blood loss ○ Feelings of pelvic pressure ○ Urinary retention ○ An unexplained pyrexia
Assessment and diagnosis	<ul style="list-style-type: none"> • Listen to the woman • Discuss with the woman the possible need for a vaginal and/or rectal examination and ensure adequate analgesia prior to performing • Undertake a thorough examination before attributing symptoms to other causes, check for⁸⁵: <ul style="list-style-type: none"> ○ Vulval haematoma: appears as a swelling on one side of the vulva that may extend into the vagina or fascia of the thigh ○ Paravaginal haematoma: may be felt as a mass protruding into the vaginal lumen or as an ischioanal mass ○ Supravaginal haematomas: may be felt as an abdominal mass causing the uterus to deviate laterally • Consider that vascular disruption (causing haematoma) may be associated with underlying 'macro' or 'micro' levator trauma⁸⁷: <ul style="list-style-type: none"> ○ Clinical diagnosis – detection enhanced using 3 dimensional (3D) or 4D ultrasound techniques, where available⁸⁸ ○ Evidence regarding benefits of surgical repair remains unclear⁸⁹ • If accessible⁹⁰: <ul style="list-style-type: none"> ○ Ultrasound (consider transvaginal) can be used to detect pelvic extraperitoneal haematomas ○ Computerised tomography (CT) and magnetic resonance imaging can identify the exact extent of the haematoma ○ Contrast-enhanced CT can detect active bleeding through extravasation of the intravenous contrast

6.2 Treatment and care of puerperal haematoma

The care outlined in Table 14 is aimed at⁸⁵:

- Preventing further blood loss
- Minimising tissue damage
- Managing pain
- Reducing the risk of infection
- Providing women with information and counselling

Table 14. Care of puerperal genital haematoma

Considerations	Good practice points
Treatment	<p>Is dependent on the size and site of the haematoma:</p> <ul style="list-style-type: none"> • If signs of shock <ul style="list-style-type: none"> ○ [Refer to Guideline: Primary postpartum haemorrhage] ○ Assess pulse, respirations, oxygen saturations and blood pressure every 5 minutes ○ Insert intravenous cannulae⁸⁵ (14g or 16g bilaterally if signs of shock) ○ Full blood count, cross match, group and hold and coagulation profile⁸⁵ ○ Provide aggressive fluid resuscitation if signs of hypovolaemic shock⁸⁵ [refer to] ○ Transfer to operating theatre for surgical procedures⁸⁵ after adequate resuscitation • For large non-haemostatic haematoma – clot evacuation, primary repair and/or tamponade of blood vessels through compression packing (for 12-24 hours)⁸⁵ <ul style="list-style-type: none"> ○ If persistent bleeding consider arterial ligation or embolisation <ul style="list-style-type: none"> ▪ Transfer to higher level service as required ○ Drain insertion is discretionary <ul style="list-style-type: none"> ▪ Monitor drainage for failed haemostasis⁸⁵ ▪ Remove once loss minimal (e.g. less than 50 mL in 12 hours) ○ Administer intraoperative prophylactic antibiotics (e.g. Cephazolin 1 gram (adult 80 kg or more: 2 grams) IV plus Metronidazole 500 milligrams IV at the time of repair⁹¹) ○ Insertion of a urinary catheter to prevent retention and to monitor fluid balance⁸⁵ • For small static haematoma – conservative treatment⁸⁵: <ul style="list-style-type: none"> ○ Early application of ice packs to minimise vulval haematoma • If levator trauma detected refer to a physiotherapist and consider uro/gynaecologist consultation
Postnatal care	<ul style="list-style-type: none"> • Remove any vaginal packing 12-24 hours after procedure • Give prophylactic analgesia prior to pack removal • Offer regular analgesia • Review regularly as recurrence is common⁸⁵, assess: <ul style="list-style-type: none"> ○ Pain levels ○ Blood pressure and pulse ○ Temperature • Check for laboratory signs of coagulopathy and anaemia – treat as required⁸⁵ [Refer to the Primary postpartum haemorrhage guideline] • Offer the woman obstetric debriefing prior to discharge (document in chart) • Advise GP follow up

7 Postpartum perineal care

In the event of significant perineal injury, particularly if anal sphincter injury, offer women clinical disclosure, taking time to:

- Discuss:
 - The nature of the injury
 - The treatment and follow-up required
 - Potential effects on future pregnancies
- Answer questions and explore the woman's responses as part of debriefing
- Document details of the interaction in the woman's chart

Optimal postnatal care requires a multidisciplinary team approach that aims to minimise perineal morbidity [refer to Tables 15 and 16].

