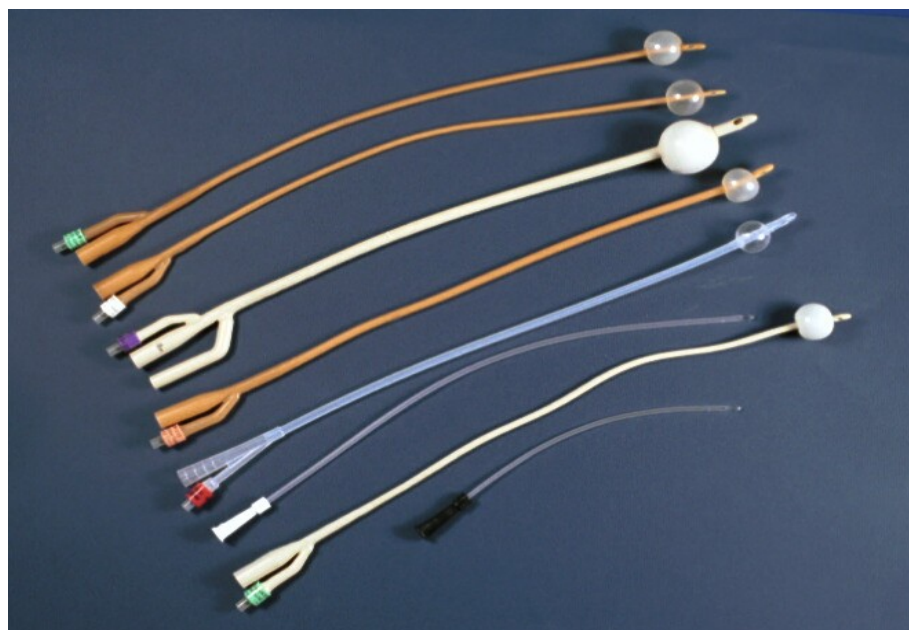


Australia and New Zealand
Urological Nurses Society INC
ABN 84313582948



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CATHETERISATION CLINICAL GUIDELINES

Clinical Guidelines | Edited by Trish White, Lynn Brinson and Julia Glentworth

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1.0 Introduction

Clinical guidelines for catheterisation have been in draft format and regularly reviewed since 2001.

The Australia and New Zealand Urological Nurses Society Inc (ANZUNS) project officer has now developed these guidelines into formal Clinical Practice Guidelines.

Trish White, Lynn Brinson and Julia Glentworth have edited this edition, and our thanks also go to the following who kindly volunteered to peer review the document:

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The guidelines have been produced to assist appropriately trained Health Care Professionals in the safe management of urinary catheters in adults. They can be used as a guide to practice but are not definitive and local policy must be followed. Recommended evidence based best practice has been utilised as a basis for this guideline.

Acknowledgment to Wayne Blair, Clinical Photographer, HBDHB, New Zealand, for allowing the use of his photographs. The following are acknowledged for their contribution to developing the initial draft document prior to the appointment of the AUZNUNS project officer.

Draft 1	Trish White and Cheryl Hennah	2001
Draft 2	Nicola Walker and Kay Talbot	2003
Draft 3	Nicola Walker and Kay Talbot	2004
Draft 4	Kay Talbot and Nicola Walker	2005
Version 1	Kay Talbot and AUNS Catheter Care SIG	2006
Version 2	Trish White, Lynn Brinson, Julia Glentworth	2013

2.0 Professional Requirements for Nurses

Only those Health Care Professionals who are trained and have a clear knowledge and understanding of the urinary tract, the catheterisation process and the principles of asepsis should be permitted to insert urethral and change suprapubic catheters. A competency based training programme containing the theoretical component of catheterisation training followed by a period of supervision until the nurse is competent in the technique of catheterisation is recommended [2, 3]. Ongoing refresher courses to review techniques, complications and new products should be available to all staff who catheterise. Community and primary healthcare workers must be trained in catheterisation as above [2].

ANZUNS recommends the initial order to insert a catheter must be from a suitably qualified Medical Practitioner, Nurse Practitioner, Advanced Practice Nurse, experienced urological Registered Nurses practicing within their scope of practice and according to local guidelines.

ANZUNS recommends only Nurse Practitioners, Registered Nurses and Enrolled Nurses (who are under delegation and supervision of a Registered Nurse) are permitted to insert urethral and change suprapubic catheters.

Advanced Practice Nurses can do initial insertion of a suprapubic catheter if this falls within their scope of practice. An experienced Urology Nurse should do the first suprapubic catheter change. Thereafter a competent Health Care Professional.

