

Applying guidance into practice

Urinary Catheters

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Guidance

- There is a wealth of guidance to direct our practice
- The what to do is clear, the how to do is not always so clear

Drivers for change

- Francis
- Infection Prevention & Control agenda

Translating guidance into clinical practice

- Who's job is it?
- A core catheter team which includes Infection Prevention & Control nurses, Continence Nurses, Urology & Urogynae Nurse specialists, Community Nurses.

The Health and Social Care Act 2008

Code of Practice on the prevention and control of infections and related guidance

- Applies to registered providers of all healthcare and adult social care in England.
- Sets out the 10 criteria against which the Care Quality Commission (CQC) will judge a registered provider on how it complies with the cleanliness and infection control requirement, which is set out in regulations

The Health and Social Care Act 2008

- Staff providing care receive suitable and sufficient information on, and training and supervision in, the measures required to prevent and control the risks of infection
- Make a suitable and sufficient assessment of the risks to the person receiving care with respect to prevention and control of infection
- A programme of audit is in place to ensure that key policies and practices are being implemented appropriately.

Infection Prevention and Control Lead

- Have the authority to challenge inappropriate practice
- Assess the impact of all existing and new policies on infections and make recommendations for change
- A review of statistics on incidence of alert organisms (for example, but not limited to, meticillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile*) and conditions, outbreaks and serious untoward incidents;
- Evidence of appropriate action taken to deal with occurrences of infection including, where applicable, root cause analysis

NICE Guidelines

- NICE CG 139 – Infection: prevention and control of healthcare-associated infections in primary and community care (2003 updated 2012)
- NICE CG 97 - The Management of Lower Urinary Tract Symptoms in Men (2010)
- NICE CG 171 – Urinary Incontinence in Women (2006 update 2013)
- NICE CG 148 - Urinary Incontinence in Neurological Disease: Management of Lower Urinary Tract Dysfunction in Neurological Disease (2012)

Anything else?

- **EAUN (2012)** Evidence-based Guidelines for Best Practice in Urological Health Care – **Catheterisation Indwelling catheters in adults.** Urethral and Suprapubic
- **RCN (2012).** Catheter Care. RCN Guidance for Nurses. Royal College of Nursing

Assessing the need for catheterisation

- Following assessment, the best approach to catheterisation that takes account of clinical need, anticipated duration of catheterisation, patient preference and risk of infection should be selected.
- Indwelling urinary catheters should be used only after alternative methods of management have been considered.
- The patient's clinical need for catheterisation should be reviewed regularly and the urinary catheter removed as soon as possible.
- Catheter insertion, changes and care should be documented (NICE 2012a)

Consider offering long-term indwelling urethral catheterisation to men with LUTS

For whom medical management has failed and surgery is not appropriate and who are unable to manage intermittent self-catheterisation or with skin wounds, pressure ulcers or irritation that are being contaminated by urine or who are distressed by bed and clothing changes

(NICE 2010)

- Long-term indwelling catheters are divided into urethral and suprapubic types. The urethral catheters have the advantage of easier initial insertion but suprapubic catheters may provide benefits in the long term such as reduced impact on sexual function, reduced infection and easier replacement
(NICE 2010)

What about women?

- Bladder catheterisation (intermittent or indwelling urethral or suprapubic) should be considered for women in whom persistent urinary retention is causing incontinence, symptomatic infections, or renal dysfunction, and in whom this cannot otherwise be corrected (NICE 2013)

What about women?

- Indications for the use of long-term indwelling urethral catheters for women with UI include
 - chronic urinary retention in women who are unable to manage intermittent self-catheterisation
 - skin wounds
 - pressure ulcers or irritations that are being contaminated by urine
 - distress or disruption caused by bed and clothing changes
 - *where a woman expresses a preference for this form of management*
- (NICE 2013)

What about women?

- Indwelling suprapubic catheters should be considered as an alternative to long-term urethral catheters. Be aware, and explain to women, that they may be associated with lower rates of symptomatic UTI, 'bypassing', and urethral complications than indwelling urethral catheters (NICE 2013a)
- Suprapubic catheters are often preferred to urethral catheters in the neuropathic population for reasons of convenience and in order to avoid urethral trauma (NICE 2013b)

Explaining the risks

- Healthcare professionals should be aware, and explain to women, that the use of indwelling catheters in urgency UI may not result in continence.
- Give careful consideration to the impact of long-term indwelling urethral catheterisation. Discuss the practicalities, benefits and risks should be discussed with the patient or, if appropriate, her carer.
- (NICE 2013)

Are patients always told the risks?

- Recurrent urinary tract infections
- Trauma to the urethra
- Accidental removal
- Renal complications - kidney stones, hydronephrosis and scarring (NICE 2013b)
- Recurrent blockage
- Stone formation
- Pain or discomfort
- Bladder cancer – haematuria may be ignored
- Death???

Catheterisation

- Where staff undertake procedures, which require skills such as aseptic technique, staff must be trained and demonstrate proficiency before being allowed to undertake these procedures independently.
- H&SCA (2008)
- All catheterisations carried out by healthcare workers should be aseptic procedures. After training, healthcare workers should be assessed for their competence to carry out these types of procedures
- NICE (2012)

Long-term urinary catheters - Education of patients, their carers and healthcare workers

- Patients and carers should be educated about and trained in techniques of hand decontamination, insertion of intermittent catheters where applicable, and **catheter management before discharge from hospital.**
- Community and primary healthcare workers must be trained in catheter insertion, including suprapubic catheter replacement and catheter maintenance.
- Follow-up training and ongoing support of patients and carers should be available for the duration of long-term catheterisation
- (NICE 2012)

