Guideline

Bladder Management - Intrapartum and Postpartum

1. Purpose

Ten to fifteen per cent of women have some degree of voiding dysfunction and for some time following delivery.

Five per cent of women have significant and longer lasting dysfunction, which if not recognised in the early peripartum period (birth centre, postnatal ward) may lead to bladder over distension and overflow incontinence resulting in long-term, significant bladder damage and voiding dysfunction.

This clinical guideline provides advice aimed at the prevention and treatment of peripartum bladder dysfunction.

2. Definitions

Overt bladder retention

This is the inability to pass urine within six hours of birth thus requiring catheterisation, in which volumes greater than normal bladder capacity (normal 400-600mL in females) are drained from the bladder. The woman will often complain of pain and the desire to void, may have overflow incontinence mistaken as stress incontinence or may be asymptomatic particularly if an epidural was used during labour.

Covert bladder retention

The woman is able to void however fails to empty at least 50% of her normal bladder capacity, or a post void residual volume of greater than 150mL. These women will often have frequency and pass volumes of < 100mL.

3. Responsibilities

Staff responsible for intrapartum and postpartum bladder management of a woman should follow this guideline.

4. Guideline

4.1 Risk factors

Women at highest risk include:

- primigravida
- prolonged labour, especially prolonged stage 2
- epidural for labour/birth, irrespective of mode of delivery
- need for catheter in labour
- assisted vaginal birth
- caesarean birth
- perineal injury including haematoma, bruising or tear with inadequate analgesia.

Women without these risk factors may be susceptible to voiding dysfunction; a high index of suspicion must be maintained.

4.2 Prevention

Prevention of acute bladder distension

In labour

1. Encourage the woman to void every 2 hours
2. If patient is unable to void on 2 occasions, threshold for catheterisation should be low.
   If the bladder is palpable and the patient cannot void – catheterise immediately
3. A soft catheter is preferable. Be sure to not tape the catheter stretched to the thigh as this will decrease the mobility of the urethra, and decrease the mobility of the balloon in the bladder neck.

The balloon should be inflated with just 5-10mL of sterile water. If the woman does not have an epidural and catheterisation is merely for the purpose of emptying the bladder prior to a procedure, then an in-out catheter should be considered.

To prevent urethral injury, it is important that the balloon is in the bladder and not merely in the urethra. The taping in of the catheter is of equal importance and must be proximal to the woman's vulva to prevent inadvertent pulling and dislodgement. The Flexi-Trak anchoring device may be used (shown fig 1 below). If unavailable, micropore or similar tape can be used (shown fig 2 below).

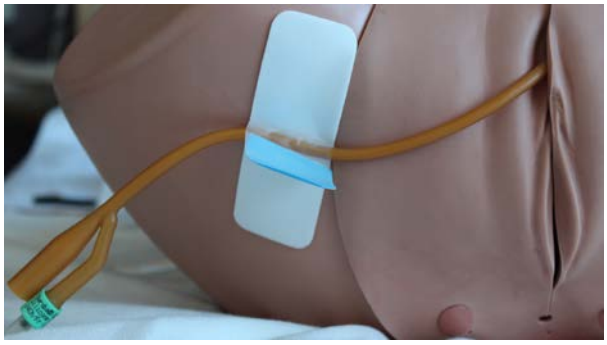

Fig 1: Taping using the Flexi-Trak. The blue wings can be trimmed for the woman's comfort - be careful not to trim too short.

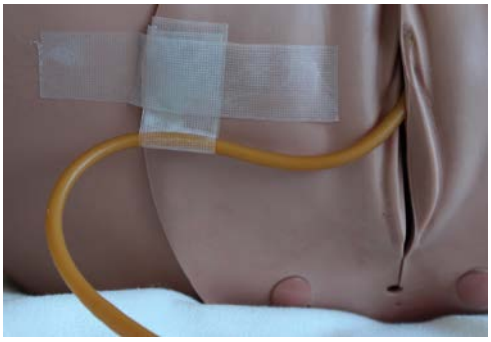

Fig 2: Any kind of tape can be used. Anchoring as shown reduces the risk of inadvertent dislodgement. Ensure that drainage is not compromised.