3.0 Indications for Catheterisation

3.1 Urethral: Insertion of a catheter into the urinary bladder via the urethra [4].

The indications are:

- To relieve acute urinary retention or bladder outlet obstruction [5-13]
- Close monitoring of urine output in acute renal failure and in the critically ill patient [5-9, 12].
- Peri-operative use for selected surgical procedures – patients undergoing urologic surgery or to other adjoining structures of the genitourinary tract [5-9]
- Anticipated prolonged duration of surgery or patients anticipated to receive large volume infusions or diuretics during surgery [7]
- To enable pre and post operative bladder drainage e.g. Trans urethral resection of prostate (TURP) [7-9, 14]
- To facilitate irrigation of the bladder and management of haematuria/clot retention [7]
- Potential for use during labour and delivery or surgery when an epidural has been utilised
- The need for intra operative monitoring during surgery [7]
- Chronic urinary retention in the symptomatic patient (e.g. renal impairment or urinary tract infection) when intermittent self catheterisation (ISC) is not an option and retention cannot be corrected medically or surgically [7]
- To facilitate urodynamic studies or specialist radiological procedures
- Instillation of cytotoxic drugs directly into the bladder [7]
- To measure residual urine after patient has voided in the absence of a bladder scanner [7]
- In patients with neurological disorders causing paralysis or loss of sensation leading to voiding difficulties [6, 12]
- Patients requiring prolonged immobilization e.g. multiple traumatic injuries such as pelvic fractures [6, 9]
- Where a patient insists on this form of management after discussion and understands the risks [15]
- To manage intractable incontinence as a last resort or when incontinence poses a risk of infection of nearby surgical sites or skin breakdown [8, 10, 15]
- Management of impaired skin integrity and to assist healing of open sacral or perineal wounds [6-8, 12]
- To improve comfort for end of life care [5-9, 12]

3.2 Suprapubic: Insertion of a catheter into the bladder via the anterior abdominal wall [4].

The indications are:

- Acute or chronic urinary retention following unsuccessful attempts at urethral catheterisation [7, 8, 16-19]
- Unable or unwilling to perform intermittent self catheterisation [20-22]
- Patient preference e.g. wheel chair bound, sexual function related issues [7, 8, 22, 23]
- Long term bladder drainage for patients with neurological disease [18, 23]
- Anatomical problems in the urethra e.g. stricture, obstruction, trauma [7]
- Mobility issues [7, 8, 24]
- Complications of long term urethral catheterisation e.g. penile meatal ulcer or catheter induced urethritis [7, 24]
- When urethral or pelvic floor trauma is suspected [25]
- Post operatively following complex urethral, genitourinary or abdominal surgery [7]
- To decrease risk of contamination with organisms from faecal material [7, 23, 24, 26]
- Acute prostatitis [7, 16]
- Patient comfort [7, 23, 24]

3.3 Intermittent Self Catheterisation (ISC): Inserting a catheter into the bladder via the urethra or other catheterisable channel such as Mitrofanoff continent urinary diversion to drain urine. The catheter is removed immediately after emptying the bladder. [27]. ISC is considered the “gold standard” of urine drainage for bladder emptying dysfunction [6, 7, 21, 22, 28, 29].

The indications are:

- ISC assists in protecting renal function, decreases incontinence, limits urinary tract infections (UTI), improves lower urinary tract symptom control and enhances quality of life [29, 30]
- Poorly emptying bladder >150mL, atonic bladder, detrusor underactivity or detrusor-sphincter dyssynergia or associated with aging [20, 22, 27, 29]
- Bladder outlet obstruction, benign prostatic hyperplasia (BPH) [28-30]

- To catheterise continent urinary diversions [27]
- Post-surgical procedures e.g. some surgery for stress urinary incontinence [20, 22, 30]
- Neurogenic bladder dysfunction including multiple sclerosis, Parkinson's, effects of diabetes, cerebral vascular accident, spina bifida, spinal injuries, post epidural/spinal anaesthetic, pudendal nerve damage post childbirth [22, 27, 30]
- To dilate urethral strictures using intermittent dilatation [6, 21, 29-31]
- ISC also reduces interference in sexual activity and decreases need for equipment and appliances [6, 22, 29, 32]
- In the hospital setting intermittent catheterisation is a sterile procedure performed by health professionals and can be used to:
 - relieve acute urinary retention
 - obtain a clean urine specimen
 - measure post void residual
 - instill medication into the bladder e.g. BCG, anticholinergics [4, 7, 21, 23]

4.0 Term of Catheterisation

Any urinary catheter should be left in-situ for the minimum possible time. Catheterisation is divided into three groups, intermittent, short-term and long term [4, 31, 33-36].

4.1 Intermittent Self Catheterisation

Frequency of catheterisation can vary [22] and urine frequency, post void residual and bladder capacity should be assessed to establish frequency.

ISC should be performed at regular intervals to prevent bladder distention and in general the total volume should not exceed 400 - 500mL. Urine volume therefore should determine catheterisation schedule and unnecessary catheterisation should be avoided to decrease the Catheter associated urinary tract infection CAUTI risk. [21, 30] For example if the patient is unable to void they may have to catheterise up to six times a day, or if bladder volume >500mL per void, aim for at least three times a day, if <100mL residual volume for three consecutive times stop catheterising [22, 30].

The changing nature of disease process may mean changes in management should be regularly considered [20].

4.2 Short Term Catheterisation

There is no agreement on the classification of short term indwelling catheterisation with it varying between 8-29 days and as per manufacturer instructions. For the purposes of this document we have defined it as 28 days [24]. Therefore a short term catheterisation is defined as the catheter being in-situ 28 days or less [24].

Use Latex based, silicone elastomer coated catheter as first choice for short term catheter (unless patient has latex sensitivity) [36].

Silver alloy or antibiotic coated catheters may be considered for short term use. They reduce and delay the onset of catheter associated asymptomatic bacteriuria (CA-ASB) [6, 24, 30, 35, 36].

Regular review of patients clinical need for continuing catheterisation and remove the catheter as recommended and as soon as possible [31, 33-35, 37].

