Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

Bladder Care Management During Intrapartum and Postnatal Period

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LOCSSIP Reference:		NATSSIP Standard:	List standard (NATSSIPS Standards)		

Version No:	Date of EqIA:	Approved by:	Date Approved:	Date made active:	Review Date:
1	Pending EqIA	Obstetric and Audit Guideline Group	15/11/2021	17/01/2022	15/11/2024

Brief Summary of Document:	To maintain bladder function and to provide appropriate management to women during the intrapartum and postpartum period. To minimise the risk of prolonged voiding dysfunction in the puerperium and prevent its long term sequelae.
Scope	Hormonal changes in pregnancy decrease the tone of the detrusor muscle. Combined with trauma to the bladder, pelvic floor muscles and nerves during the intrapartum and postpartum period the bladder tends to become underactive and is therefore vulnerable to the retention of urine. Minimising the possibility of over-distension of the bladder to reduce the risk of hypotonic bladder and prolonged voiding dysfunction with long term sequelae such as recurrent urinary tract infection, urinary incontinence and prolonged intermittent self-catheterisation (ISC).

To be read in conjunction with:	• NICE National Institute for Health and Care Excellence (NICE) Clinical guideline (CG) 190 • NICE CG171 (2015) Urinary incontinence in women Urinary incontinence in women: management | Guidance | NICE

	• NICE QS77 (2015) Urinary incontinence in women Overview | Urinary incontinence in women | Quality standards | NICE • 683 - Bladder Scan Guideline • 396 - Urinary Catheterisation (Adults) Policy and Procedure • 222 - Continence Care Policy
Patient Information:	Include links to Patient Information Library

Owning committee/ group	Obstetric Guideline and Audit Group

Reviews and updates		
Version no:	Summary of Amendments:	Date Approved:
1	New guideline	15/11/2021

Glossary of terms

Term	Definition
PVRV	Post Void Residual Volume
TWOC	Trail With Out Catheter

Keywords	Bladder care, intrapartum, postpartum

Contents

1. Aim of Guideline

The aim of this guideline 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. Objectives

- To maintain bladder function and to provide appropriate management to women during the intrapartum and postpartum period.
- To minimise the risk of prolonged voiding dysfunction in the puerperium and prevent its long term sequalae.

3. Scope

All women in the intrapartum and postpartum period

4. Introduction

Hormonal changes in pregnancy decrease the tone of the detrusor muscle. Combined with trauma to the bladder, pelvic floor muscles and nerves during birth, the postpartum bladder can become underactive and is therefore vulnerable to the retention of urine.

Postpartum voiding dysfunction is defined as failure to pass urine spontaneously within 6 hours of vaginal birth or catheter removal following birth. This occurs in 0.7 – 4% of all births.

Overt urinary retention is the inability to void postpartum.

Covert urinary retention occurs when there is an elevated post void residual volume (PVRV) of >150ml urine *without* symptoms of urinary retention

5. Risk Factors Associated with Bladder Dysfunction

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

- Prolonged labour
- Epidural analgesia
- Instrumental birth
- Perineal trauma
- Caesarean section

6. Intrapartum bladder care management

6.1. Normal labour without an epidural (including Midwifery Led Care)

1st stage of labour

- Ask to void every 4 HOURS and/or prior to a vaginal examination.
- If unable to void, use automatic lubricated intermittent single use catheter to drain the bladder and record the volume on the partogramme.

- Accurate fluid balance must be documented on Daily Intake/Output Chart (NB For women on the ***All Wales Normal Labour Pathway*** bladder care remains paramount but it is not necessary to record urine output on a fluid balance chart, refer to the Normal Labour Pathway for additional information.)

2nd stage of labour

- Consider automatic lubricated intermittent single use catheter if delivery not occurred within 4 HOURS after last void / drainage

- Accurate fluid balance must be documented on Daily Intake/Output Chart.