7.1 Minimising pain and the risk of infection

Table 15. Postnatal measures to reduce perineal pain and infection risk

Clinical measures	Good practice points
Reduce pain	<ul style="list-style-type: none"> • If tears are in close proximity to the urethra consider an indwelling catheter for 24-48 hours • Apply cold packs or gel pads for 10-20 minute intervals for 24-72 hrs^{92,93} • Advise gentle perineal compression (e.g. straddle rolled hand towel) • Post 2nd degree/episiotomy repair offer rectal non-steroidal anti-inflammatory drugs (NSAID) as reduces use of oral analgesia for first 48 hours⁹⁴ • Offer: <ul style="list-style-type: none"> ○ Oral Paracetamol one gram early in the postnatal period⁹⁵ ○ Oral NSAID^{47,96} in the absence of any contraindications ○ Urinary alkalisers soon after birth to reduce urine acidity and discomfort associated with open wounds⁹⁷ • Minimise use of Codeine and other narcotics to reduce risk of constipation
Other drugs	<ul style="list-style-type: none"> • For women with 3rd and 4th degree tears, administer: <ul style="list-style-type: none"> ○ Prophylactic IV antibiotics to reduce incidence of infection^{16,98,99} (e.g. Cephazolin 1 gram (adult 80 kg or more: 2 grams) IV plus Metronidazole 500 milligrams IV at the time of repair⁹¹) ○ At <i>least</i> 10 days of laxatives and stool softeners to prevent constipation and risk of wound dehiscence¹⁶ and give oral/written advice to: <ul style="list-style-type: none"> ▪ Cease use and see GP if experiencing faecal incontinence ▪ See GP if bowels not open or constipated after discharge • For 4th degree tears (consider for complicated 3rd degree repair): <ul style="list-style-type: none"> ○ Continue IV antibiotics for 24 hours (as above) then ○ Follow with 5 days of oral broad spectrum antibiotics (e.g. Amoxicillin + Clavulanic 500 + 125 milligrams orally, 12-hourly for 5 days⁹¹)

7.2 Promoting perineal recovery

Table 16. Postnatal measures to promote perineal recovery

Clinical measures	Good practice points
Positioning and movement	<ul style="list-style-type: none"> • Advise positions that reduce dependent perineal oedema, particularly in first 48 hours, such as: <ul style="list-style-type: none"> ○ Lying the bed flat and side-lying to rest and breastfeed, try pillow-supported 'recovery' position, avoid overuse of sitting/propped positions • Avoid activities that increases intra-abdominal pressure (IAP) for 6-12 weeks post birth such as: <ul style="list-style-type: none"> ○ Straining, lifting (e.g. use of over-bed bar in hospital), high impact exercise, sit ups – move in/out of bed through a side-lying position
Pelvic floor muscle exercises	<ul style="list-style-type: none"> • Commence 2-3 days postpartum, or when comfortable • For women with a 3rd or 4th degree tear refer to a physiotherapist¹⁶ prior to discharge • Educate all women about the <i>correct</i> technique for PFME and the importance of long term adherence^{16,39,47,97,100} [refer also to Table 4]: <ul style="list-style-type: none"> ○ NOTE: Incorrect technique can cause excessive IAP and repetitive downward displacement of the pelvic floor, over time, may disrupt tissue and muscle healing
Hygiene and healing	<ul style="list-style-type: none"> • Visually assess the repair and healing process at each postnatal check and share findings with the woman • Advise women to: <ul style="list-style-type: none"> ○ Support the perineal wound when defecating or coughing ○ Wash and pat dry the perineal area after toileting⁹⁶ ○ Change perineal pad frequently, wash hands before and after changing and to shower at <i>least</i> daily to keep the perineum clean⁹ ○ Check the wound daily⁹ using a hand mirror – provide education about the signs of infection and wound breakdown ○ Report concerns to their midwife or GP⁹⁶
Diet	<ul style="list-style-type: none"> • Emphasise the importance of a healthy balanced diet to maximise wound healing and prevent constipation⁹⁷ – encourage high fibre food choices • Encourage 1.5-2 litres of water per day if ordered laxatives or Iron therapy • Treat anaemia, as needed, with Iron therapy (consider delaying start for 2 weeks) and/or dietary advice

7.3 Follow-up

Inform women who sustained perineal injury, particularly if suturing was required, of recommended follow-up [refer to Table 16].

