HUTT maternity
Hutt Valley Maternity Care

HUTT VALLEY DHB

Document ID: MATY111	Version: 1.0
Facilitated by: ACMM	Last reviewed: September 2018
Approved by: Maternity Quality Committee	Review date: September 2022

Intrapartum and postnatal bladder care Guideline

Hutt Maternity Policies provide guidance for the midwives and medical staff working in Hutt Maternity Services. Please discuss policies relevant to your care with your Lead Maternity Carer.

Audience
All midwifery staff
All obstetric staff

Contributors
Sarah Ingamells, O&G Registrar
Michelle Walker, Advanced Charge Midwife Manager
Eleanor Martin, Midwifery Educator

Background
Voiding difficulties during and following labour are uncommon. Only approximately 0.5% of women will suffer with urinary retention following childbirth. However, a single episode of urinary retention over 800-1000mls can lead to long term bladder damage.
This guideline aims to outline optimal care of the bladder in the intrapartum and postnatal period to avoid long term sequelae for women.
See flowchart 1 for summarised guideline.

Risk factors
Antenatal risk factors:
- Primiparous
- History of bladder dysfunction including intermittent self-catheterisation
- Neurological disorders

Intrapartum risk factors:
- Prolonged second stage
- Episiotomy
- Instrumental delivery
- Significant perineal trauma
- Epidural analgesia (especially heavy / dense block)
- Caesarean birth

Intrapartum bladder care
During labour:
It is important to ensure that the woman in established labour is passing urine every four hours and ensure urine output is adequate in order to prevent the effects of a full bladder on progress of labour, urine leakage in second stage and the risk of postpartum haemorrhage. If a woman has difficulty passing urine after four hours then an in/out catheter should be considered.

Women with epidural or spinal analgesia:
Women with epidural or spinal analgesia are recommended have an indwelling urinary catheter (IDC) inserted once the epidural has taken effect, especially if the block is dense and mobility is restricted. This will ensure the bladder is empty, as the urge to pass urine is reduced and mobility is restricted. The input and output should be documented in the clinical record.
In active second stage the indwelling catheter balloon should be deflated with the urinary catheter secured by tape to the woman's thigh.
If the urinary catheter is displaced during the birth it should be replaced as soon as practically possible following the birth as the woman will still be under the effect of the epidural / spinal anaesthesia at this point.

Instrumental or assisted birth:
It is important to ensure that the bladder is empty before instrumental birth is undertaken. The exception to this is in extreme foetal distress such as bradycardia.

Caesarean section:
All women who are giving birth via caesarean section should have an indwelling urinary catheter in situ before the start of surgery.

Postnatal bladder care
Voiding symptoms and signs
1. Hesitancy of flow
2. Irregular flow
3. Urinary incontinence
4. Sensation of incomplete voiding
5. Passing volumes of urine <100mls
6. Unable to void
7. Palpable bladder

Women without IDC:
Woman should have one recorded voids of over 200mL with no symptoms of bladder dysfunction before she can be considered to be beyond the risk of urinary retention. The first void should occur within six hours of birth. Encourage the woman to void by keeping her well hydrated, pain free, double voiding, using warm and/or running water and facilitating privacy.

Women with IDC:
The indwelling urinary catheter should remain in situ for a minimum of six hours following last epidural top up or until sensation and mobility are normal (whichever is sooner).
If a spinal anaesthetic has been administered, or there has been an epidural top up for trail of instrumental / caesarean section, then the indwelling catheter should be

left in situ for a minimum of 12 hours or until sensation and mobility are normal (whichever is later).

Prior to removal of the indwelling urinary catheter check:

- The medical and operative notes to ensure there is no indication for prolonged catheterisation
- The level of the epidural / spinal block and the return of full sensation the woman is well enough to mobilise independently

Following removal of the indwelling urinary catheter, also called Trial Removal of Catheter (TROC):

- The woman should be encouraged to void by keeping her well hydrated, pain free, double voiding, using warm and/or running water and facilitating privacy
- The fluid balance chart should be continued
- The woman should have one recorded void of over 200ml with no voiding symptoms before she can be considered to be beyond the risk of urinary retention
- The first void should occur within six hours of removal of the urinary catheter

If she is unable to void six hours after removal of the IDC despite conservative measures, she passes less than 200mls of urine or she has voiding symptoms (see list above) the possibility of urinary retention should be considered. An indwelling catheter should be inserted, an MSU sent and the volume of residual urine recorded:

1. If the MSU is suggestive of a urinary tract infection, this should be treated as per hospital antibiotic guideline
2. If the volume is less than 500mls, then the catheter should be removed and a repeat TROC should be performed.
3. If the residual volume of urine is between 500-1000mls, then the IDC should be kept in for 24 hours and a repeat TROC performed
4. If the residual volume of urine is over 1000mls, then the IDC should be kept in for 48 hours and a repeat TROC performed

If the woman fails her repeat TROC, obstetric advice should be sought. She may need a longer period of bladder rest with in IDC, or possibly training for intermittent self-catheterisation.

References

1. Baldini et al. Postoperative Urinary Retention: Anesthetic and Perioperative Considerations. Anesthesiology 2009; 110:1139-1157
2. Olofsson, Ekblom, Ekman-Ordeberg, Irestedt. Post-partum urinary retention: A comparison between two methods of epidural analgesia. Eur J Obstet Gynecol Reprod Biol 1997; 71:31–4
3. Wilson, MacArthur, Shennan. Urinary catheterization in labour with high-dose vs mobile epidural analgesia: a randomized controlled trial. British Journal of Anaesthesia 2009; 102(1):97–103
4. Mulder F, Schoffelmeer M, Hakvoort R, Limpens J, Mol B, van der Post J, Roovers J. Risk factors for postpartum urinary retention: a systematic review and meta-analysis. BJOG 2012; 119:1440–1446.
5. Yip et al. Urinary retention in the post-partum period. Acta Obst Gynecol Scand 1997: 76:667-672

6. Lim et al. Post-partum voiding dysfunction and urinary retention. Australian and New Zealand Journal of Obstetrics and Gynaecology. 2010; 50 (6): 502–505
7. Kearney et al. Postpartum voiding dysfunction. The Obstetrician and Gynaecologist. 2008: 10 (2): 71-74
8. Teo R, Punter J, Abrams K, Mayne C, Tincello D. Clinically overt postpartum urinary retention after vaginal delivery: a retrospective case-control study. International Urogynecology Journal 2007; 18 (5): 521-524
9. Carely ME, Carley JM, Vasdev G, Lesnick TG, Webb MJ, Ramin KD, Lee RA. Factors that are associated with clinically overt postpartum urinary retention after vaginal delivery. American Journal of Obstetrics and Gynaecology 2002; 187 (2): 430-433
10. Jeffery TJ, Thyer B, Tsokas N, Taylor JD. Chronic urinary retention postpartum. ANZJOG 1990; 30: 364-366
11. Mulder et al. Delivery-related risk factors for covert postpartum urinary retention after vaginal delivery. Int Urogynaecology J 2016; 27: 55-60
12. Lim, J. Post-partum voiding dysfunction and urinary retention. ANZJOG 2010; 50 (6): 502-505

Informed Consent

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a woman can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012)

Flowchart 1: Summarised bladder care guideline

INTRAPARTUM CARE

Women should pass urine every four hours or palpable bladder
Consider in/out catheter if unable to void in labour
Empty bladder prior to assisted birth (unless bradycardia)
Place indwelling urinary catheter (IDC) if having epidural or spinal anaesthesia

Postnatal Care Normal Vaginal Birth

- Encourage women to void urine within six hours of birth or IDC removal
- IDC can be removed six hours after last epidural dose or once sensation and mobility normal
- First void urine volume should be measured and documented if had epidural

Post assisted birth (unless outlet) / significant perineal trauma

- IDC to be inserted
- Removal of IDC post delivery no less than 12 hours or as in plan of care
- First void urine should be passed <6 hours and volume should be measured and documented

Caesarean section

- IDC inserted prior to C/Section
- Removal of IDC no less than 12 hours
- First void urine should be passed <6 hours and volume should be measured and documented

Woman passes >200ml of urine on one occasion <6 hours post birth

OR

IDC removal

AND

no voiding symptoms, (straining, passing small

Continue normal postnatal cares

Woman is not able to void six hours after IDC removal or at six hours post birth after taking simple measures to encourage voiding

OR

Voiding symptoms

Insert catheter, perform MSU and document residual urine amount:

<500mls = Remove IDC and measure next void

500-1000mls = Leave IDC in for 24hours

If unable to void insert IDC

Consult with Obstetric team for further management

Insert IDC for 48-72 hours.