1. Overview

Purpose
To guide practitioners in the prevention and management of postpartum urinary retention

Scope
Waitemata DHB employed clinicians that work in Maternity, and Waitemata DHB Maternity access holders.

2. Background

Postpartum urinary retention is a relatively common condition. Ongoing risk assessment, preventative care during labour, timely recognition and management are vital to reduce irreversible damage to the detrusor muscle.

3. Risk Factors

Antenatal
- Poor bladder function, for example previous pelvic surgery or maternal disease such as multiple sclerosis
- Anticholinergic medications for example Atrovent, some irritable bowel syndrome medications
- Previous genital tract trauma causing urethral strictures
- Previous urinary retention

Intrapartum
- Epidural or spinal anaesthesia
- Opioid analgesia (can impair bladder contractility)
- Obstructed labour
- Prolonged active second stage of labour
- Operative vaginal birth
- Perineal lacerations, oedema or haematoma
4. Antenatal care

- Enquire about previous bladder surgery
- Ask about history of urinary retention
- Document any risk factors in the clinical notes and request obstetric consultation if significant history.

5. Intrapartum care

- Encourage women to pass urine every 4 hours in labour
- Record times when woman has passed urine in clinical notes or on partogram
- Consider in/out catheter if not able to pass urine in labour
- Consider Foleys catheter for women with an epidural who are expected to need more than one catheterization
- Palpate bladder when undertaking abdominal examination 4 hourly in labour
- Ask woman to empty her bladder prior to active second stage
- If a woman has a Foleys in situ deflate the balloon prior to active second stage
- Empty bladder prior to assisted birth

6. Postpartum care

**Immediately following birth**

- Encourage women to pass urine within 2 hours of a vaginal birth
- Record time and subjective volume of first void in the clinical notes, or existing fluid balance chart
- If the woman has not passed urine before transfer to the postnatal ward, communicate this to the midwife taking over care and ensure this information is documented.
- If the woman has not passed urine or has signs of a full bladder, encourage urination by turning on taps, or recommend a warm shower and/or mobilization
- If the woman has not passed urine by 6 hours postpartum, gently check for the presence of a palpable bladder. Consider treating as urinary retention.

**For women with previous urinary retention or multiple risk factors**

- Measure and record first two voids
- If urine output is less than 200ml in the absence of signs of urinary retention, measure and record urine for 6 hours on fluid balance chart
- If the woman continues to void less than 200ml after 6 hours treat as urinary retention (section 8)

**For women with IDC in situ following birth (excluding elective cesarean section)**

- Timing of removal of IDC should take into consideration length of labour, type of analgesia and birth trauma.
- Following removal of an IDC measure and record first two voids
- If urine output is less than 200ml in the absence of signs of urinary retention, measure and record urine for 6 hours on fluid balance chart
Urinary Retention Prevention and Management

- If the woman continues to void less than 200ml after 6 hours or shows signs of urinary retention treat as urinary retention (section 8)

Ongoing postnatal care

- Ask women daily about bladder pain/discomfort, frequency, or urgency and subjective volume of urine passed.
- Identify and treat perineal pain or constipation as these can be contributing factors.
- If any concerns measure and record two consecutive voids, volume must be greater than 200mls

Retention of urine is a risk factor for postpartum haemorrhage

7. Signs of Acute Urinary Retention

- Inability to pass urine despite persistent attempts
- Lack of sensation, or sensation of incomplete emptying of bladder
- Urgency to void or urinary incontinence
- Passing small amounts of urine frequently (retention with overflow)
- Slow, intermittent stream
- Bladder pain, although may be pain free especially after epidural anaesthesia
- Increased post-operative pain
- Palpable distended bladder
- Asymmetrical high fundus
- Increased vaginal bleeding

8. Treatment of Urinary Retention

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Catheterize with Foley catheter, catheter must be on free drainage - do not use spigots or gate clamps. Use a catheter stand for the drainage bag</td>
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<td>2.</td>
<td>Undertake a urinalysis and send a CSU to exclude infection</td>
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<td>3.</td>
<td>Commence a fluid balance chart</td>
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<td>4.</td>
<td>Measure and record the volume immediately drained. If urine drained &gt;1000mls, catheter remains in suti for 3 days. Likely to go home with catheter in situ. If urine drained 400mls to 1000mls, catheter remains in situ for 24 hours, then measure and record urine output for 6 hours. If urine drained less than 400mls, remove catheter and measure and record monitor urine output for 6 hours</td>
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<td>5.</td>
<td>Inform the obstetrician and LMC when the woman is comfortable</td>
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<td>6.</td>
<td>Treat any contributing factors such as perineal pain and swelling, constipation</td>
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<td>7.</td>
<td>Take a history to establish if the woman has had any previous difficulties with voiding</td>
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9. Discharge Planning

If going home with a urinary catheter in situ
- Provide information leaflet on catheter care
- Provide a supply of catheter bags sufficient for the expected duration the catheter will remain in situ
- Arrange follow-up outpatient appointment in urology clinic and/or obstetric clinic as advised by obstetrician
- Inform LMC of discharge and ongoing plan
- Registrar/obstetrician to write discharge summary to GP
- Refer to District Nursing service for community follow-up.

Referral to District Nurse
Fax an ‘Older Adults and Home Health’ referral form to Fax number 2497 (internal, both sites)

Communicate a clear plan of care including:
- Background information and relevant history
- The size of catheter used and volume of fluid in the balloon
- Date that catheter is to be removed
- Plan of care following removal of catheter
- Follow-up appointment date

10. References