Table 16. Post perineal repair follow-up

Follow-up	Good practice points
Prior to discharge – anal sphincter injury	<p>For women with anal sphincter injury:</p> <ul style="list-style-type: none"> • Refer to obstetrician¹⁰⁰ for 6-12 weeks postpartum review • Refer to a physiotherapist for follow up and pelvic floor muscle training (PFMT)¹⁶ • Refer to continence clinics (where available) prior to discharge
Discharge preparation – self care advice till 6 weeks post birth	<p>Advise women with a perineal injury:</p> <ul style="list-style-type: none"> • Obtain GP/midwife review around 6 weeks post partum for assessment of wound healing <ul style="list-style-type: none"> ○ If signs of wound infection or breakdown seek medical review earlier • Continence clinic review or follow-up is required, where available • Report to GP/midwife if experiencing dyspareunia, explain: <ul style="list-style-type: none"> ○ Women with perineal suturing are at increased risk^{101,102} ○ Wound healing is one of many factors that influences the decision to resume sexual intercourse⁹⁷ ○ Ways to minimise discomfort (e.g. experimenting with sexual positions, use of lubrication)⁹⁷ ○ Delayed reporting is common due to median time of return to intercourse being 5-8 weeks postpartum¹⁰¹ • Report to their GP/midwife if ongoing constipation or symptoms of urinary or faecal incontinence <ul style="list-style-type: none"> ○ Refer as indicated
After 6 weeks postpartum	<p>For women with anal sphincter injury and those reporting symptoms of anal sphincter dysfunction:</p> <ul style="list-style-type: none"> • Refer to a gynaecologist or uro-gynaecological or colorectal surgeon • Care considerations may include¹⁶: <ul style="list-style-type: none"> ○ Endoanal ultrasound ○ Anorectal manometry ○ Consideration of secondary sphincter repair • Refer to a physiotherapist for assessment and individualised PFMT to help manage pelvic floor dysfunction

7.3.1 Prognosis following repair of anal sphincter injury

Advise women:

- Following external anal sphincter repair approximately 60-80% of women are asymptomatic at 12 months¹⁶
- Symptomatic women mostly report experiencing incontinence of flatus or faecal urgency¹⁶
- Primary care givers in subsequent pregnancies need to be informed of anal sphincter repair and of any continuing urinary or faecal symptoms
- If symptomatic after repair and/or abnormal ultrasound or manometry findings are present elective caesarean section in subsequent pregnancies may be offered¹⁶:
 - The clinical relevance of asymptomatic defects demonstrated by ultrasound is currently unclear¹⁶
 - Inform women that best practice is unknown and discuss birth options¹⁰⁰
- Vaginal birth in subsequent pregnancies is associated with a 17-24% chance of developing worsening symptoms afterwards¹⁶
- The risk of repeat severe perineal trauma is not increased in subsequent birth, compared with women having their first baby⁷
- There is no evidence to support the use of prophylactic episiotomy in subsequent vaginal births¹⁶

References

1. Crowning.Dictionary.com. Collins English Dictionary Complete and Unabridged, 10th Edition. Harper Collins Publishers. [cited 2011 October 12]. Available from: <http://dictionary.reference.com/browse/Crowning>.
2. Royal Australian College of Obstetricians and Gynaecologists (RACOG). Female genital mutilation: Information for Australian health professionals. 1997.
3. Mc Candlish R, Bowler U, van Asten H, Berridge G, Winter C, Sames L, et al. A randomised controlled trial of care of the perineum during second stage of normal labour. *British Journal of Obstetrics and Gynaecology*. 1998; 105:1262-72.
4. Jonsson E, Elfaghi I, Rydhstrom H, A H. Modified Ritgen's maneuver for anal sphincter injury at delivery: a randomised controlled trial. *Obstetrics and Gynecology*. 2008; 112:212-7.
5. Mayerhofer K, Bodner-Adler B, Bodner K, Rabl M, Kaider A, Wagenbichler P, et al. Traditional care of the perineum during birth. A prospective, randomized, multicenter study of 1,076 women. *The Journal of Reproductive Medicine*. 2002; 47(6):477-82.
6. Da Costa A, Riesco M. A comparison of "Hands off" versus "Hands on" techniques for decreasing perineal lacerations during birth. *Journal of Midwifery and Women's Health*. 2006; 51:106-11.
7. National Institute for Health and Clinical Excellence. Intrapartum Care: care of healthy women and their babies during childbirth. 2007; CG55. London: National Institute for Health and Clinical Excellence.
8. Laine K, Pirhonen T, Rollan R, Pirhonen J. Decreasing the incidence of anal sphincter tears during delivery. *Obstetrics and Gynecology*. 2008; 111(5).
9. Bick D. Postpartum management of the perineum. *British Journal of Midwifery*. 2009; 17(9):571-7.
10. Premkumar G. Perineal trauma: reducing associated postnatal maternal morbidity. *Midwives*. 2005; 8(1):30-2.
11. Australian Council on Healthcare Standards. Clinical Indicator Users' Manual 2010: Obstetric Clinical Indicators Version 6. 2010:11-12.
12. Queensland Health. Perinatal Data Collection. Extracted 27 January 2012.
13. Royal College of Obstetrics and Gynaecologists (RCOG). Perineal Repair. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); Guideline; no. 23. 2004.
14. World Health Organisation. Female genital mutilation: a joint WHO/UNICEF/UNFPA statement. Geneva. 1997.
15. Albers S, Sedler D, Bedrick E, Teaf D, Peralta P. Midwifery care measures in the second stage of labor and reduction of genital tract trauma at birth: a randomised trial. *Journal of Midwifery and Women's Health*. 2005; 50:365-72.
16. 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.
17. 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.
18. Bick D, Kettle C, Macdonald S, Thomas P, Hills C, Ismail K. Perineal Assessment and Repair of Longitudinal Study (PEARLS); protocol for a matched pair cluster trial. *BioMed Central Pregnancy and Childbirth* 10:10 @ <http://www.biomedcentral.com/1471-2393/10/10>. 2010 [cited 2011 October 9].
19. Carstens J. Intrapartum: perineal and genital trauma (tears or episiotomy). The Joanna Briggs Institute. 2010.
20. Symon A. Third degree tears: the three-stage negligence test. *British Journal of Midwifery*. 2008; 16(3):192-3.
21. Hals E, Oian P, T P, M G, Hjelle S, Nilsen E, et al. A multicenter interventional program to reduce the incidence of anal sphincter tears. *Obstetrics and Gynecology*. 2010; 116(4):901-908.
22. A v Heart of England NHS Foundation Trust. Failure to diagnose fourth-degree tear following episiotomy causing injury and loss. *The avMA Medical and Legal Journal*. 2009; 15(3):126.
23. Dahlen H, Ryan M, Homer C, Cooke M. An Australian prospective cohort study of risk factors for severe perineal trauma during childbirth. *Midwifery*. 2006; 23:196-203.
24. Hudelist G, Gellen J, Singer C, Ruecklinger E, Czerwenka K, Kandolf O, et al. Factors predicting severe perineal trauma during childbirth: role of forceps delivery routinely combined with mediolateral episiotomy. *American Journal of Obstetrics and Gynaecology*. 2005; 192:875-81.