4.3 Long Term Catheterisation

The indwelling catheter is in-situ for longer than 28 days and can be up to a maximum of 12 weeks or as per manufacturer's instructions.

A hydrogel catheter or 100% silicone is recommended for long term urethral and supra-pubic catheterisation. However catheter selection is variable dependent upon patients needs

Use 100% silicone if patient has a latex allergy, persistently blocking catheter and also for suprapubic catheters [21, 36, 38].

Individual variation is evident in the length of time a catheter will remain functional. Routine changes should be on an individual basis but not exceeding the manufacturers' recommendations. Consider catheter function, encrustation degree, frequency of blockages and patient comfort [4, 31, 38].

Hydrogel, silicone elastomer coated and 100% silicone catheters can all be left in-situ for up to 3 months [21, 37]. Please check your local policy and governmental guidelines.

Having an indwelling catheter for greater than 10 years increases the risk of bladder cancer and regular screening checks should be undertaken [11].

Catheterised patients should be encouraged to self care for their long term catheters and continue their usual lifestyle. It is likely that long term catheterisation will increase with the aging population and chronic health conditions [38].

5.0 Potential Complications and Contraindications

5.1 Urethral

Male and Female Complications

- Catheterisation of males can be more problematic than females because of anatomy, however in women difficulty can be experienced locating the urethral meatus [30]
- Urethritis
- Urethral fistulas [39]
- Catheter blockage from encrustations or calcium deposits [40]
- Bladder stones
- Haematuria
- Chronic inflammation also increases the risk of bladder cancer [41, 42]
- Pressure necrosis
- Psychological trauma
- Pain and discomfort [43]
- Long term catheterisation can lead to urethral trauma [29, 39]
- Erosion or tearing primarily of the urethral meatus [26]
- Urethral stricture [44]

Male Complications

- Paraphimosis, caused by failure to return the foreskin in the uncircumcised male to normal position following catheter insertion.
- Creation of a false passage [7, 29, 39]
- Epididymitis [45]

Contraindications for Males:

- Acute prostatitis or suspicion of urethral trauma [4]

5.2 Suprapubic

Contraindications for insertion of SPC

- Previous lower abdominal surgery with associated scar tissue/adhesions [8, 17, 46]
- Pelvic cancer without or without radiation with increased risk of adhesions [7]
- Unexplained haematuria [7]

- Severe obesity
- Pregnancy [24]
- Suspicion of an ovarian cyst
- Ascites [8, 17]
- Known or suspected carcinoma of the bladder [7, 8, 17, 46, 47]
- Anti coagulation therapy or blood clotting disorders [8, 17, 24]
- In the presence of vascular grafts/mesh in the supra pubic region [7, 17, 47]

Complications related to Initial Insertion

- Bleeding
- Bowel injury which is more common if insertion performed when the bladder is not fully distended [7, 48]

Long term complications

- Skin irritation, cellulitis at site [4, 7]
- Bladder shrinkage [24]
- Bladder stones [7]
- Higher incidence squamous cell bladder cancer [4, 7]
- Chronic CA-ASB [7]
- Overgranulation at insertion site [7]

5.3 Intermittent Self Catheterisation

Contraindications

- Priapism in male [29]
- Previous false passage stricture or infection [7, 29]
- Injury or tumour in urethra or penis [7, 29]

Precautions

- Patients with limited vision, dexterity, cognition and mobility may find ISC difficult; in some instances it is appropriate to teach a caregiver to perform ISC [20-22]
- Patients need to be able to manage ISC psychologically [20, 22]
- Caution with intermittent catheterisation is recommended in patient's post prostate surgery, bladder neck incision or urethral surgery and those with prostatic stent artificial prosthesis [7] or females with obstructing vaginal prolapse [20]
- A small capacity bladder may need frequent catheterisation to be effective so may not be suitable for ISC [20, 22]



Complications

- Occasional urethritis, urinary tract infection – however the risk is lower than with a long term indwelling urethral catheter [20]
- Frequency of catheterisation may need to be increased to keep residual volume drained <400-500mL [22]

Prostatitis in men

- Trauma resulting in urethral bleeding, strictures and false passage [20, 22]

6.0 Catheter Selection and Products

A urinary catheter is a thin hollow tube inserted via the urethra or suprapubic tract into the urinary bladder. Appropriate catheter selection can only be achieved after the patient's individual needs have been thoroughly assessed. Choosing the correct catheter requires nursing awareness of catheter availability, the needs of the patient and knowledge of evidence based best practice [4, 7, 34].

Factors for consideration include:

- Indication for catheterisation: Catheters, both long and short term should only be used after considering alternative management methods such as external “condom” catheter, and intermittent self catheterisation. The most effective way to reduce CAUTI and catheter associated asymptomatic bacteriuria (CA-ASB) incidence is to restrict urinary catheterisation to patients whom have clear indications and remove the catheter as soon as it is no longer required [6, 31, 34, 35].
- Likely duration of catheterisation: Long term catheters can remain in-situ for a maximum of 12 weeks depending on individual patient need or as per manufacturer's instructions. Antibiotic and silver impregnated catheters are beneficial in reducing CA-ASB in hospitalised patients with a catheter in situ for less than one week [6, 33, 35].
- Urethral or suprapubic catheterisation
- Size selection considering urine consistency e.g. increased sediment or haematuria would require a larger gauge catheter
- Patient allergies e.g. latex allergy [7]

6.1 Type

Straight Nelaton Catheter *or* **One-Way Catheter** with only one lumen and no balloon used for intermittent catheterisation or intermittent self catheterisation. It is not intended as an option for long term use. These catheters are available in both lubricated and un-lubricated versions. One way straight catheters can also be used for regular dilatation of urethral strictures, urodynamic studies and intra-vesical drug administration with the appropriate connecting device [4, 49].

