Catheter Troubleshooting

NBT Guide 2019

Overview of advice

Most catheter problems can be resolved by washing out or changing the catheter. Any other problems may require referral. Suprapubic catheters, if they fall out, must be replaced as a matter of urgency to prevent the tract from closing up.

This guide aims to give simple information for the management of many of the catheter related problems the urology service are contacted about daily that can be managed very simply.

If, having followed the advice provided, you are still struggling, please contact the urology service via:

Urology Specialist nurse team:

- **Urology ward Gate 34B 01174143600 nurse in charge**
- **Engela Otto 01174149156- leave an answer phone message for a call back**

Or Out of Hours (outside of 8am-5pm) the Urology registrar on call via switch: 01179505050

Problems Covered in this guide

- Blocked
- Bypassing
- SPC change/ Displaced SPC
- Unable to change catheter, Difficult catheterisation tips.
- Recurrent UTI
- Debris
- Penile discomfort
- Traumatic hypospadias
- Uncomplicated acute retention (first episode, not related to recent urological surgery)

Blocked/ bypassing urethral catheter or SPC

Causes:

1. Bladder spasm
2. UTI
3. Blocked
4. Debris
5. Blood clot
6. Not in right place

Actions:

- Check for UTI

- Check catheter position
- Flush catheter to check patency – if not change
- If long term catheter, and it has been in for a long time, and there is some debris then AXR to check for bladder stones
- Debris with neobladders is common –just needs to be flushed regularly with Urotainer® solutions. Neo bladders usually gets washed out with a syringe and NaCl- the patient can usually do it them self.
- Antimuscarinics such as Detrusitol®, Detrunorm®, Vesicare®, Regurin®, Oxybutynin or Oxybutynin patches, or B3 agonist Betmiga® may help (if catheter patent).
- If blood clot and patient has significant haematuria preceeding please refer to clot retention pathway.
- If problem persists ? urology nurse review

Debris in urethral catheter/ SPC

Causes:

1. UTIs
2. Bladder stones
3. Neobladder or bladder augmentation– where part of the small bowel has been used to either augment the bladder or replace it.

Actions:

- Check for UTIs
- Check catheter position
- Flush catheter to check patency – if not change
- If long term catheter and it has been in for a long time and there is some debris then AXR to check for bladder stones
- If problem persists ? urology nurse review

Penile discomfort with urethral catheter

Causes:

1. Catheter irritation
2. Traumatic hypospadias
3. UTI

Actions:

- Examine penis and look for catheter trauma
- Check for UTI
- Instillagel
- Antimuscarinics such as Detrusitol®, Detrunorm®, Vesicare®, Regurin®, Oxybutynin or Oxybutynin patches, or B3 agonist Mirabegron may help.
- If problem persists ? urology nurse review

- **Traumatic hypospadias –** *where the catheter has eroded the distal end of the penis, splaying it open.*

Causes:

1. Longer term urethral catheter in men and women
2. Catheter tubing attached too tight on leg (there should be some slack)
3. No G-strap/stat lock to limit catheter movement

Actions:

- Refer to urology as OPD review to discuss SPC insertion

Recurrent UTI with urethral catheter/ SPC

Causes:

1. Long term catheter
2. Recent catheter change
3. Bladder stones

Actions:

- Treat with antibiotics **ONLY** if symptomatic (pain/ unwell/fever). By 7 days most catheters are colonised by bacteria.
- If symptomatic, and not due to bladder spasm, and has had a long term catheter also organise XRay KUB/ USS KUB to check for bladder stones.
- If symptomatic and repeated infections for referral to Urology as OPD to discuss options such as SPC other investigations.
- If treated with ABX catheter should be changed before the end of the course of treatment.

Unable to change catheter/ difficult catheterisation

Causes:

1. Poor technique
2. Urethral trauma/ false passages
3. Large prostate
4. Stricture

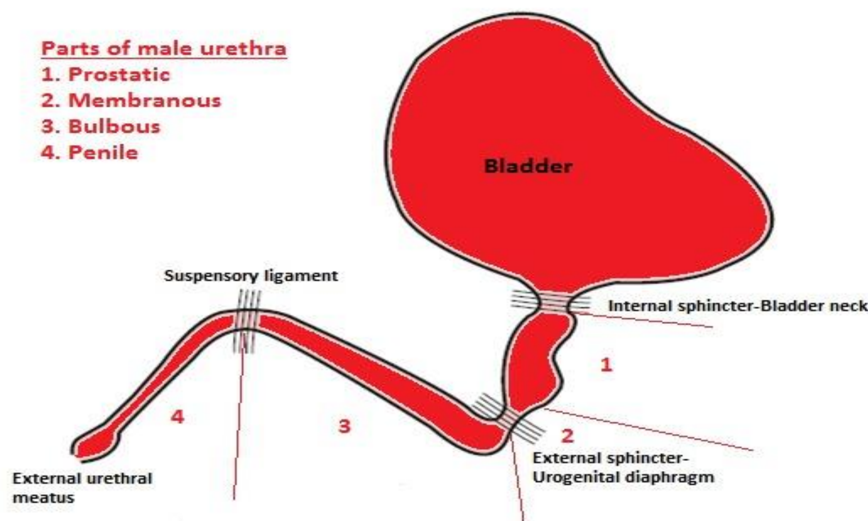
Actions:

- Use appropriate technique with 2 tubes of instillagel X1 if still fails for referral to on call Urology Reg.

Appropriate technique:

- Ensure catheter pack is ready with a minimum size 14 fr catheter for men, and sterile, aseptic technique is used.
- Having cleaned penis, apply instillagel urethrally. Ensure it is massaged down shaft.
- Lift penis up straight and taught to avoid urethral kinking – see pic below.
- Pass catheter down with a constant swift motion, all the time conversing with patient and ensuring he is relaxed.
- If it stops at prostate level then ask patient to cough whilst applying gentle pressure - This should allow external urethral sphincter (see picture) to relax and catheter to pass.
- If significant resistance is felt then STOP.
- Once in the bladder and catheter pushed **up to the hilt** and urine is seen / aspirated from catheter then inflate balloon.
- Ensure foreskin retracted back if present

Penile anatomy



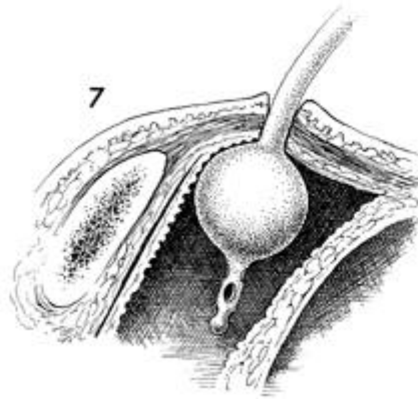
SPC fallen out / displaced/ change

Causes:

1. Spontaneous rupture of balloon
2. Iatrogenic
3. If long term SPC ? stone

Actions:

- SPC needs to be replaced ASAP, most start closing over after an hour, making replacement difficult
- If changing then ensure bladder full prior to change. Fill the bladder with 300mls N. saline.
- If multiple recent SPC failures then consider bladder stones (XRKUB/USSKUB)
- If unable to change please contact urology service as above.
- If in pain, and SPC out for a significant time, and has normal urethra for urethral catheterisation. Then refer to urology for SPC re insertion as OPD.



A suprapubic catheter has the benefit of avoiding all of the, at times complicated or traumatised, urethra. It is inserted via abdominal wall into a full bladder. As such it should sit in the retroperitoneal space avoiding the bowel.

As from the picture above it should be a very simple change. The key steps are:

1. Ensure bladder is relatively full (clamp catheter prior to procedure)or fill with 300mls N.Saline
2. Ensure the same sized catheter is available for the change.
3. A little instillagel will help pass the catheter easily
4. When changing, ensure it is done swiftly. Out with one in with the other.
5. Sometimes the catheter feels stuck – ensure all fluid is removed from balloon, never cut it! Apply gentle traction with some instillagel passed alongside the catheter tube. If not working contact Urology Service.
6. The catheter does not need to be pushed up to the hilt (it can sometimes pass down the urethra)

Acute uncomplicated retention

Causes:

1. Enlarged prostate
2. Urethral stricture
3. Post-operative (non urological)
4. Constipation

Action:

Initial

- For catheter insertion
- Please note carefully the residual in the notes. (catheter checked at 10mins post insertion)
- Bloods to check renal function
- PR to assess for abnormal prostate (hard, obvious nodules)/ constipation
- History of symptoms
- Any previous urology surgery/ drug therapy

Further

- If residual < 1 litre
    - If not on drug therapy then start Tamsulosin 400mcg od
    - TWOC in community in 7-10 days
    - If previous failed TWOC already then referral for urology TWOC is appropriate **(unless medication not started previously)**
- If residual > 1litre and abnormal kidney function
    - Contact on call urology for admission
    - Pt will need careful fluid balance, lying + standing blood pressures and daily weighs
- If residual > 1 litre with normal renal function and no diuresis
    - Maybe acute on chronic retention
    - Referral to urology TWOC clinic with appropriate medication (Tamsulosin) if not already started