25. Christianson L, Bovbjerg V, McDavitt E, Hullfish K. Risk factors for perineal injury during delivery. *American Journal of Obstetrics and Gynecology*. 2003; 189:255-60.
26. Williams A. Third degree perineal tears: risk factors and outcome after primary repair. *Journal of Obstetrics and Gynaecology*. 2003; 23(6):611-14.
27. Groutz A, Hasson J, Wengier A, Gold R, Skornick-Rapaport A, Lessing J, et al. Third and fourth degree perineal tears: prevalence and risk factors in the third millennium. *American Journal of Obstetrics and Gynecology*. 2011; 204:347.e1-4.
28. Richter H, Brumfield C, Cliver S, Burgio K, Neely C, Varner E. Risk factors associated with anal sphincter tear: a comparison of primiparous patients, vaginal births after caesarean deliveries, and patients with previous vaginal delivery. *American Journal of Obstetrics and Gynecology*. 2002; 187(5):1194-8.
29. Soong B, Barnes M. Maternal position at midwife-attended birth and perineal trauma: Is there an association? *Birth*. 2005; 32(3):164-9.
30. Dahlen H, Homer C. Perineal trauma and postpartum morbidity in Asian and Non-Asian primiparous women giving birth in Australia. *Journal of Obstetric, Gynecologic and Neonatal Nursing*. 2008; 37:455-63.
31. Royal College of Obstetrics and Gynaecology (RCOG). Female genital mutilation and its management. London (UK): Royal College of Obstetricians and Gynaecologists (RCOG); Guideline; no. 53. 2003.
32. O'Herlihy C. Obstetric perineal injury: risk factors and strategies for prevention. *Seminars in Perinatology*. 2003; 27(1):13-9.
33. Fenner D, Genberg B, Brahma P, Marek L, DeLancey J. Fecal and urinary incontinence after vaginal delivery with anal sphincter disruption in an obstetric unit in the United States. *American Journal of Obstetrics and Gynecology*. 2003; 189(6):1543-9.
34. Alperin M, Krohn M, Parviainen K. Episiotomy and increase in the risk of obstetric laceration in a subsequent vaginal delivery. *Obstetrics and Gynecology*. 2008; 111:1274-8.
35. 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.
36. Mc Arthur A. Antenatal: Perineal massage. The Joanna Briggs Institute. 2010.
37. 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.
38. Ko PC, Liang CC, Chang SD, Chao AS, Cheng PJ. A randomized controlled trial of antenatal pelvic floor exercises to prevent and treat urinary incontinence. *International Urogynecology Journal*. 2011; 22:17-22.
39. Joanna Briggs Institute. The effectiveness of a pelvic floor muscle exercise program on urinary incontinence following childbirth. *Best Practice*. 2005; 9(2):Blackwell Publishing Asia Australia.
40. Ruckhaberle E, Jundt K, Bauerle M, Brisch K, Ulm K, Dannecker C, et al. Prospective randomised multicentre trial with the birth trainer EPI-NO for the prevention of perineal trauma. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2009; 49:478-83.
41. Kok J, Tan K, Cheng P, Lim W, Yew M, Yeo C. Antenatal use of a novel vaginal birth training device by term primiparous women in Singapore. *Singapore Medical Journal*. 2004; 45(7):318-23.
42. Kovacs G, Health P, Heather C. First Australian trial of the birth-training device Epi-No: a highly significant increased chance of an intact perineum. *Australian and New Zealand Journal of Obstetrics and Gynaecology*. 2004; 44:347-8.
43. Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). College Statement: Female genital mutilation/cutting. RANZCOG. 2007.
44. Nour MN. Female circumcision and genital mutilation. UpToDate® Licensed to Mater Education Centre. 2009 [cited 2011 September 22]. Available from: www.uptodate.com.
45. 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.
46. Leeman L, Fullilove A, Borders N, Manocchio R, Albers L, Rogers R. Postpartum perineal pain in a low episiotomy setting: Association with severity of genital trauma, labor care, and birth variables. *Birth*. 2009; 36(4):283-8.
47. Albers L, Borders N. Minimising genital tract trauma and related pain following spontaneous vaginal birth. *Journal of Midwifery Womens Health*. 2007; 52:246-53.