6.2. Labour with an epidural in situ

- Requires intermittent urinary drainage (self-void or intermittent catheter) at least every 4 hours
    - Combine with vaginal examination wherever possible
    - Consider more frequent intermittent catheterisation if receiving intravenous fluids or palpable bladder
    - Consider indwelling catheter if:
        - Two intermittent catheters within 8 – 12 hours
        - Large volumes of intravenous fluids needed and intermittent drainage required more frequently than 3 - 4 hourly
        - Difficulty performing intermittent catheterisation / unable to self-void
        - If maternal medical history or current obstetric situation requires (e.g. PET)
        - Remove indwelling catheter during active pushing
- Accurate fluid balance must be documented on Daily Intake/Output Chart

6.3. Caesarean section

- An indwelling catheter should be inserted prior to start of procedure
- Catheter should be removed 6 – 12 hours after procedure unless otherwise specified in operation notes

Any bladder trauma during surgery requires IMMEDIATE referral to Urology and Cystogram to be arranged 12 – 14 days following.

7. Postnatal Bladder Care Management

All women should void within 6 hours of delivery or indwelling catheter removal

The Royal College of Obstetricians and Gynaecologists (RCOG) study group on incontinence recommends that no woman should be allowed to go longer than 6 hours without voiding or catheterisation postpartum. Encouragement to pass urine after 4 hours allows time for conservative measures to be tried (analgesia, mobilisation, bath or shower, privacy).

Postpartum warning signs

- Inability to pass urine 6 hours following birth or catheter removal
- Voided volume (if measured) of less than 250ml
- Women who are symptomatic of voiding dysfunction such as slow urinary stream, urinary frequency, incomplete emptying and incontinence.

Regional anaesthesia can affect bladder sensation and therefore the indwelling catheter should not be removed until the woman is mobile as a minimum unless specified otherwise in the operation notes. It may be appropriate to leave an indwelling catheter in place for a longer period for example, if there is significant perineal trauma/oedema or there is a need for accurate measurement of the urine output.

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

Consider (re-)inserting an indwelling urinary catheter in women after:

- Regional anaesthesia and prolonged labour
- Mid-cavity instrumental delivery
- Urethral trauma
- Severe perineal trauma
- Women receiving High Dependency Care
- For all deliveries and procedures in theatre, who have spinal anaesthesia (including combined spinal-epidural) or who have had epidural anaesthesia “topped up”

8. Management of postpartum retention and voiding dysfunction

- Insert an automatic lubricated intermittent single use catheter OR bladder scan for post void residual volume (PVRV) in the following patients:

- No void within 6 hours of delivery or removal of indwelling catheter

  OR

- Passing frequent small amounts of urine with the sensation of incomplete voiding

A bladder scan however, may not give accurate readings in patients with a high BMI or with the presence of clots in the uterus.

- If PVRV < 500mL: measure the next voided volume and PVRV.
  - If PVRV < 150mL: no further management needed in the *asymptomatic* patient.
  - If PVRV > 150mL: insert an indwelling catheter for 24 hours followed by trial without catheter (TWOC) (this can be done as an outpatient within the maternity department). **The obstetric team must be informed. Referral to Women's Physiotherapy Department must be completed.**
- If PVRV >500ml: insert indwelling catheter. Arrange for TWOC after 24 hours
- If at TWOC the woman is either unable to void within 6 hours or has a PVRV > 150mL; record the next 2 voids and if PVRV > 150mL after the 2nd void then re-catheterise the woman for 1 week. Leave the catheter on free drainage. TWOC should be attempted after 1 week (this can be done as an outpatient within the maternity department). **The obstetric team must be informed.**
- At 2nd TWOC record 2 voids and if the woman is either unable to void within six hours or has a PVRV > 150mL after 2nd void; re-catheterise for 10 days. Fit a flip-flo valve for daytime use and keep the catheter on free drainage at night. After 10 days a TWOC is attempted (this can be done as an outpatient within the maternity department)

Above management of postpartum retention and voiding dysfunction is summarised in attached flow diagram.

