Management of Suprapubic Catheters

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Why Suprapubic Catheterisation?
Indications for S/P Catheterisation

- Neurogenic lower urinary tract dysfunction.
- Urinary retention – acute and chronic.
- Urinary incontinence.
- Post-operative.

...but only after careful consideration and discussion about alternative approaches.
Suprapubic v Urethral

- Preventing urethral complications.
- Increased comfort.
- Ease of catheter changes.
- Separating urinary and genital functions.
Suprapubic v Urethral
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Insertion of Suprapubic Catheters
Insertion - Technique
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Minimising risks of suprapubic catheter insertion (adults only)

Issue
Urinary bladder drainage using an indwelling urethral catheter is necessary in a wide range of clinical situations. Suprapubic catheterisation should be used when urethral catheterisation is contraindicated or where it is technically not possible to relieve urinary retention in both acute and chronic conditions. In addition, suprapubic catheterisation may be chosen to improve patient comfort, dignity or convenience, and to prevent complications such as catheter-induced urethral injury, e.g. in patients with neurological disease or diminished genital sensation.

Suprapubic catheterisation is a common procedure (in both elective and emergency situations) which may be undertaken by a range of clinicians in a variety of settings. It is not always seen as a high-risk procedure, but risks do include injury to the intestine and haemorrhage due to perforation of vascular structures in the pelvis.
Patient for suprapubic catheterisation

Indication and contraindication criteria met?

No → Alternative bladder management

Yes → Appropriately trained person available?

No → Patient in distress?

No → Aspirate bladder

Yes →
Open or USS guided SPC insertion

Previous lower abdominal surgery?

Yes

Percutaneous SPC insertion

Yes

Palpable bladder?

Yes

Distended bladder identified by USS?

Yes

No

No

No

GA for bladder filling or open procedure
Early Complications
Early Complications

- Bowel injury – high index of suspicion needed.
- Bleeding.
- Infection.
- Blockage – leave the catheter in situ and insert a urethral catheter.
- Displacement.
Catheter Valves
Catheter Valves

- Always consider the option of a valve.
- Does the bladder store urine at safe pressures?
- If not, can the bladder be made to store urine safely?
- Do the kidneys need to be monitored?
Routine Catheter Changes
Catheter Change Technique

- Be prepared.
- ? Put some fluid into the bladder.
- Advance catheter to the hilt.
- Inflate the balloon with care.
- Advance and pull back on catheter to check position.
- Consider antibiotic prophylaxis.
Catheter Change Technique
Catheter Changes

- Discuss teaching the patient or carers to undertake changes.
Catheter Changes

- Catheter balloon ridging – change brand.
- Failed change – immediate referral to hospital for salvage of the track.
- Put an ISC catheter into the track and tape it in place as a temporary measure.
Late Complications
Catheter Bypassing

- Diagnose the cause – bladder overactivity, sphincter weakness or blockages.
- Blockage or bypassing?
- Bladder overactivity – antimuscarinic drugs, botulinum toxin.
- Sphincter weakness – surgery if necessary.
Catheter Blockages

- Increase catheter size to 18 or 20 Fr.
- More frequent changes.
- Consider referral for cystoscopy.
- ? Washouts, antibiotics, botulinum toxin etc.
Infection

- Urinary or track infection?
- Asymptomatic bacteruria or symptomatic infection?
- Investigate if recurrent or associated with haematuria – ultrasound and cystoscopy.
- Antibiotics – self-start or prophylaxis.
Patient Follow Up
Follow Up

- Is a suprapubic catheter the agreed definitive management?
- Is it proving satisfactory?
- Do the patient and carers know how to be re-referred in case of future difficulties?
- Do they need continuing surveillance?
Renal stones and indwelling catheters - 8% risk in 3 years after spinal cord injury.

“Offer lifelong ultrasound surveillance of the kidneys to people who are judged to be at high risk of renal complications”
Renal Ultrasound Surveillance
Conclusions
Conclusions

- For many patients, suprapubic catheterisation provides major benefits.
- However, there is a significant risk of complications – some of which are serious.
- Patients and carers require expert care if they are to derive maximum benefit with minimum risk.