48. 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.
49. Dahlen H, Homer C, Cooke M, Upton A, Nunn R, Brodrick B. 'Soothing the ring of fire': Australian women's and midwives' experience of using perineal warm packs in the second stage of labour. *Midwifery*. 2009; 25:e39-e48.
50. Dahlen H. 'Soothing the ring of fire': Australian women's and midwives' experience of using perineal warm packs in the second stage of labour. *Midwifery*, 2009. [Personal communication (email) regarding standardisation of warm pads]. 2011.
51. Stamp G, Kruzins G, Crowther C. Perineal massage in labour and prevention of perineal trauma: randomised control trial. *British Medical Journal*. 2001; 322:1277-80.
52. Shippey S, Malan T. Desquamating vaginal mucosa from chlorhexidine gluconate. *Obstetrics and Gynecology*. 2004; 103:1048-50.
53. Anim-Somuah M, Smyth R, Howell C. Epidural versus non-epidural or no analgesia in labour. *Cochrane Database for Systematic Reviews*. 2005; Issue 4. Art. No.: CD000331. DOI:10.1002/14651858.CD000331.pub2.
54. Fitzgerald M, Weber A, Howden N, Cundiff G, Brown M. Risk factors for anal sphincter tear during vaginal delivery. *Obstetrics and Gynaecology*. 2007; 109(1):29-34.
55. Li Z, McNally L, Hilder L, Sullivan EA. Australia's mothers and babies 2009. Perinatal statistics series no. 25. Cat. no. PER 52. Sydney: Australian Institute of Health and Welfare, National Perinatal Epidemiology and Statistics Unit. 2011.
56. Eason E, Labrecque M, Wells G, Feldman P. Preventing perineal trauma during childbirth: a systematic review. *Obstetrics and Gynecology*. 2000; 95(3):464-71.
57. 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.CD0055455.pub2.
58. Sooklim R, Thinkhamrop J, Lumbiganon P, Prasercharoensuk W, Pattamadilok J, Seekorn K, et al. The outcomes of midline versus medio-lateral episiotomy. *Reproductive Health*. 2007; 4:4-10.
59. Simpson M, Parsons M, Greenwood J, Wade K. Raspberry leaf in pregnancy: its safety and efficacy in labor. *Journal of Midwifery and Women's Health*. 2001; 46(2):51-9.
60. Tiran D. The use of herbs by pregnant and childbearing women: a risk-benefit assessment. *Complementary Therapies in Nursing and Midwifery*. 2003; 9:176-81.
61. Australian Government, Department of Health and Aging, Therapeutic Goods Administration. Guidelines for levels and kinds of evidence to support indications and claims for non-registerable medicines, including complementary medicines, and other listable medicines. Version 1.1. 2011.
62. Cluett ER, Burns E. Immersion in water in labour and birth. *Cochrane Database of Systematic Reviews Issue 2*. Art. No.: CD0000111. DOI: 10.1002/14651858.CD000111.pub3. 2009; Issue 2. Art. No.: CD0000111. DOI: 10.1002/14651858.CD000111.pub3.
63. Woodward J, Kelly S. A pilot study for a randomised controlled trial of waterbirth versus land birth. *British Journal of Obstetrics and Gynaecology*. 2004; 111:537-45.
64. Scarabotto L, Riesco M. A pilot study: use of hyaluronidase to prevent perineal trauma during spontaneous delivery. *Journal of Midwifery and Women's Health*. 2008; 53:353-61.
65. Prins M, Boxem J, Lucas C, Huttone E. Effect of spontaneous pushing versus Valsalva pushing in the second stage of labour on mother and fetus: a systematic review of randomised trials. *British Journal of Obstetrics and Gynaecology*. 2011; 118:662-70.
66. Gillesby E, Burns E, Dempsey A, Kirby S, Monensen K, Naylor K, et al. Comparison of delayed versus immediate pushing during second stage of labour for nulliparous women with epidural anaesthesia. *Journal of Obstetric and Gynecologic and Neonatal Nursing*. 2010; 39:635-44.
67. Hatem M, Sandall J, Devane D, Solanti H, Gates S. Midwifery-led versus other models of care for childbearing women. *Cochrane Database of Systematic Reviews*. 2008; Issue 4. Art. No.: CD004667. DOI: 10.1002/14651858.CD004667.pub2.
68. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C, Weston J. Continuous support for women during childbirth. *Cochrane Database for Systematic Reviews*. 2011; Issue 2. Art. No.: CD003766. DOI: 10.1002/14651858.CD003766.pub3.
69. Hay-Smith J. Therapeutic ultrasound for postpartum perineal pain and dyspareunia. *Cochrane Database of Systematic Reviews*. 1998; Issue 3. Art. No.: CD000495. DOI:10.1002/14651858.CD000495.pub2.
70. Hedayati H, Parsons J, Crowther CA. Topically applied anaesthetics for treating perineal pain after childbirth. *Cochrane Database for Systematic Reviews*. 2005; Issue 2. Art. No.:CD004223. DOI:10.1002/14651858.CD004223.pub2.

