GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol
Abertawe Bro Morgannwg
University Health Board

PROTOCOL FOR BLADDER CARE MANAGEMENT DURING INTRAPARTUM AND POSTNATAL PERIOD

Specialty: Maternity Services
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1. Introduction

The aim of this protocol is to minimise the possibility of over-distension of the bladder which can cause a hypotonic bladder and prolonged voiding dysfunction with long term sequelae such as recurrent urinary tract infection, urinary incontinence and prolonged intermittent self-catheterization (ISC).

2. Risk Factors Associated with Bladder Dysfunction

While some women develop postnatal bladder dysfunction without identifiable risk factors, the following may increase the risk:

- Prolonged labour
- Epidural analgesia
- Instrumental delivery
- Perineal trauma
- Caesarean Section

3. Intrapartum Bladder Care Management

A) Normal labour without an epidural (including Midwifery Led Care)

1st stage of labour

1. Encourage to void urine every 2 HOURS for all women
2. Need to ensure a void has taken place within 4 hours and prior to a vaginal examination.
3. If unable to void, use a standard length intermittent catheter to drain the bladder and record the volume on the partogram/fluid balance chart.

2nd stage of labour

1. Consider standard length intermittent catheter if delivery not occurred within 4 HOURS after last void / drainage.

3b) Labour with an epidural in situ

1. Requires intermittent urinary drainage at least every 4 hours
- Combine with vaginal examination wherever possible

- Indwelling catheter if:

  - Accurate fluid balance needed
  - Large volumes of intravenous fluids needed and intermittent drainage required more frequently than 3 - 4 hourly
  - Difficulty performing intermittent catheterisation
  - If woman has been intermittently catheterised x2 in her labour she should have an indwelling catheter inserted on the 3rd time.

Remember: Remove indwelling catheter during active pushing or prior to assisted birth. Should an operative delivery be indicated the indwelling catheter can remain insitu- A volume should be recorded on transfer to theatre

3c) Caesarean section

- An indwelling catheter should be inserted prior to start of procedure
- Catheter should be removed 6 hours after procedure unless otherwise specified in operation notes by the operator.

4. Postnatal Bladder Care Management

Postpartum warning signs

- Inability to pass urine 6 hours following delivery
- Voided volume (if measured) of less than 250mls

- Women who are symptomatic of voiding dysfunction such as slow urinary stream, urinary frequency, incomplete emptying and incontinence
- Inability to void following removal of catheter.

It is important to recognise that acute retention can be painless in postpartum period especially following epidural analgesia.

Overt urinary retention is the inability to void postpartum.
Covert retention occurs when a woman has elevated post-void residual urine volume>150mls with no symptoms of urinary retention.

Hospital birth

- All women should void within 6 hours of delivery or 6 hours of catheter removal. The time of first void following delivery must be recorded in the postnatal record by the midwife responsible for the woman's care.
- It is important to be aware that epidural anaesthesia can affect bladder sensation and therefore it may be appropriate to leave an indwelling catheter in place for a longer period of time following delivery.
- If a catheter is in situ following an instrumental delivery, manual removal of placenta or repair of third degree tear, the catheter should not be removed until the woman is mobile and careful attention should be paid to voiding within the following 6 hours.
- For all deliveries and procedures in theatre, where an epidural has been topped up or had a spinal anaesthesia, it is expected that the woman will be immobile for a few hours and should have an indwelling catheter inserted.
- If a woman has had a caesarean section, measurement of the first x2 voids after removal of the catheter should be undertaken and recorded.
- If the woman wishes to be discharged from hospital before she is 6 hours post-delivery and has not passed urine, then she should be advised to ensure that she has passed a good volume of urine by 6 hours post birth. If not she should contact the maternity unit for advice.

Non Voiding Women in Postnatal Period

If bladder emptying has not occurred within 6 hours of delivery or catheter removal, bladder must be emptied by intermittent catheterisation and the volume of urine recorded in the notes by the midwife responsible for postnatal care.

1. If the volume of urine drained by catheterisation is less than 500mls, the next voided volume and the post void residual (PVR) needs to be measured either by intermittent catheterisation again or by bladder scan.

2. If the PVR is less than 150mls, no further action needs to be to be taken. If the drained volume on the first instance is more than 500mls or the PVR is more than 150mls after the second void, an indwelling catheter should be inserted. The catheter should be then left in situ for 24 hours.

3. If the residual is greater than 500mls you need to keep the indwelling for an extra 24 hrs for each 250mls - i.e. 48hrs for 750ml and 72hr for 1000mls and so on. **The consultant obstetrician must be informed at this point.**

Low Voiding Women in Postnatal Period

All women whose initial voided volume is less than 250mls or reports any symptoms of voiding dysfunction should have their post void residual measured and then the same protocol as above should be followed.

In all of the above cases, the time of voiding must be documented in the postnatal records. The voided volumes and the post void residuals must also be recorded.
Measurement of intake and output volumes needs to be recorded in these cases and a fluid balance chart commenced.

Women who birth at home/ in Birth Centre.

Following homebirth/ MLU birth, the woman should be advised to make a note of the time of first void and contact the community midwife this has not occurred within 6 hours or if there are any symptoms of voiding problems.
Hospital referral must be considered if –

- The woman has failed to void within 6 hours
- The voided volume is only a small amount in spite of good hydration
- There are any symptoms of voiding difficulty
- Midwives must assess this volume to the best of their ability, considering the limitation of being able to accurately measure the voided volume in the home environment.

Further management and treatment

Further management aims to identify any factors contributing to delayed bladder emptying and to ensure adequate bladder drainage while waiting for normal function to return.

