# POSTNATAL BLADDER CARE GUIDELINE

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| **INITIATED BY:** | Cwm Taf Morgannwg University Health Board Obstetrics and Gynaecology Directorate |
| **APPROVED BY:** | Cwm Taf Morgannwg UHB Post Natal Forum |
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**FREEDOM OF INFORMATION STATUS**: Open

**Guidelines Definition**

Clinical guidelines are systemically developed statements that assist clinicians and patients in making decisions about appropriate treatments for specific conditions.

They allow deviation from a prescribed pathway according to the individual circumstances and where reasons can be clearly demonstrated and documented.

**Minor Amendments**

If a minor change is required to the document, which does not require a full review please identify the change below and update the version number.

| Type of change | Why change made | Page number | Date of change | Version 1 to 1.1 | Name of responsible person |
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**Equality Impact Assessment Statement**

This Procedure has been subject to a full equality assessment and no impact has been identified.

## Contents

## Introduction and Aim

Hormonal changes in pregnancy decrease the tone of the detrusor muscle. Combined with trauma to the bladder, pelvic floor muscles and nerves during delivery the postpartum bladder tends to 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 delivery or following 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 post-void residual volume (PVRV) of >150mL urine *without* symptoms of urinary retention.

If postpartum voiding dysfunction is unrecognised it can lead to long term sequelae such as recurrent urinary tract infection and urinary incontinence. Prevention of this should aim to identify all women 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 as early intervention is the key to ensuring rapid return to normal bladder function.

## 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 long term 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.

## Risk Factors for postpartum Voiding Dysfunction

Many risk factors have been identified for the development of postpartum voiding dysfunction, including the following:

- Primiparity
- Instrumental delivery
- Epidural analgesia
- Prolonged labour
- Perineal trauma
- History of voiding problems

Postpartum voiding dysfunction however can develop in women without any identifiable risk factors, regardless of mode of delivery or analgesia.

## 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 4-6 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 the active second stage of labour and assisted vaginal deliveries to prevent trauma to the bladder and urethra.

## 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".

**Insertion of a catheter should be documented on the local Urinary Catheter Bundle pathway.**

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 e.g. intra or post postpartum sepsis

**Bladder Management Following C-Section or Vaginal Delivery with Epidural**

The number of caesarean sections has increased over the years and approximately 1 in 4 women will have a caesarean section. Bladder sensation may take over 10 hours to return after caesarean section under spinal analgesia and over 6 hours following vaginal delivery with or without epidural. Retention of urine following caesarean section does occur; even though women will have been catheterised for 12 – 24 hours after delivery. Women most at risk are those who have undergone emergency caesarean section for lack of progress in labour.

**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).

## Symptoms of Postpartum Voiding Dysfunction

Signs and symptoms that should raise the alert to voiding dysfunction include:

- Inability to pass urine within 6 hours of delivery or catheter removal
- Slow urinary stream
- Urinary frequency passing small amounts of urine
- (Sensation of) incomplete emptying
- Urinary incontinence

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

## Hospital Birth

**1**. Document time and volume of first void after delivery or after removal of 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 symptoms above). In women with an indwelling catheter time of removal of the catheter must also be documented in the postnatal pathway and urinary catheter bundle.

**2.** 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.

Insert a catheter and measure amount or perform a bladder scan for bladder volume. Well-timed catheterisation reduces risk of bladder trauma & does not lead to bladder trauma, if bladder scanner is unavailable or not working

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

**2a**. **If urine measured or bladder volume < 150mL**: no further management needed in the asymptomatic patient.

**If urine measured or bladder volume < 500mL > 150**: measure the next voided volume and PVRV (Post Void residual Volume).

**2b**. **If PVRV > 500 mL or > 20% of voided volume**: insert an indwelling catheter for 24 – 48 hours followed by trial without catheter (TWOC) – this can be done as an outpatient.

*The obstetric team should be informed.*

**3.** 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)

**4.** 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 one week and complete a referral to the UroGynaecology Nurse Practitioner (see page 11 for referral form) who will liaise with the patient's local Consultant lead for further management plan.

Antibiotics are not routinely given unless clinically indicated.

Above management of postpartum retention and voiding dysfunction is summarised in flow diagram on page 10.

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 in these cases and a fluid balance chart commenced.

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 send for C&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 Microbiology guidance.

- The perineum should be examined and if swollen or painful, a catheter should be sited until the swelling and pain have settled, this can take up to two weeks.

- 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 an appointment to see the UroGynaecology nurse practitioner is made as per the flow chart who will liaise with local UroGynaecology Consultant.

## 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

Referral to the postnatal ward can be arranged for management as described above for a hospital birth.

# CWM TAF MORGANNWG
# UNIVERSITY HEALTH BOARD
# POSTNATAL BLADDER CARE FLOWCHART

1st void post-delivery should be routinely measured and recorded. Direct questioning from midwives to patients about their voiding pattern

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Post-partum urinary retention should be suspected if:

1. Not voided within 6 hours of SVD, removal of catheter, following C/S, regional anaesthesia, 3rd & 4th degree tear.
2. Passing frequent small amounts of urine with sensation of incomplete voiding

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Insert catheter OR bladder scan to record urine or bladder volume - Bladder scan may not give accurate reading in patients with high BMI or with the presence of clots in the uterus. Well-timed catheterisation reduces risk of bladder trauma & does not lead to bladder trauma, if bladder scanner is unavailable or not working

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Urine or Bladder volume < 500mls

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Measure next voided volume and PVRV

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Unable to void or PVRV >150mls

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Insert indwelling catheter for 24 -48 hours
Attend for Trial without catheter (TWOC)

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If PVRV <150ml or < 20% of voided volume no further management required

Urine or Bladder volume > 500mls

↓

Insert indwelling catheter for 24 -48 hours
Attend for Trial without catheter (TWOC)

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**Reassess: Record 2 voids, if PVRV >150mls after 2nd void or unable to void at all:**

1. Re-catheterise for 1 week on free drainage
2. Complete referral to Angharad Carroll - UroGynaecology Nurse Practitioner
3. Urogynecology nurse practicioner will liaise / refer to local UroGynaecology Consultant

# CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD
# POST NATAL VOIDING DYSFUNCTION
# REFERRAL FORM

Pt sticker

Referral date……..

Consultant……

Patient's tel no……..

Patient BMI: Date of delivery: Parity: Baby Weight :

Vaginal delivery ☐ Forceps ☐ Ventouse ☐ Epidural ☐ Caesarean ☐ 3rd/4th Degree Tear ☐

History of presenting complaint:
……

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Date of initial catheterisation……..

Date of 1st TWOC ……Recatheterised ☐

Date of 2nd TWOC …… Recatheterised ☐ Flip Flo valve attached: YES / NO

Date of 3rd TWOC .....Recatheterised ☐ Flip Flo Valve attached: YES /NO

Signature of Person Referring: ……

PRINT NAME & Designation: ……

Referrers Ext/Contact No. ……

**PLEASE COMPLETE THIS FORM AND ENSURE YOU HAVE THE PATIENTS CORRECT CONTACT NUMBER. PLEASE FORWARD TO:**

**Miss Tammy Maguire- Secretaries office-Department of O&G – RGH**
**FAO – Sister Angharad Carroll - UroGynaecology Nurse Practitioner**

**Incomplete or Illegible forms will be returned to sender**

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