71. Calvert S, Fleming V. Minimizing postpartum pain: a review of research pertaining to perineal care for childbearing women. *Journal of Advanced Nursing*. 2000; 32(2):407-15.
72. Langley V, Thoburn A, Shaw S, Barton A. Second degree tears: to suture or not? A randomised controlled trial. *British Journal of Midwifery*. 2006; 14(9):550-4.
73. Stevenson L. Guideline for the systematic assessment of perineal trauma. *British Journal of Midwifery*. 2010; 18(8):498-501.
74. Sanders J, Campbell R, Peters T. Effectiveness of pain relief during perineal suturing. *British Journal of Obstetrics and Gynaecology*. 2002; 129:1066-8.
75. Carstens J. Suturing episiotomy/genital lacerations The Joanna Briggs Institute. 2011.
76. Eidelman A, Weiss JM, Baldwin CL, Enu IK, McNicol ED, Carr DB. Topical anaesthetics for repair of dermal laceration. *Cochrane Database for Systematic Reviews*. 2011; Issue 6. Art. No.:CD005364. DOI: 10.1002/14651858.CD005364.pub2.
77. Kettle C, Tohill S. Perineal Care. *BMJ Clinical Evidence*. 2011; 4:1401.
78. Maor-Sageie E, Feigenberg T, Zivi E, Sela H, Ben-Meir A, Ezra Y. Use of adhesive glues for the treatment of first degree perineal tears: a prospective randomised controlled trial. *American Journal of Obstetrics and Gynecology*. 2011; Supplement:S84.
79. 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.
80. Fleming V, Hagen S, Niven C. Does perineal suturing make a difference? The SUNS trial. *BJOG*. 2003; 110:684-9.
81. Lundquist M, Olsson A, Nissen E, Norman M. Is it necessary to suture all lacerations after a vaginal delivery? *Birth*. 2000; 27(2):79-85.
82. 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.
83. Mota R, Costa F, Amaral A, Oliveira F, Costa Santos C, Ayres-de-Campos D. Skin adhesive versus subcuticular suture for perineal skin repair after episiotomy - a randomised controlled trial. *Acta Obstetrica et Gynecologica*. 2009; 88:660-666.
84. 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.pub2.
85. Mawhinney S, Holman R. Practice points puerperal genital haematoma: a commonly missed diagnosis. *The Obstetrician and Gynaecologist*. 2007; 9:195-200.
86. New South Wales Department of Health. Maternity - prevention, early recognition and management of postpartum haemorrhage (PPH). Policy Directive. 2010.
87. Shek KL, Dietz HP. Intrapartum risk factors for levator trauma. *British Journal of Obstetrics and Gynaecology*. 2010; 117:1485-92.
88. Dietz HP, Lanzarone V. Levator trauma after vaginal delivery. *Obstetrics and Gynecology*. 2005; 106(4):707-12.
89. Dietz HP, Bhalla R, Chantarasorn V, Shek KL. Avulsion of the puborectalis muscle is associated with asymmetry of the levator hiatus. *Ultrasound in Obstetrics and Gynecology*. 2011; 37:723-6.
90. Lee NK, Kim S, Lee JW, Sol YL, Kim CW, Kim HS, et al. Postpartum hemorrhage: clinical and radiologic aspects. *European Journal of Radiology*. 2010; 74:50-9.
91. eTG Complete [internet]. Melbourne: Therapeutic Guidelines Limited; 2010 Mar.
92. 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.
93. Leventhal L, de Oliveira S, Nobre M, da Silva F. Perineal analgesia with an ice pack after spontaneous vaginal birth: a randomised controlled trial. *Journal of Midwifery and Women's Health*. 2011; 56:141-46.
94. 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.