Following the diagnosis of urinary retention, following actions should be taken:

- Urine dipstick analysis and MSU
- If an urinary tract infection is suspected, prompt antibiotic therapy should be initiated
- The perineum should be examined (either by the midwife or the obstetrician) and if swollen or painful, a catheter should be sited until the swelling and pain have settled.
- Adequate analgesia is important, as perineal pain is a significant factor in development of retention.
- Constipation should be avoided and treatment given if required

After removal of catheter, the voided volume and post void residual volume should be recorded by the midwife. Any further retention or increased post void residuals, warrant continued bladder emptying by indwelling urethral catheter for one week. Alternatively, intermittent self-catheterisation (ISC) can be considered which can be taught by a trained midwife on the ward. If the perineum is still tender, indwelling catheter up to 2 weeks can be justified. Consider flip-flow if using catheter for more than 48 hrs as this will keep the bladder having a more fill empty cycle.

Voiding dysfunction beyond this point warrants careful assessment and review by an Uro-gynaecologist as an outpatient. The investigations, treatment and management plan must be documented in the hospital postnatal records.

All women experiencing voiding dysfunction must have follow up appointment in the Uro-gynaecology clinic. It is the responsibility of the midwife who discharges the woman from the postnatal area to ensure that this appointment has been arranged.
(Please refer to the postnatal bladder care management flowchart in the appendix)

5. Removal of catheter

- Remove catheter on the day / time specified by medical team looking after the woman.
- If catheter was inserted because of an epidural, remove approximately 6 hours after delivery or when mother is able to mobilise unaided.
- If catheter was inserted because of a Caesarean Section, remove after 6 hours unless specific instructions for alternative management given.
- Prior to removal of a catheter, the nurse / midwife will explain the procedure to the lady and how her bladder function will be monitored.

- The patient may wish to participate and should be encouraged to fill her own fluid balance chart.
- Advise the patient to alert the nursing / midwifery team if at any time after removal she is unable to void or if pain is experienced.
- **If discharging the patient with an indwelling catheter in situ, please provide:**

    1. A catheter take home pack (containing leg bags, straps, non-drainable bed bags and patient information on caring for their catheter).
    2. The Short Term Catheter care bundle.
    3. Any further information on when catheter is to be removed and plan for this.

6. Bladder management following removal of catheter

- Advise the woman to drink normally (up to 2.5 litres in 24 hours)
- She should void when she feels the need and measure 1st and 2nd void
- If she has not voided **4-6 hours** after the catheter is removed, she should be asked to try and void. (At this point please refer to the flowchart "Management of postpartum urinary retention".)

N.B. For the female urethral catheterisation procedure, intermittent self-catheterization and suprapubic catheters please refer to: **ABMUHB Catheter Management Policy**

Management of postpartum urinary retention

Diagnosis

1. Unable to pass urine 6 hours after delivery or after catheter removal **(NON -VOIDERS)**
2. Passing frequent small volumes of urine (<250mls over 4 hours , Measure 1st& 2nd void)**+/-** sensation of incomplete bladder emptying, slow urinary stream, urinary frequency, **(LOW-VOIDERS)** and incontinence

Advise all women to inform midwifery staff if ANY of the above occurs

In Non-Voiders - Insert catheter and measure volume drained or measure volume with bladder scan (NOT a reliable method in postpartum women as can be confused with involuting uterus)

In Low-Voiders - Measure post void residual volume (PVR)

Non Voiders – Volume drained

Measure next voided volume and PVR

If PVR < 150mls no further management

If Unable to void or PVR > 150mls Re-catheterise (24hrs) only)

Voiding satisfactorily and PVR < 150mls –Check MSU result and discharge with fluid advice

Non Voiders – Volume drained > 500mls but < 750mls

Leave Foley catheter for 24 hrs
Send urine for C & S

Non Voiders – Volume drained > 750mls. For each +250mls beyond 500mls, the catheter remains for an extra 24hours.

Remove catheter

If unable to pass urine within 6 hrs or voiding dysfunction and small volume of urine passed or PVR > 150mls Teach Intermittent self-catheterisation (ISC) 4-6 hourly until able to void and residual urine <150mls -Discharge when competent and telephone follow up with Continence Advisors in Suite 17. If ISC not feasible – indwelling catheter for 48 hours and repeat trial of voiding or consider insertion of supra pubic catheter.

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Maternity Services

Checklist for Clinical Guidelines being Submitted for Approval

Title of Guideline:	Protocol for bladder care management during intrapartum and postnatal period
Name(s) of Author:	*Labour Ward Forum*
Chair of Group or Committee supporting submission:	Labour Ward Forum
Issue / Version No:	*2*
Next Review / Guideline Expiry:	November 2021
Details of persons included in consultation process:	Rebecca Lewis Intraparum lead midwife, Madhu Dey Consultant Obstetrician, Myriam Bonduelle, Consultant Obstetrician, Nigel Jenkins, labour ward forum
Brief outline giving reasons for document being submitted for ratification	Update on current policy in place for management of bladder during intrpartum and postnatal period
Name of Pharmacist (mandatory if drugs involved):	n/a
Please list any policies/guidelines this document will supercede:	*Previous guideline*
Please indicate key words you wish to be linked to document	Bladder catheter urinary TWOC
Date approved by Directorate Quality & Safety Group:	November 2018
File Name: Used to locate where file is stores on hard drive	pow_fs1\ABM_W&CH_mgt\Clinical Governance - Q&S\Policies & Procedures etc - Ratified\Maternity