Postpartum

Urine volumes should be representative of patient oral input, keeping in mind normal diuresis in the postpartum woman. If postpartum urinary retention is suspected or the woman is unable to void, threshold for catheterisation should be low.

4.3 Diagnosis

A common error is failure to diagnose the bladder distension and incomplete bladder emptying.

Symptoms of voiding dysfunction/retention

Symptoms of voiding dysfunction may include:

- no urge to void
- inability to void within 6 hours of birth or within 6 hours of catheter removalurinary frequency, urgency
- lower abdominal pain
- palpable bladder
- overflow incontinence
- voided volumes of <100mL.
- poor commencement /flow of urine
- sense of incomplete bladder emptying

If a woman experiences the above symptoms, commence Fluid Balance Assessment Chart (MR2054) and refer to physiotherapy using Internal Referral (OP20), notify the physiotherapist (ext 3160), via pager 53167 or using the on call service available via switchboard (on weekends and public holidays). The Postpartum Voiding Dysfunction Treatment Algorithm should be reviewed.

In order to assess bladder function, the first postpartum void should be recorded, and the patient questioned about urge, flow and feeling of complete emptying. If an IDC has been inserted, documentation regarding removal time, and 2 formal trial of voids need to be completed.

A yellow sticker should be placed in the progress notes of <u>all</u> postpartum women and filled out by midwives looking after them to clearly document this.

Date and time of birth:	/	/	@		**Mode of birth**	NVB	Forceps	Vacuum	CS	
Perineal Trauma:	N/A	1	2	3A	3B	3C	4	Episiotomy	Oedema/swelling	
Post Natal Void (if no IDC):										
Voided within 6/24 post-delivery?	Yes	No								
Normal urge to void?	Yes	No								
Normal commencement/flow?	Yes	No								
Bladder feels empty post void?	Yes	No								
IDC removal:	/	/	@							
Trial of Void 1: _____mL	Time:_____									
Normal urge to void?	Yes	No								
Normal commencement/flow?	Yes	No								
Bladder feels empty post void?	Yes	No								
Trial of Void 2: _____mL	Time:_____									
Normal urge to void?	Yes	No								
Normal commencement/flow?	Yes	No								
Bladder feels empty post void?	Yes	No								

If 'No' to any criteria or TOV unsuccessful:

☐ Commence FBC (input & output)

☐ Refer to physiotherapy (on-call via switchboard weekend/public holiday)

If the answer to any of the above questions is No, a Fluid Balance Assessment Chart (MR2054) should be commenced and a referral to physiotherapy actioned.

4.4 Treatment

Refer to Algorithm 1: Postpartum voiding dysfunction flow chart (see Appendix 1).

Physiotherapist Continence nurse advisor (urogynaecology outpatient clinic)	Phone: (03) 8345 3160 Phone: (03) 8345 3144

5. Evaluation, monitoring and reporting of compliance to this guideline

Not applicable.

6. References

1. Andolf E. Iosif CS. Jorgensen C. Rydhstrom H. Insidious urinary retention after vaginal delivery: prevalence and symptoms at follow-up in a population-based study. Gynecologic & Obstetric Investigation. 38(1):51-3, 1994.
2. Ramsay IN. Torbet TE. Incidence of abnormal voiding parameters in the immediate postpartum period. Neurourology & Urodynamics. 12(2):179-83, 1993.
3. Malinowski J. Bladder assessment in the postpartum patient. JOGN Nursing. 7(4):14-6, 1978.
4. Groutz A. Gordon D. Wolman I. Jaffa A. Kupferminc MJ. Lessing JB. Persistent postpartum urinary retention in contemporary obstetric practice. Definition, prevalence and clinical implications. Journal of Reproductive Medicine. 46(1):44-8, 2001.
5. Lee SN. Lee CP. Tang OS. Wong WM. Postpartum urinary retention. International Journal of Gynaecology & Obstetrics. 66(3):287-8, 1999.
6. Yip SK. Hin LY. Chung TK. Effect of the duration of labor on postpartum postvoid residual bladder volume.

