Reference Number: UHBOBS015 **Version Number: 5**	**Date of Next Review: Apr 2025** **Previous Trust/LHB Reference Number: N/A**

Bladder Care in Labour and the Postpartum period

Introduction and Aim

Objectives

To maintain bladder function and to provide appropriate management to women with postpartum voiding dysfunction.
To minimise the risk of prolonged voiding dysfunction in the puerperium and prevent its longterm sequelae.

Scope

This policy applies to all clinicians working within maternity services including temporary staff, locums, bank and agency / annualised hours staff and visiting clinicians.

Equality Health Impact Assessment	*An Equality Health Impact Assessment (EHIA) has not been completed.*
Documents to read alongside this Procedure	*Postnatal Care Guidelines*
Approved by	*Maternity Professional Forum*

Accountable Executive or Clinical Board Director	*Ruth Walker, Executive Nurse Director*
Author(s)	*Dr A Darbhamulla, Consultant O&G* *Mr K Bhal, Consultant urogynaecologist* *Mrs J Davies,Urogynaecology Nurse Practitioner* *Primary Reviewer: Ruba Halabi, Consultant Obstetrician*

Summary of reviews/amendments

Version Number	Date of Review Approved	Date Published	Summary of Amendments
1	*2008*	*2008*	Authors JD/KB/LS/PA
2	April 2011	April 2011	Authors JD/KB/AD
3	Feb 2015	Feb 2015	Reviewed and Updated
4			Reviewed and Updated by K Bisseling/ A Darbhamulla/ K.Bhal /Jo Davies /Annie Burrin
5	November 2021	Apr 2022	Reviewed and Updated by Sarah Wolujewicz/ J.Jones/ A Darbhamulla

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2 Introduction

Hormonal changes in pregnancy decrease the tone of the detrusor muscle. The combination of trauma to the bladder, pelvic floor muscles and nerves during delivery results in the postpartum bladder being underactive and therefore vulnerable to the retention of urine.

Intrapartum and postpartum bladder care is crucial to the early recognition of urinary retention and prevention of long term damage to the bladder function.

If postpartum voiding dysfunction is unrecognised, it may result in long term sequelae such as denervation and bladder atony associated with long term voiding problems, recurrent urinary tract infections and possible urinary incontinence.

In order to prevent this, it is important to identify all women who are unable to pass urine within 6 hours of delivery or catheter removal *and* all women who are symptomatic of voiding dysfunction.

The importance of prompt diagnosis and appropriate management of these women cannot be over-emphasised. Early intervention is the key to ensuring rapid return to normal bladder function.

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2.1 Definitions

Postpartum voiding dysfunction is defined as failure to pass urine spontaneously within 6 hours of vaginal delivery or catheter removal after delivery. This occurs in 0.7-4% of deliveries.

- Overt urinary retention is the inability to void postpartum.
- Covert urinary retention occurs when there is an elevated postvoid residual volume (PVRV) of >150mL urine *without* obvious symptoms of urinary retention.

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3 Risk Factors for Postpartum Voiding Dysfunction

Many risk factors have been identified for the development of postpartum voiding dysfunction. These are listed in Table 1.

Postpartum voiding dysfunction can develop in women without any identifiable risk factors, regardless of mode of delivery or analgesia. Good bladder care in labour and postpartum is therefore necessary in all women.

Risk Factors for Postpartum Voiding Dysfunction
Primiparity
Assisted Vaginal Delivery
Epidural analgesia
Prolonged labour
Perineal trauma
History of voiding dysfunction

Table 1 Risk Factors for Postpartum Voiding Dysfunction

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4 Intrapartum bladder care

- Prevention of postpartum voiding dysfunction starts with good bladder management intrapartum which includes the documentation of frequency and volume of bladder emptying.
- Women should be encouraged to empty their bladder at regular intervals, every 2-4 hours, in labour.
- If the woman is unable to pass urine spontaneously, intermittent catheterisation should be used. Ideally this is done at the time of vaginal examination. If catheterisation is likely to be used more than twice during labour, an indwelling catheter should be considered.
- An indwelling catheter should be removed during pushing to prevent trauma to the bladder and urethra
- Fluid balance should be monitored as per protocol (see GAIN guideline and Intrapartum Care guidelines)

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5 Postpartum bladder care

- Consider (re-)inserting an in-dwelling 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".