Two-way Foley Catheter is used for indwelling catheterisation, double lumen, one removes urine and the smaller lumen enables balloon water inflation securing the indwelling catheter in the urinary bladder [49].



Transected Double Lumen Foley Catheter (Reproduced with permission of BARD)

Three-way Foley Catheters have three lumens and can therefore facilitate bladder irrigation and medication instillation. Used typically post urological surgery or for patients with haematuria [4, 49].



Three-way Haematuria Catheter (Photograph by Wayne Blair, HBDHB)

Haematuria Catheter/couvalaire/whistle tip are catheters which have a more generous tip opening to allow clot evacuation and blood drainage

Coude Tip and Tiemann Catheters have a curved tip to aid difficult insertions. Useful for bypassing urethral narrowing's caused by BPH. Insert with the tip pointed upwards to negotiate bulbar urethra [4, 49]

Suprapubic Catheters can be either: Two-way Foley which is inserted using an introducer or a guidewire if using an open ended Foley catheter. Or catheters designed and manufactured specifically for SPC use. These may require suturing onto the abdomen and are generally only for temporary use. [4]

6.2 Materials

Polyvinylchloride: (PVC) is used in Nelaton catheters (without balloon). These catheters require lubrication. All disposable catheters are intended for single use according to manufacturer's instructions. This catheter can be firm but softens at body temperature. The catheter is inexpensive and has a large internal diameter to facilitate drainage [30]



Nelaton Catheters for ISC (Photograph by Wayne Blair, HBDHB)

Coated catheters have a lubricated hydrophilic coating and need water applied to activate the lubrication



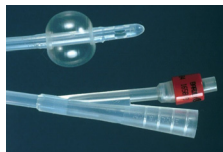
Polytetrafluoroethylene: (PTFE commonly known as Teflon) Decreases irritation and encrustations. These catheters are not suitable for latex or Teflon sensitive patients. Dwell time for up to four weeks or as indicated by the manufacturer. [2, 4]

Hydrogel Coated: contain latex and hydrogel and are biocompatible with human tissue. Hydrogel is a polymer that absorbs water forming a smooth surface around the catheter contributing to decreased urethral irritation. Can dwell for up to twelve weeks and or as indicated by the manufacturer [2, 4, 38, 50].



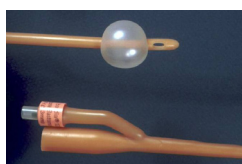
Hydrogel Catheter (Photograph by Wayne Blair, HBDHB)

100% Silicone: are hypoallergenic and latex free. They have a larger diameter drainage lumen compared to coated catheters. They offer encrustation resistance but can have a tendency to lose balloon fluid increasing risk of displacement, manufacturers are addressing this issue with ongoing product development [4, 37, 38].



100% Silicone Catheter (Photograph by Wayne Blair, HBDHB)

Silicone Elastomer Coated Catheters/Latex Silicone Coated Catheter: these catheters contain latex internally which is soft and flexible to promotes patient comfort, the outer 100% silicone coating provides a smooth surface thus protecting the patient from urethral irritation and reduces encrustation. It can dwell for up to three months or as according to local policy or as indicated by the manufacturer [4, 37, 38]. It must be noted that manufacturer advice for dwell time for this catheter is ambiguous in some cases. In Australia it is common for this catheter to be used on a short term basis only. Where in New Zealand they can dwell up to three months.



Silicone Elastomer Coated Catheter/Latex Silicone Coated Catheter

Silver Coated Catheters are manufactured using silver alloy with hydrogel. They reduce and delay the incidence and onset of biofilm formation if the catheter is in situ for less than one week. Available in both silicone and latex silver hydrogel coated catheters. This catheter can dwell for up to twelve weeks or as indicated by the manufacturer. [4, 6, 24, 33, 37, 38]











Antibiotic Impregnated Catheters: are available from some manufacturers and may influence CA-ASB within the one week period. Influence is unknown on symptomatic infection and anti-biotic resistance. [4, 6, 24, 35, 36]

6.3 Size

Catheters are measured in Charriere (Ch) or French gauge (Fg or Fr) and indicate the external diameter 1mm=3Ch. Sizes range from 6-24 Fg. There is an international colour code of the catheter sizes. [4, 7, 36, 49]

General Guide

6-10 Fg	Paediatric
12-14 Fg	Women
14-18 Fg	Men
14-20 Fg	Suprapubic
18-22 Fg	Haematuria

		5 fr
		6 fr
		8 fr
		10 fr
		12 fr
		14 fr
		16 fr
		18 fr
		20 fr

Reproduced with permission 180medical.com

Catheter size needs to be individualised and the smallest size to allow the best drainage should be chosen. 18+ Fg catheters can increase erosion of the bladder neck and urethral mucosa and also cause stricture formation and restrict drainage of periurethral gland secretions.