95. 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.
96. Hadwen G. *Perineal care: postnatal*. The Joanna Briggs Institute. 2010.
97. Pairman S, Tracy S, Thorogood C, Pincombe J. *Midwifery: preparation for practice*. Sydney: Churchill Livingstone Elsevier. 2010.
98. 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.
99. Duggal N, Mercado C, Daniels K, Bujor A, Caughey A, El-sayed Y. Antibiotic prophylaxis for prevention of postpartum perineal wound complications. *Obstetrics and Gynecology*. 2008; 111(6):1268-73.
100. Sultan AH, Thakar R. Lower genital tract and anal sphincter trauma. *Best Practice and Research Clinical Obstetrics and Gynaecology*. 2002; 16:99-115.
101. Radestad I, Olsson A, Nissen E, Rubertsson C. Tears in the vagina, perineum, sphincter ani and rectum and first sexual intercourse after childbirth: a nationwide follow-up. *Birth*. 2008; 35(2):98-105.
102. Rathfisch G, Dikencik B, Kizilkaya Beji N, Comert N, Tekirday A I, Kadioglua A. Effects of perineal trauma on postpartum sexual function. *Journal of Advanced Nursing*. 2010; 66(12):2640-9.

Appendix A: Pelvic floor muscle exercises

Reproduced with the kind permission of the Continence Foundation Australia, excerpt from 'Pelvic Floor Muscle Exercises for Women'

Where are my pelvic floor muscles?

The first thing to do is to find out which muscles you need to train:

1. Sit or lie down with the muscles of your thighs, buttocks and stomach relaxed
2. Squeeze the ring of muscle around the back passage as if you are trying to stop passing wind. Now relax this muscle. Squeeze and let go a couple of times until you are sure you have found the right muscles. Try not to squeeze your buttocks
3. When sitting on the toilet to empty your bladder, try to stop the stream of urine, then start it again. Do this to learn which muscles are the right ones to use – **but do this no more than once a week**. Your bladder may not empty the way it should if you stop and start your stream more often than that

If you don't feel a distinct "squeeze and lift" of your pelvic floor muscles, or if you can't slow your stream of urine as talked about in Point 3, discuss with your midwife, doctor, physiotherapist or continence nurse. They will help you to get your pelvic floor muscles working right.

Women with very weak pelvic floor muscles can benefit from pelvic floor muscle exercises.

How do I do pelvic floor muscle exercises?

Now that you can feel the muscles working, you can:

- Squeeze and draw in the muscles around your back passage and your vagina at the same time:
 - Lift them UP inside
 - You should have a sense of "lift" each time you squeeze your pelvic floor muscles
 - Try to hold them strong and tight as you count to 8
 - Now, let them go and relax
 - You should have a distinct feeling of "letting go"
- Repeat "squeeze and lift" and let go. It is best to rest for about 8 seconds in between each lift up of the muscles. **If you can't hold for 8, just hold for as long as you can**
- Repeat this "squeeze and lift" as many times as you can, up to a limit of 8 to 12 squeezes
- Try to do three sets of 8 to 12 squeezes each, with a rest in between
- Do this whole training plan (three sets of 8 to 12 squeezes) each day while lying down, sitting or standing

While doing pelvic floor muscle training: keep breathing; only squeeze and lift; do NOT tighten your buttocks; and keep your thighs relaxed.

Other things you can do to help your pelvic floor muscles:

- Use "the knack" – that is, always try to "brace" your pelvic floor muscles (by squeezing up and holding) each time before you cough, sneeze or lift anything
- Share the lifting of heavy loads
- Eat fruit and vegetables and drink 6 to 8 glasses of water daily
- Don't strain when using your bowels
- Ask your doctor about [treatment for] hay fever, asthma and bronchitis to ease sneezing and coughing
- Keep your weight within the right range for your height and age

Appendix B: Female genital mutilation classification and country

Type	Classification
I	Partial or total removal of the clitoris and/or the prepuce (clitoridectomy)
II	Partial or total removal of the clitoris and the labia minora, with or without excision of the labia majora (excision)
III	Narrowing of the vaginal orifice with creation of a covering seal by cutting and appositioning the labia minora and/or the labia majora, with or without excision of the clitoris (infibulation)
IV	All other harmful procedures to the female genitalia for non-medical purposes, for example: pricking, piercing, incising, scraping and cauterization

Countries in which FGM has been documented

Benin	Kenya
Burkina Faso	Liberia
Cameroon	Mali
Central African Republic	Mauritania
Chad	Niger
Cote d'Ivoire	Nigeria
Djibouti	Senegal
Egypt	Sierra Leone
Eritrea	Somalia
Ethiopia	Sudan
Gambia	Togo
Ghana	Uganda
Guinea	United Republic of Tanzania
Guinea-Bissau	Yemen

Incidences also documented in:

India	Malaysia
Indonesia	United Arab Emirates
Iraq	Thailand
Israel	

Source: World Health Organisation, An update on WHO's work on Female genital mutilation (FGM): Progress report, 2011 <http://www.who.int/en/>

Acknowledgements

The Queensland Maternity and Neonatal Clinical Guideline Program gratefully acknowledge the contribution of Queensland clinicians and other stakeholders who participated throughout the guideline development process particularly.