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 note. 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.

- Encouragement to pass urine after 4 hours allows time for conservative measures to be tried (analgesia, mobilisation, bath or shower, privacy).

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

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5.1 Hospital birth

- Document time and volume of first void after delivery or after removal of the indwelling catheter on the postnatal pathway. It is important to ask the woman about her voiding pattern as this could point towards voiding dysfunction (see

Table 2).

- In women with indwelling catheter, time of removal of the catheter must also be documented.
- An indwelling catheter should only be removed when the woman is mobile. Avoid removing the catheter between 6pm and 6am.

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5.2 Home Birth

Following a homebirth, the woman should be instructed to make a note of the time of the first void and contact the Midwife Led Unit (MLU) if

- this has not occurred within 6 hours
- there are any symptoms of voiding dysfunction

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6 Management of Postpartum Voiding Dysfunction

6.1 Symptoms of Postpartum Voiding Dysfunction

Signs and symptoms that should raise the alert to voiding dysfunction are listed in Table 2.

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

Signs or Symptom	Comment
An inability to pass urine within 6 hours of delivery or removal of indwelling catheter.	
Slow urinary stream	
Frequent voids of less than 150mls	
Incomplete bladder emptying	Woman will report the sensation of this.
Urinary incontinence	Including episodes of overflow leakage i.e. a large leak without the urge to void or constant dripping.
Discomfort due to bladder distension	
Lack of bladder filling sensation	

Table 2 Signs and Symptoms of Postpartum Voiding Dysfunction

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6.2 Diagnosis and Initial Management

6.2.1 Diagnosis and initial management of postpartum voiding dysfunction

1. Midwifery assessment on the postnatal ward should include questions regarding normal bladder control and sensation, feeling of complete bladder emptying and urinary incontinence.

2. Insert an in/out catheter for post void residual volume (PVRV) if any of the above symptoms are experienced, to exclude bladder dysfunction. Clearly document time and volume drained. A bladder scan may not give accurate readings in patients with a high BMI or with the presence of clots in the uterus.

3a. If PVRV 100-500ml, measure the next voided volume (within 3-4 hours) and PVRV:

- If the subsequent PVRV <150mls: no further intervention is needed in an asymptomatic woman.
- If the subsequent PVRV is 150 ml or more: insert an indwelling catheter for 24 hours followed by trial without catheter (TWOC). This can be done as an outpatient.

3b. If PVRV > 500ml or more: insert an indwelling catheter for 24 hours followed by TWOC – this can be done as an outpatient. The obstetric team should be informed. All patients with postpartum bladder dysfunction should have a Datix form completed.

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6.2.2 Investigations following the diagnosis of postpartum voiding dysfunction

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 as per Hospital Microguide.
- 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 area to ensure that this appointment for the perineal trauma clinic has been arranged