A three-way Foley catheter should be used when haematuria is present to allow for continuous bladder irrigation as required. The irrigation port is to be spiggotted when not in use. [6, 21, 32, 35, 36]

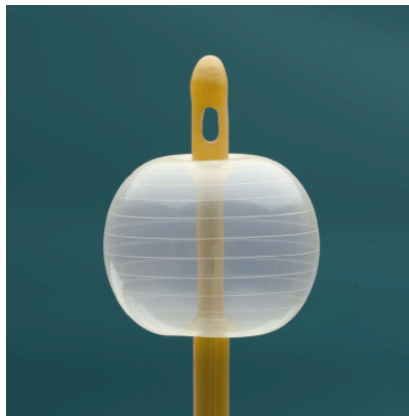
6.4 Length

There are three lengths of catheters.

STANDARD (41-45cm) FEMALE (20-25cm) PAEDIATRIC (30cm)

The standard length is for both male and female use. The female length provides more discretion and comfort for the ambulant, long term catheterised female. They are not appropriate if the female is bedridden or obese as they can pull on the bladder neck and also cause skin irritations. Female length catheters **MUST NEVER BE USED IN MALE CATHETERISATION** as the risk of trauma to the urethra due to inappropriately positioned balloon inflation is high [4, 7]

6.5 Balloon Size



10mL Inflated Balloon (Reproduced with permission of BARD)

Balloon size is written in mL or cc on catheter connector and also on the packaging. The catheter balloon retains the indwelling catheter in place in the bladder and should be filled to the volume recommended by the manufacturer.

Under and over inflated balloons can cause problems with drainage i.e. eye occlusion, bladder wall irritation and spasms. Use sterile water to inflate the balloon. Air is not suitable. [4, 7, 37]



Catheter Eyes (Reproduced with permission of BARD)

6.6 Drainage Systems

6.6.1 Bag Selection

When selecting a drainage system, the following should be considered:

- Indications for catheterisation
- Intended duration of catheterisation
- Infection control issues
- Mobility of patient
- Dexterity of patient
- Comfort and dignity

Disposable two litre bags (night bags)

- General use
- Outlet port for emptying urine
- Preferred urine specimen access port
- One-way anti-reflux valve
- Length of tubing



2L Night Bag (Photograph by Wayne Blair, HBDHB)

Disposable two litre closed system bag (hourly measuring with sample port)

- Generally used short term post operatively or for those critically ill to enable precise monitoring of urinary output [51]

- As generally short term use, the bags are only changed if damaged, malodorous or contaminated

Disposable leg bags (day bags)

- Designed for the mobile patient to wear during the day strapped to the thigh, calf or waist. There are a number of volume capacities available ranging from 120-800mL to meet the individuals routine and activities [4, 28, 38]
- Different materials and backings available for comfort and support of leg bags
- Tubing is available in differing lengths and some can be adjusted to individuals requirements
- Different outlet taps are available to accommodate patients differing manual dexterity levels e.g. barrel top, lever tap, T-tap and push-pull tap [4]



Leg Bag (Photograph by Wayne Blair, HBDHB)

- Patients can attach a 2L drainage bag (night bag) to the bottom of their leg bag thereby maintaining a closed link system and giving a larger volume capacity for overnight use. This system requires a stand for support and to reduce dislodgement and infection risk. In the community leg bags should be changed every 5-7 days or as indicated and in keeping with manufacturers guidelines [2, 4, 34, 50, 52].
- In the home setting a drainable night bag may be reused for up to one week, unless malodorous when it should be changed earlier. Wash out with warm soapy water (not strong detergents or bleach as strength of chemicals cannot be guaranteed as some can damage the drainage bag or cause irritation) [52]
- Addition of antiseptics or antimicrobials to drainage bags is ineffective [31, 35]



Link System (Photograph by Wayne Blair, HBDHB)

Disposable four litre bags

Used short term post urological surgery and for continuous bladder irrigation

They have an anti-reflux, non-return valve



Continuous Bladder Irrigation Using 4L Drainage Bag (Photograph by Wayne Blair, HBDHB)

6.6.2 Catheter Valves

Catheter valves can provide a discreet alternative to drainage bags when connected to the catheter outlet lumen [2]

Imitate and maintain normal bladder capacity and tone by allowing the bladder to fill and empty [4, 38]

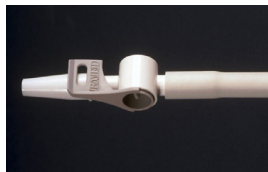
Not suitable for all patients. Consider the patients renal function, bladder capacity, manual dexterity, cognition and carer needs. Patients with over active bladder, severe cognitive impairment, urinary tract infection and urethral reflux should be excluded from catheter valve use [4, 36, 38]

Allows for the catheter balloon to be lifted off bladder wall thereby decreasing risk of bladder wall erosion and balloon associated bladder neck trauma [38]

A variety of designs are available, usually compatible with a linked system so they can connect to night bags overnight [4, 32, 38]

Recommended to be released every 2-4 hours and changed in accordance to manufacturer instruction

Catheter valves should be changed weekly or in accordance with manufacturer instructions



Flip Flo Valve (Photograph by Wayne Blair, HBDHB)

6.7 Catheter Securement

Best practice in managing an indwelling catheter includes use of a securement device. The catheter should be secured to help prevent dislodgement, movement induced urethral trauma and increased risk of urinary tract infection [2, 4, 38, 53, 54]