Skills for Health – National Occupational Standards

- CC04. Manage Supra Pubic Catheters
- CC03. Care for Individuals with urethral catheters
- CC02. Insert & Secure urethral Catheters
- CH59. Undertake care for individuals with urinary catheter
- CH58. Insert & secure urethral & monitor & respond to the effects of urethral catheterisation

Ongoing support

- Follow-up training and ongoing support of patients and carers should be available for the duration of long-term catheterisation (2012a)
- A policy on information sharing when referring, admitting, transferring, discharging and moving service users within and between health and adult social care facilities is available (DH 2008)
- **Catheter Diary / journal / management plan / patient held record**

Catheter Changes

When changing catheters in patients with a long-term indwelling urinary catheter:

- do not offer antibiotic prophylaxis routinely
- consider antibiotic prophylaxis for patients who:
 - have a history of symptomatic urinary tract infection after catheter change or
 - experience trauma during catheterisation

(NICE 2012)

The Health and Social Care Act 2008

Considerations for practice

- Meticillin-resistant *Staphylococcus aureus* (**MRSA**) suppression regimens for colonised patients when appropriate
- Extended Spectrum Beta Lactamase (**ESBLs**) and other antibiotic resistant bacteria
- *Clostridium difficile* – local RCA suggest link with Trimethoprim

Our experience

- Active management is essential
- Work in partnership with Infection Prevention & Control team
- Ciprofloxacin
- IM Gentamicin
- IV Teicoplanin

Lubricants

- Urethral trauma and discomfort will be minimised by using an appropriate sterile, single-use lubricant or anaesthetic gel.
- Ongoing debate

Reducing risk of CAUTI

- Regular review of need for catheter
- Remove if possible
- Maintain closed system
- Regular meatal cleansing
- Empty drainage bags when clinically indicated
- Adequate hand hygiene & wear gloves when touching catheter

What else?

- Supporting devices – reduce urethral trauma
- Access to appropriate products – staff must have knowledge of the range of products available (NICE 2013b)
- Product review annually (DH2000) / every 2 years (NICE 2013b)
- Urine samples – use of sample ports
- Size of catheter – size 16ch for SP
- Catheter material

To minimise the risk of blockages, encrustations and catheter-associated infections for patients with a long-term indwelling urinary catheter:

- Develop a patient-specific care regimen
- Consider approaches such as reviewing the frequency of planned catheter changes and increasing fluid intake
- Document catheter blockages – refer stone screen
- Catheters should be changed only when clinically necessary or according to the manufacturer's current recommendations.
- Bladder instillations or washouts must not be used to prevent catheter-associated infections.

In practice

- Bladder instillations / washouts are beneficial for some patients
- L.IN.C Bladder Infusion kit - prevents breaking the closed system

Catheter removal

- There is some evidence that the balloon material on all silicone Foley catheters has a greater tendency to “cuff” on deflation than latex catheters, particularly when used suprapubically. Cuffing can cause distress and injury to patients when the catheter is removed (NICE 2013a)
- **In practice -**
 - Integral balloon may help
 - Re - inflate balloon then deflate again – cuff may reposition
 - Rotate catheter during removal
 - Use of gel pre catheter removal
 - Increase frequency of catheter changes – SP
 - Citric acid instillation pre removal

- One study identified by our systematic review compared the use of catheter valves with a standard drainage system and found no significant difference in urinary tract infection but a patient preference for the catheter valve. The Medical Device Agency (now Medicines and Healthcare products Regulatory Agency) suggests patients need to be assessed for their mental acuity, manual dexterity, clothing preferences and use of night drainage bags when considering using catheter valves (NICE 2012a)

Meatal cleansing with antiseptic solutions is unnecessary

- One systematic review considered six acceptable studies that compared meatal cleansing with a variety of antiseptic/antimicrobial agents or soap and water.
- No reduction in bacteriuria was demonstrated when using any of these preparations for meatal care compared with routine bathing or showering.
- Expert opinion and another systematic review support the view that vigorous meatal cleansing is not necessary and may increase the risk of infection.
- Washing the meatus with soap and water during daily routine bathing or showering is all that is needed (NICE 2012a)

Octenilin

- Incorporates octenidine dihydrochloride as its active ingredient, which acts as a broad spectrum antimicrobial and is suitable for use on skin & mucous membrane.
- Also contains ethylhexylglycerin (a conditioning agent & preservative), which reduces the skin's surface tension, providing optimal moistening & cleansing (Sandle 2013)

Community patients at risk of CAUTI

- Women
- Older male patients in long term residential care
- Those who are immunocompromised
- Patients with Diabetes Mellitus (Infection Control Today 2006)
- ?? Faecal Incontinence – issues with disposable products

To conclude

- The what to do is clear
- The how to do is less clear
- A centralised caseload is essential to facilitate effective management & surveillance

References

- Brusch (2013) Catheter –Related Urinary Tract Infection. Available online <http://emedicine.medscape.com/article/2040035-overview>
- DH (2008) The Health and Social Care Act 2008. Code of Practice on the prevention and control of infections and related guidance (2010) DH www.dh.gov.uk/publications
- EAUN (2012) <http://www.uroweb.org/nurses/nursing-guidelines>
- NICE (2012a)CG 139 – Infection: prevention and control of healthcare-associated infections in primary and community care (2003 updated 2012)
- NICE CG 97 - The management of lower urinary tract symptoms in men (2010)
- NICE CG 171 – Urinary Incontinence in Women (2006 update 2013)
- NICE (2012b) CG 148 - Urinary incontinence in neurological disease: management of lower urinary tract dysfunction in neurological disease (2012)
- RCN (2012). Catheter Care. RCN Guidance for Nurses. Royal College of Nursing
- Sandle (2013) Using an antimicrobial skin cleanser before catheterisation. Journal of Community Nursing. Vol 27, No 5. 30-33