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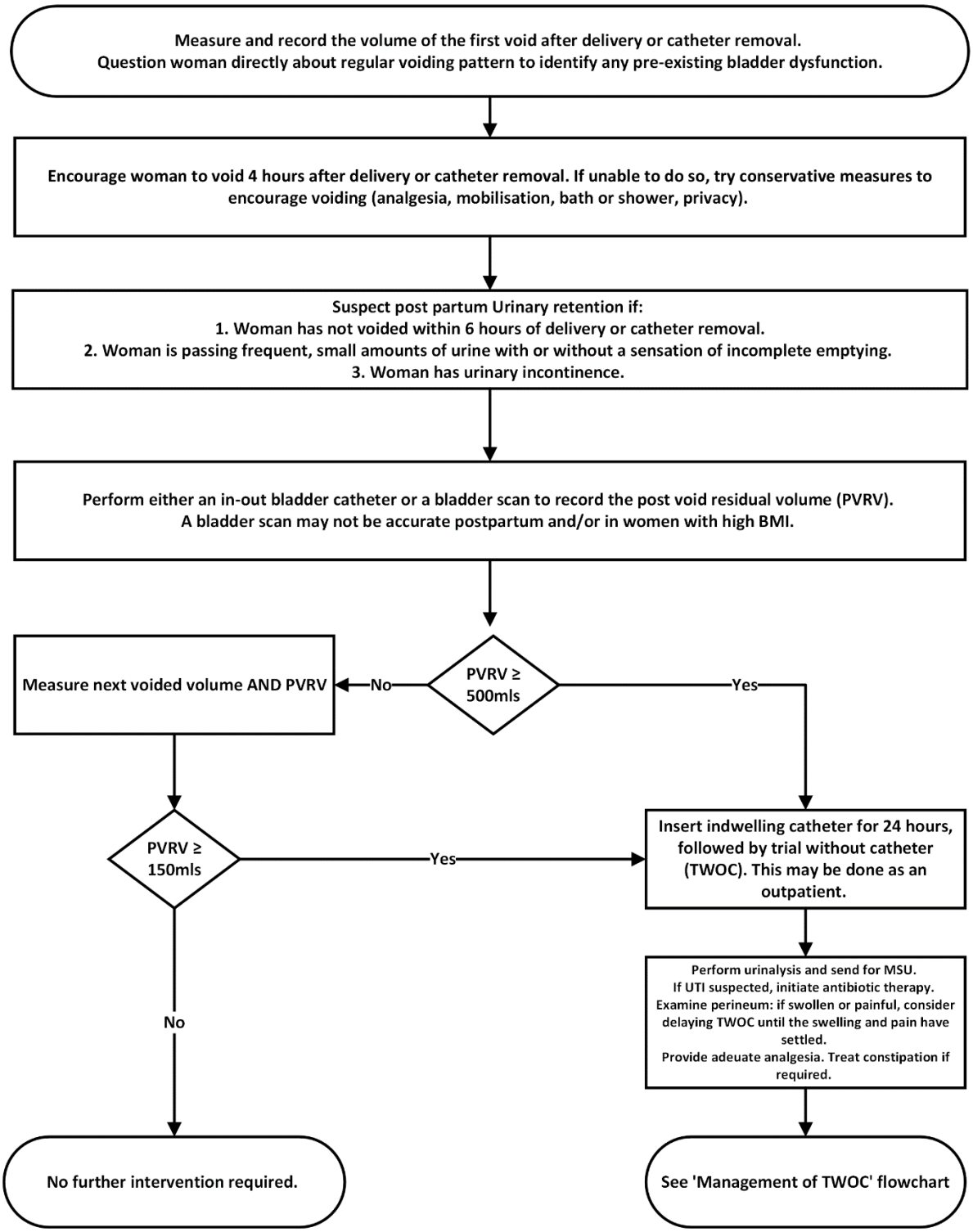
6.2.3 Flowchart for Diagnosis and Initial Management of Postpartum Voiding Dysfunction



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6.3 Management of Trial Without Catheter (TWOC)

1. If at TWOC the woman is either unable to void within 6 hours or has a PVRV > 500mls, re-catheterise. If PVRV is 150mL – 500mls: record the next 2 voids. If PVRV is ≥ 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)

2. 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 (as an outpatient).

3. If at 3rd TWOC the woman is either unable to void within 6 hours or has a PVRV > 150mL after 2nd void; re-catheterise and refer to Mrs Jo Jones, urogynaecology Nurse Practitioner using attached referral form.

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 also be recorded. Measurement of intake and output volumes needs to be recorded on a fluid balance chart in these cases.