Secured indwelling catheters both short and long term also prevent the catheter balloon from exerting bladder neck or urethral force [54]

Indwelling catheters should be secured to the patient's upper thigh or abdomen. [2, 4, 36, 53, 54]. The securement should be placed where the catheter is stiffest, typically just below the bifurcation

Catheter securing can also be utilised post Trans Urethral Resection of Prostate and Radical Prostatectomy to facilitate a gentle traction helping to reduce post-operative bleeding and to protect a surgical anastomosis [53, 54]

There are a range of securement devices available and these should be used in accordance with manufacturer's recommendations

There are both adhesive backed devices and non-adhesive such as Velcro straps available [54]

A bio-occlusive film and a strong adhesive tape can also be used as an improvised indwelling catheter securement as in picture below.



Simple Securement System

6.8 Catheter Storage

Inappropriately stored catheters can lead to damage, therefore catheters should:

- Lie flat, preferably in the original box provided by the manufacturer
- Not be exposed to sunlight or heat
- Not be bent
- Not be grouped by rubber bands
- Have expiry date checked before use
- Not be overstocked and have regular rotation
- Be clearly separated between female and standard lengths to decrease the risk of using a female length in the male patient [7]

7.0 Procedure Guidelines

7.1 Male Urethral Catheterisation

Equipment Required

1. Procedure trolley or suitable clean surface if in community setting
2. Sterile catheterisation pack
3. Cleansing solution – an appropriate antiseptic or sterile solution preferably, 0.9% sodium chloride [3, 4, 6, 7, 34, 55]
4. Sterile and non sterile gloves
5. Appropriate size and length catheter
6. Sterile anaesthetic lubricating gel as per local policy
7. Sterile water for balloon and 10mL syringe
8. Specimen container if indicated
9. Disposable waterproof sheet
10. Extra Jug
11. Personal protective equipment (PPE)
12. Appropriate catheter valve or drainage bag and support accessories as required
13. Securement device or system

Procedure	Rationale
Explain and discuss the procedure with the patient and gain consent. Provide a patient education/information brochure on catheterisation as appropriate. [12] This may need further reinforcement at the end of the procedure if patient is to be discharged home with catheter.	To ensure patient has a good understanding of the procedure and gives informed consent To ensure safe catheter management in the home
Check current medications and any known allergies	Prevent medication reaction
Ensure a good light source is available	To maximise visibility
Undertake the procedure on the patient's bed or in a clinical setting utilising screens or curtains to promote and maintain dignity and privacy	To ensure privacy
Position patient in the supine position with knees slightly flexed and the feet a little apart. Place a waterproof sheet under the buttocks. Ensure the patient is not exposed and maintain warmth	To ensure accessibility and to maintain dignity and comfort
Perform hand hygiene using alcohol gel or soap and water [56-58]	To reduce the risk of infection
Clean and prepare trolley and open catheterisation pack using an	

Procedure	Rationale
aseptic technique, add catheter and other sterile equipment pour cleansing solution onto tray and open specimen container if needed. Empty sterile water into tray ready for balloon inflation. (some have this prepared in pack)	
Remove cover that is maintaining patient privacy	
Perform hand hygiene using alcohol gel or soap and water and put on non sterile gloves. Retract the foreskin, if necessary, and clean the glans penis with cleansing solution according to your local guidelines, moving in a circular motion from the meatus outwards to the base of the penis	To reduce the risk of introducing infection to the urinary tract during catheterisation
Remove non sterile gloves, Perform hand hygiene using alcohol gel or soap and water and put on sterile gloves [56-58]	To reduce the risk of infection
Apply the fenestrated drape	To create a sterile field
Lubricate catheter length with anaesthetic gel. Draw up sterile water into syringe to inflate balloon. Hold the penis with a piece of gauze and cover the meatus with gel, then instil the remainder into the urethra and discard the gel container [11] Warn the patient about the risk of stinging from anaesthetic gel	Small amount of anaesthetic gel allows adequate lubrication to insert the catheter nozzle into the meatus prior to insertion, use of a local anaesthetic minimises the discomfort experienced by the patient
Hold the penis behind the glans, raise to a 90° angle to the body Insert the catheter until resistance is felt at the first sphincter, continue to the Y bifurcation	To facilitate ease of insertion To ensure the balloon is not in the prostatic urethra. Inadvertent inflation of the balloon in the urethra causes pain and urethral trauma
If resistance is felt at the external sphincter: <ul style="list-style-type: none"> • Consider second tube of lubricant • Apply gentle steady pressure on the catheter • Ask the patient to take a deep breath • Ask the patient to cough or bear down • Ask the patient to try to pass urine • Gently rotate the catheter 	To reduce the risk of urethral and bladder neck trauma
Gently inflate the balloon according to the manufacturer's instruction NEVER INFLATE THE BALLOON UNTIL URINE FLOWS FREELY AND STOP IF PAIN IS FELT	Reduce the risk of urethral, prostatic and bladder neck trauma Pain could indicate bladder spasm or incorrect placement
Withdraw the catheter slightly until resistance is felt Attach it to a compatible valve or drainage system, Support the catheter by using a specifically designed support strap or tape [6, 11, 18, 19, 54, 59, 60], Ensure that the catheter does not become taut when the patient is mobilising	To ensure correct catheter placement To ensure patient comfort and to reduce the risk of urethral and bladder neck trauma Movement induced trauma can lead to UTI and tissue necrosis