Gynecologic & Obstetric Investigation. 45(3):177-80, 1998.

7. Jeffery TJ. Thyer B. Tsokos N. Taylor JD. Chronic urinary retention postpartum. Australian & New Zealand Journal of Obstetrics & Gynaecology. 30(4):364-6, 1990.

7. Legislation/Regulations related to this guideline

Not applicable.

8. Appendices

Algorithm 1: Postpartum voiding dysfunction treatment algorithm.

Appendix 1

Postpartum Voiding Dysfunction Treatment Algorithm

the women's
the royal women's hospital

Symptoms of voiding dysfunction/retention

- No urge to void
- Inability to void within 6 hours of giving birth or within 6 hours of catheter removal after caesarean birth
- Frequency, urgency
- Lower abdominal pain
- Palpable bladder
- Overflow incontinence
- Voided volumes of <100ml.

If woman experiences above symptoms notify physiotherapist (ext 3160) or page 53167 (Mon-Fri 08.30-17.30. On weekend and public holidays, contact on-call service via switchboard and follow flowchart below.
If patient experiencing pain & unable to void, contact medical officerfor review, patient may require IDC or in/out catheter.

SECTION 1: Trial of void

- Commence fluid balance chart, input and output recorded
- Measure all voids and document on fluid balance chart
- Commence timed voiding encouraging patient to void every 2-3 hour
- Ensure adequate fluid intake (1.5 – 2litres/day) and adequate analgesia
- Encourage double voiding
- Perform urinalysis to exclude infection and inform medical staff of any abnormalities.
- Women who continue to void <100mL or are unable to void require immediate measurement of residual volumes with in/out catheter. **Do not use bladder scanner.**

After completion of a 24 hour FBC, assess bladder urge. **Does the patient have normal urge to void?**

NO: Patient has no urge to void. Continue section 1advice . Measure 2 voids and residual volumes using in/out catheter. **Do not use bladder scan.**

YES: Patient has normal urge to void.
No further action.

If residual volumes >150mL on 2 occasions:

- IDC inserted for 24hrs
- If perineum bruised or swollen catheter to remain for 48hrs & apply ice to perineum
- Send CSU

If residuals volumes <150ml on 2 occasions:

- Trial of void successful.
- Refer patient to physio for appointment in one week. Patient to continue timed voiding and double voiding at home.
- Provide fact sheet 'Emptying Your Bladder After Birth' Provide bladder diary for home use

After 24-48hrs remove IDC and **SECTION 1**is repeated and residual volumes measured using in/out catheter

Residual volumes >150ml on 2 occasions:

- IDC inserted & patient discharged home for 5-7 days.

Residual volume <150ml on 2 occasions:

- Trial of void successful.
- **Does the patient have a urge to void?**

NO, patient has no urge to void.

- Patient to continue timed voiding and double voiding at home.
- Provide bladder diary.

YES, patient has normal urge to void.
No further action.

- After 5-7 days patient is readmitted and **SECTION 1** is repeated.

Residual volumes >150ml on 2 occasions:

- Patient to be taught intermittent self catheterisation (ISC). Refer to ISC fact sheet. ISC to cease when residual volumes are <100ml on 2 occasions.
- Refer to Continence nurse advisor for follow up in urogynaecology outpatient clinic in 2 weeks (ext 3144).

Residual volume <150ml on 2occasions:

- Trial of void successful
- Review in Urogynaecology outpatient clinic in 6 months.
- **Does the patient have urge to void?**

NO, patient has no urge to void.

- Trial of void successful.
- Refer patient to physio for appointment in one week. Patient to continue timed voiding and double voiding at home.

YES, patient has normal urge to void. No further action.