Working Party Clinical Lead

Dr Edward Weaver, Senior Medical Officer, Obstetrics and Gynaecology, Nambour General Hospital

Working Party Members

Ms Rita Ball, Nurse/Midwife Educator, Cairns Base Hospital

Dr Michael Beckmann, Obstetrician, Mater Health Services, Brisbane

Ms Suzanne Bunker, Midwife, Royal Brisbane and Women's Hospital

Ms Anne Bousfield, Midwife, Toowoomba Hospital

Dr Deryck Charters, Obstetrician, Gold Coast Hospital

Dr Lindsay Cochrane, Obstetrician, Redcliffe Hospital

Ms Annette Conroy, Midwife, Royal Brisbane and Women's Hospital

Ms Catherine Cooper, Midwife, Mater Health Services, Brisbane

Ms Dee Cridland, Physiotherapist, Nambour Hospital

Ms Penelope Dale, Queensland Health

Dr Hasthika Ellepola, Registrar, Logan Hospital

Ms Kerri Green, Nurse Unit Manager, Harvey Bay Hospital

Ms Janelle Greitschus, Physiotherapist, Royal Brisbane and Women's Hospital

Ms Veronica Hall, Midwife, Gold Coast Hospital

Ms Rowan Hill, Senior Physiotherapist, Royal Brisbane and Women's Hospital

Ms Debra Humbley, Acting Nurse Unit Manager, Dalby Health Service

Ms Fiona Kajewski, Midwife, Roma Hospital

Associate Professor Rebecca Kimble, Obstetrician, Royal Brisbane and Women's Hospital

Associate Professor Alka Kothari, Obstetrician, Redcliffe Hospital

Ms Sarah Kirby, Midwifery Unit Manager, Royal Brisbane and Women's Hospital

Ms Natalie Loft, Clinical Nurse, Hervey Bay Hospital

Ms Meredith Lovegrove, Midwifery Educator, Rockhampton Hospital

Ms Melanie Mackenzie, Consumer Representative, Maternity Coalition

Associate Professor Kassam Mahomed, Obstetrician, Ipswich Hospital

Dr Lee Minuzzo, Obstetrician, Royal Brisbane and Women's Hospital

Ms Sara Nest, Consumer Representative, Maternity Coalition

Ms Lynne O'Brien, Clinical Nurse Consultant, Gold Coast Hospital

Ms Gloria O'Connor, Midwife, Redcliffe Hospital

Ms Kathy Prior, Nurse Unit Manager, Ipswich Hospital

Dr Mahilal Ratnapala, Obstetrician, Caboolture Hospital

Ms Vivien Reid, Nurse Unit Manager, Longreach Hospital

Ms Leigh Sadler, Registered Midwife, Royal Brisbane and Women's Hospital

Ms Heather Scanlan, Clinical Nurse Midwife, Cairns Base Hospital

Mr Keppel Schafer, Nurse Educator (Maternity), Nambour Hospital

Ms Pamela Sepulveda, Clinical Midwife Consultant, Logan Hospital

Ms Barbara Soong, Midwife, Mater Health Services, Brisbane

Ms Michelle Steel, Refugee Maternity Service Midwife, Mater Health Services, Brisbane

Ms Angela Swift, Clinical Midwife, Royal Brisbane and Women's Hospital

Ms Diane Tamariki, Midwifery Group Practice Midwife, Logan Hospital

Dr Liana Tanda, Obstetrician, Caboolture Hospital

Dr Heng Tang, Obstetrician, Mater Health Services, Brisbane

Ms Rhonda Taylor, Clinical Midwifery Consultant, The Townsville Hospital

Ms Mary Tredinnick, Senior Pharmacist, Royal Brisbane and Women's Hospital

Ms Catherine van den Berg, Project Manager, Gold Coast Hospital

Dr Shelley Wilkinson, Senior Research Dietician, Mater Mother's Hospital and School of Public Health (Griffith University)

Ms Melissa Wright, Continence Nurse Specialist, Royal Brisbane and Women's Hospital

Program Team

Associate Professor Rebecca Kimble, Director, Queensland Maternity and Neonatal Clinical Guidelines Program

Ms Jacinta Lee, Manager, Queensland Maternity and Neonatal Clinical Guidelines Program

Ms Jackie Doolan, Program Officer, Queensland Maternity and Neonatal Clinical Guidelines Program

Ms Lyndel Gray, Program Officer, Queensland Maternity and Neonatal Clinical Guidelines Program

Steering Committee, Queensland Maternity and Neonatal Clinical Guidelines Program

Funding

This clinical guideline was funded by Queensland Health, Centre for Healthcare Improvement.

CHI

Centre for Healthcare Improvement