Procedure	Rationale
Ensure that the glans penis is clean and dry and reposition the foreskin in uncircumcised males	To prevent Paraphimosis. If the area is left wet skin irritation may occur
Remove gloves and perform hand hygiene using alcohol gel or soap and water. [56-58] Ensure the patient is comfortable	
Dispose of equipment and gloves in a biohazard bag utilised in the clinical area	To prevent environmental contamination
Dispose of clinical waste bag into Appropriate waste system	To prevent environmental contamination
Perform hand hygiene using alcohol gel or soap and water. [56-58]	To reduce risk of cross-infection from Micro organisms
Complete documentation	

7.2 Female Urethral Catheterisation

Equipment Required

1. Procedure trolley or suitable clean surface if in community setting
2. Sterile catheterisation pack
3. Sterile and non sterile gloves
4. Cleansing solution – an appropriate antiseptic or sterile solution preferably, 0.9% sodium chloride [3, 4, 6, 7, 34, 55]
5. Appropriate size and length catheter
6. Sterile anaesthetic lubricating gel as per local policy
7. Sterile water for balloon and 10mL syringe
8. Specimen container if indicated
9. Disposable waterproof sheet
10. Extra Jug
11. Personal protective equipment (PPE)
12. Appropriate catheter valve or drainage bag and support accessories as required
13. Light source
14. Securement device or system

Procedure	Rationale
<p>Explain and discuss the procedure with the patient and gain consent. Provide a patient education/information brochure on catheterisation as appropriate. [12] This may need further reinforcement at the end of the procedure if patient is to be discharged home with catheter.</p>	<p>To ensure patient has a good understanding of the procedure and gives informed consent To ensure safe catheter management in the home</p>
<p>Check current medications and any known allergies</p>	<p>Prevent medication reaction</p>
<p>Ensure a good light source is available</p>	<p>To maximise visibility</p>
<p>Undertake the procedure on the patient's bed or in a clinical setting utilising screens or curtains to promote and maintain dignity and privacy</p>	<p>To ensure privacy</p>
<p>Position patient in the supine position with the knees bent and abducted, hips flexed and feet together. Place a waterproof sheet under the buttocks. Ensure the patient is not exposed and maintain warmth</p>	<p>To ensure accessibility and to maintain dignity and comfort</p>
<p>Perform hand hygiene using alcohol gel or soap and water [56-58]</p>	<p>To reduce the risk of infection</p>
<p>Clean and prepare trolley and open catheterisation pack using an aseptic technique, add catheter and other sterile equipment, pour cleansing solution onto tray and open specimen container if needed. Empty sterile water into tray ready for balloon inflation. (some have this prepared in pack)</p>	
<p>Remove cover that is maintaining patient privacy</p>	
<p>Perform hand hygiene using alcohol gel or soap and water and put on non sterile gloves.[56-58]</p>	<p>To reduce the risk of introducing infection to the urinary tract during catheterisation</p>
<p>Separate the labia minora so that the urethral meatus is visualised. If there is any difficulty in identifying the urethral orifice due to vaginal atrophy and retraction of the urethral orifice, consider re-positioning the patient e.g. by raising the buttocks, turning to left lateral position and ensure lighting is good</p>	<p>This manoeuvre provides better access to the urethral orifice and helps to prevent labial contamination of the catheter</p>
<p>Clean both the labia and around the urethral orifice with cleansing solution or recommended local cleansing solution, using single downward strokes</p>	<p>To avoid contamination with bacteria from the perineum and anus</p>
<p>Remove non sterile gloves, Perform hand hygiene using alcohol gel or soap and water and put on sterile gloves[56-58]</p>	<p>To reduce the risk of infection</p>
<p>Apply the fenestrated drape</p>	<p>To create a sterile field</p>

Procedure	Rationale
Lubricate lower third of catheter with gel. Draw up sterile water into syringe to inflate balloon. Cover the meatus with gel, then according to local policy instil anaesthetic gel into the urethra and discard the gel container [13]	Reduce the risk of urethral trauma, minimise discomfort and to facilitate catheterisation. Can also aid visualisation of the urethra in females
Insert the catheter until urine flows then advance the catheter a further 2-4cm to ensure the balloon is clear of the urethra. , Ask the patient to take a deep breath or rotate the catheter slightly if resistance is felt Should the catheter go into the vagina leave it there as a guide and insert a new catheter above it Advance the catheter until urine flows freely	To ensure catheter is in the bladder
Gently inflate the balloon according to the manufacturer's instruction NEVER INFLATE THE BALLOON UNTIL URINE FLOWS FREELY AND STOP IF PAIN IS FELT	Pain could indicate bladder spasm or incorrect placement
Withdraw the catheter slightly until resistance is felt Attach it to a compatible valve or drainage system, Support the catheter by using a specifically designed support strap or tape [6, 11, 18, 19, 54, 59, 60], Ensure that the catheter does not become taut when the patient is mobilising	To check catheter placement To ensure patient comfort and to reduce the risk of urethral and bladder neck trauma Movement induced trauma can lead to UTI and tissue necrosis
Ensure that the genital area is clean and dry	If the area is left wet skin irritation may occur
Remove gloves and perform hand hygiene using alcohol gel or soap and water [56-58] Ensure the patient is comfortable	
Dispose of equipment and gloves in a biohazard bag utilised in the clinical area	To prevent environmental contamination
Dispose of clinical waste bag into appropriate waste system	To prevent environmental contamination
Perform hand hygiene using alcohol gel or soap and water [56-58]	To reduce risk of cross-infection from Micro organisms
Complete documentation	