In all of these cases, the time and volume of voiding must be documented in the hospital notes. The voided volumes and the PVRV must be recorded. Measurement of fluid balance must be documented on fluid balance chart. In women with an indwelling catheter time of removal of the catheter must be documented.

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 or voiding dysfunction, the following actions should be taken and documented in the hospital notes:

- Perform urinalysis and sent for MC&S as the presence of infection is an important contributory factor to prolonged voiding dysfunction.

- If a urinary tract infection is suspected, prompt antibiotic therapy should be initiated following local guidelines and review with MC&S.
- The perineum should be examined and if swollen or painful, a catheter should be sited until the swelling and pain have settled.
- Ensure and provide adequate analgesia, as perineal pain is a significant factor in development of retention.
- Avoid and treat constipation if required.

All women experiencing voiding dysfunction must have follow up after discussion with the responsible consultant or senior registrar. It is the responsibility of the midwife who discharges the woman from the postnatal ward to ensure that appropriate referral to the Physiotherapy department is completed.

9. Home Birth

Following a homebirth, the woman should be instructed to make a note of the time of the first void and contact the community midwife if:

- This has not occurred within 6 hours or
- There are any symptoms of voiding dysfunction

The community midwife should then arrange referral to the Obstetric unit for management as described above.

10. References

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11. Appendix 1.

PHYSIOTHERAPY SERVICE
HYWEL DDA UNIVERSITY HEALTH BOARD
WOMEN'S HEALTH SERVICE MATERNITY REFERRAL

PATIENT DETAILS

NAME:	GP:
ADDRESS	SURGERY
POST CODE:	
DOB	
HOSPITAL NUMBER:	CONSULTANT:
TEL NO:	

PATIENT IS:

ANTENATAL: ☐ Gestation: POSTNATAL: ☐ Days:

TYPE OF DELIVERY:

DATE:

REASON FOR REFERRAL

PELVIC GIRDLE/BACK PAIN ☐

PELVIC FLOOR REHAB ☐

RISK SCORE (SEE OVERLEAF):

OTHER – Please specify:

……..

……..

RELEVANT INFORMATION

……

……..

……..

……..

REFERRED BY:……..SIGNATURE:……..DATE:…….

PLEASE SEND COMPLETED FORM TO WOMEN'S HEALTH PHYSIOTHERAPY SERVICE OUTPATIENT DEPARTMENT

1

PHYSIOTHERAPY SERVICE
HYWEL DDA UNIVERSITY HEALTH BOARD
WOMEN'S HEALTH SERVICE MATERNITY REFERRAL

PELVIC FLOOR RISK ASSESSMENT TOOL

RISK FACTORS	CIRCLE SCORE
LARGE BABY > 4kg (8LB)	2
MULTIPARITY	2
PROLONGED PUSHING >2 HRS	4
FORCEPS/VONTUSE	4
EPISIOTOMY	3
3RD/4TH DEGREE TEAR	6
EPIDURAL/SPINAL	2
MULTILPE PREGNANCY	1
CHRONIC CONSTIPATION	1
OBESITY	1
OLDER PRIMIPAREA (>35)	1
CONTINENCE PROBLEM	6
SYMPTOMS OF PROLAPSE	4
TOTAL SCORE (MAX 37)	

LOW/MEDIUM RISK (0-5) – LEAFLET

MEDIUM/HIGH RISK (6-14) – LEAFLET, ADVICE, CONSIDER PHYSIO REFERRAL

HIGH/VERY HIGH RISK (15+) – LEAFLET, ADVICE, PHYSIO REFERRAL

- **PATIENT WITH 3RD AND 4TH DEGREE TEARS, CONTINENCE SYMPTOMS OR PROLAPSE SHOULD BE REFERRED TO PHSIO OUTPATIENT SERVICE REGARDLESS OF TOTAL RISK SCORE**

ADDITIONAL PERINEAL WOUND BREAKDOWN RISKS

EXTENSIVE ODEMA ☐

BRUSING ☐

HAEMATOMA ☐

WOUND CONTAMINATION ☐

2

12. Appendix 2.