Catheter Removal (Trial of Void) or Change

Disclaimer

This page describes the process for managing patients after insertion of a catheter for acute urinary retention. See also:

- Male Urethral Catheterisation
- Catheter Management

Contents

Practice Point

Use accurate catheter removal times

- Following retention, do not remove catheters before 3 days.
- Be cautious using long-term catheterisation as this can lead to complications.

Patient selection for TOV

- Select patients for trial of void in the community:

Patients not suitable for community TOV

- *Hydronephrosis or abnormal renal function at time of retention*
- *Neurological cause for retention*
- *Trauma*
- *Recent urethral, bladder, or prostate surgery*
- *Recurrent failed TOV*
- *Large volume painless retention*

Patients suitable for community TOV

- *> 3 days post insertion*
- *Cognitively capable of reporting retention*
- *Access to bladder scanner in aged care facility*

- If patient not suitable for community TOV requires urgent urology referral for catheter management, ensure appropriate pre-referral preparation.

- If patient is suitable for community management, prepare for, perform, and follow up the catheter TOV, or change as outlined below.

Before procedure

Most general practices can remove a urinary catheter.

1. Check that male patients with benign prostatic hyperplasia are treated with alpha-blockers. Commence at catheterisation or at least 2 days before TOV.

2. If a general practice team is unable to remove or change a catheter, arrange immediate urology referral or admission.

3. Ensure ***equipment*** is available for removal.

Catheterisation equipment

- *Gloves – check for latex allergy. If allergic, use latex-free gloves.*
- *A 10 mL syringe*

4. Following acute retention, arrange a trial of removal after 3 days, ensuring ***precipitating factors*** for retention have been addressed. Long-term catheterisation leads to complications like splitting of the glans and serious infection.

Precipitating factors

- *Alcohol*
- *Recent neurological or urological surgery*
- *Urinary tract infection (UTI)*
- *Constipation*
- *New medications*
- *Infrequent voiding*
- *Previous instrumentation or trauma*

5. Schedule removal for first thing in the morning, so that re-insertion can be done in normal office hours.

Procedure

1. Attach a syringe to the inflation lumen of catheter to empty the water out of the balloon. The syringe should generally self-fill or may need gentle aspiration.
2. Encourage the patient to relax and on their outward breath, gently slide the catheter out.
3. If problems with removal, check whether it is related to an ***inability to deflate the balloon.***

Inability to deflate the balloon

- *Try gentle traction on the plunger of the syringe.*
- *Advance the catheter to ensure that it is actually in the bladder.*
- *Try wiggling and rotating the catheter while pulling the plunger.*
- *Consider **cutting the balloon channel** only to release fluid from the balloon.*

Cutting the balloon channel

- *If these techniques fail, arrange [immediate urology referral or admission](#).*

After procedure (where catheter has not been replaced)

1. Send patient home, and encourage normal activities, slight increase in fluid intake and record of urinary output in millilitres.
2. Advise patient to expect passing urine normally within 3 to 5 hours.
3. Arrange patient review after 4 to 5 hours:

Successful urination

- *Ask if first void was symptom free and good flow.*
- *Palpate abdomen to ensure no suprapubic discomfort.*
- *Advise to attend after-hours service or Emergency Department if patient develops urinary flow problems overnight.*
- *Arrange review in 3 to 5 days with a post-void residual ultrasound and urea, electrolytes, and creatinine. Consider referral for management of benign prostatic hyperplasia or other cause.*

Unsuccessful urination

- *Palpate bladder and record presence of discomfort.*
- *Reinsert catheter. Record residual urine volume and resolution of symptoms.*
- *See Acute Urinary Retention pathway for causes and investigations to consider.*
- *Request Urology review, as below. Patients will be assessed with a catheter in situ.*

Referral

- If failed trial of void, arrange immediate urology referral or admission and include ***these details.***

Urology review details

Provide details regarding:

- *history of urinary outflow restriction symptoms (yes/no)*
- *painful urinary retention relieved by catheterisation (yes/no)*
- *incontinence (yes/no)*
- *renal function and ultrasound reports*
- *measured residual volume of urine (in mL) at catheterisation*
- *comorbidities, neurological conditions, anticoagulation*
- *mobility, self-care, cognitive function*
- *use of alpha-blockers*
- *prolapse or pelvic mass.*

- If catheter has not been replaced, advise patient to attend an after-hours service or Emergency Department if they develop urinary flow problems overnight.

- If patient is not suitable for community TOV and requires urgent urology referral for catheter management, ensure appropriate pre-referral preparation.

Last Reviewed: June 2019

Disclaimer