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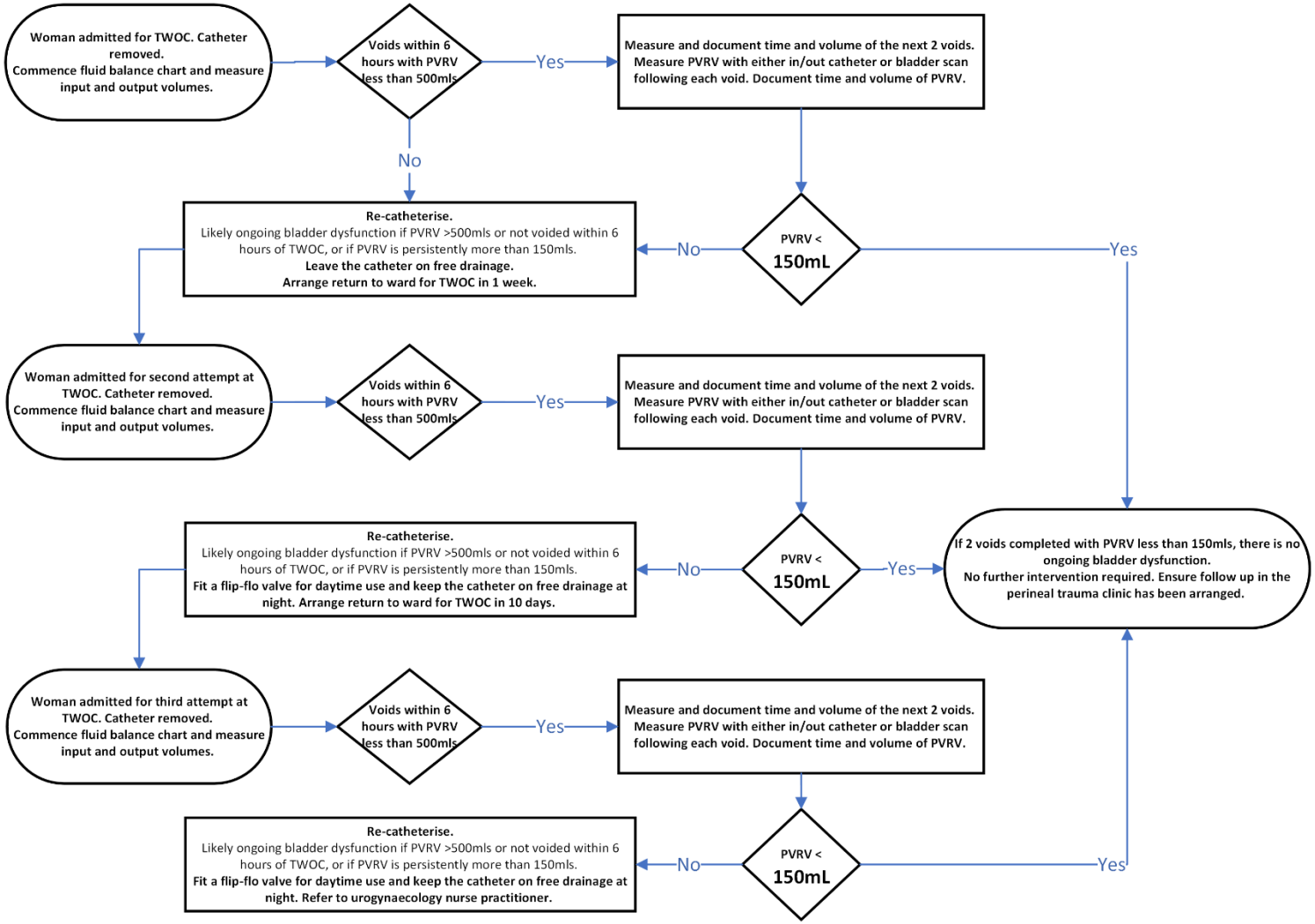
6.3.1 Flowchart for the Management of Trial Without Catheter (TWOC)



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6.3.2 Referral To Urogynaecology Nurse Practitioner

Please print and complete the following referral form (starts on next page).

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POST NATAL VOIDING DYSFUNCTION
REFERRAL FORM

Pt sticker

Referral date…….

Consultant……

Patient's tel no…….

Date of delivery: ……. BMI: ……. Parity: …… Baby Weight: …… g
SVD Forceps Ventouse Epidural Caesarean 3rd/4th Degree Tear

History of presenting complaint:
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.....……

Date of initial catheterisation……...

Date of 1st TWOC …… Re-catheterised

Date of 2nd TWOC ……. Re-catheterised Flip-Flo attached: Y / N

Date of 3rd TWOC ..... Re-catheterised Flip-Flo attached: Y / N

Signature of Person Referring:
……

PRINT NAME & Designation:
……

Ext/Contact No:
……

PLEASE FORWARD THIS FORM TO JO JONES, UROGYNAECOLOGY NURSE PRACTITIONER, ROOM 225,
WOMEN'S UNIT, UPPER GROUND FLOOR, UHW, EXT 41849

7 References

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