7.3 Change of Suprapubic Catheter

Equipment Required

1. Procedure trolley or suitable clean surface if in community setting
2. Sterile catheterisation pack
3. Cleansing solution – an appropriate antiseptic or sterile solutions preferably, 0.9% sodium chloride [3, 4, 6, 7, 34, 55]
4. Sterile and non sterile gloves
5. Appropriate size and length catheter

6. Sterile lubricating gel as per local policy
7. Sterile water for balloon and 10mL syringes x2
8. Catheter tip syringe and 100mL 0.9% sodium chloride if filling bladder prior to removing previous SPC
9. Specimen container if indicated
10. Disposable waterproof sheet
11. Extra Jug
12. Personal protective equipment (PPE)
13. Appropriate catheter valve or drainage bag and support accessories as required
14. Securement device or system

Procedure	Rationale
<p>Explain and discuss the procedure with the patient and gain consent. Provide a patient education/information brochure on catheterisation as appropriate.</p> <p>[12]</p> <p>This may need further reinforcement at the end of the procedure if patient is to be discharged home with catheter.</p>	<p>To ensure patient has a good understanding of the procedure and gives informed consent</p> <p>To ensure safe catheter management in the home</p>
Check current medications and any known allergies	Prevent medication reaction
Clamp catheter drainage bag 30-60 minutes prior to procedure (do not clamp catheter as this may prevent balloon deflation)	To facilitate flow of urine as soon as new SPC enters bladder to confirm position
Position patient in the supine position. Place a waterproof sheet under the buttocks. Expose the SPC site, loosening the drainage bag or valve from leg straps. Cover patient	To ensure accessibility and to maintain dignity and comfort
Perform hand hygiene using alcohol gel or soap and water [56-58]	To reduce the risk of infection
Clean and prepare trolley and open catheterisation pack using an aseptic technique, add catheter and other sterile equipment, pour cleansing solution onto tray and open specimen container if specimen required. Attach syringe to balloon port and allow water to drain while preparing patient. Empty sterile water into tray ready for balloon inflation. (some have this prepared in pack)	
Remove cover that is maintaining patient privacy	For ease of access
<p>Perform hand hygiene using alcohol gel or soap and water and put on sterile gloves [56-58]</p> <p>Lubricate lower third of catheter</p> <p>Draw up sterile water into syringe to inflate balloon.</p> <p>Cleanse area surrounding SPC with cleansing solution including outer lumen of catheter and the connection between catheter and drainage bag</p> <p>Apply sterile drape</p> <p>If drainage bag had not been clamped 30-60 mins prior to procedure you can instil 50-100mL 0.9% sodium chloride via catheter tip syringe to facilitate immediate drainage and confirm position in bladder, leave syringe attached to prevent leakage</p>	<p>To reduce the risk of introducing infection to the urinary tract during catheterisation</p> <p>Reduce the risk of urethral trauma, minimise discomfort and to facilitate catheterisation</p> <p>To create a sterile field</p>
Remove existing SPC using non dominant hand, noting direction of catheter and depth of insertion. Remove with even traction at 90° to abdomen, rotate slightly on withdrawal if resistance felt.	

Procedure	Rationale
Using dominant hand reinsert new SPC immediately Insert the catheter until urine flows freely, advance a further 5cm to ensure catheter balloon clears the bladder wall	To ensure continued patency of existing SPC tract and to prevent bladder spasm prior to insertion of new catheter To ensure correct placement in bladder
Gently inflate the balloon according to the manufacturer's instruction NEVER INFLATE THE BALLOON UNTIL URINE FLOWS FREELY AND STOP IF PAIN IS FELT	Pain could indicate bladder spasm or incorrect placement
Ensure that the skin is clean and dry A small keyhole dressing can be applied around the suprapubic opening only in the presence of exudates. If dressing is required it should be renewed daily	If the area is left wet skin irritation may occur
Dispose of equipment and gloves in a biohazard bag utilised in the clinical area	To prevent environmental contamination
Dispose of clinical waste bag into appropriate waste system	To prevent environmental contamination
Perform hand hygiene using alcohol gel or soap and water [56-58]	To reduce risk of cross-infection from Micro organisms
Complete documentation	

7.4 Intermittent Self Catheterisation

This guideline focuses on the process for teaching a patient ISC in their home

If performing intermittent catheterisation on a patient in a hospital setting a sterile and aseptic technique must be used [30]

7.4.1 Female Intermittent Self Catheterisation

Equipment Required

Soap and water or disposable cleansing wipe

Nelaton catheter – smallest size to allow adequate drainage. 10 – 12Fg

Lubricating jelly

Procedure	Rationale
<p>Patient to wash genital area with soap and water and then hands. A disposable cleansing wipe can be used [56-58]</p> <p>Instruct to spread labia and cleanse in downward strokes</p> <p>Perform hand hygiene yourself and don non sterile gloves to assist patient as needed [56-58]</p> <p>Ensure good lighting</p>	Prevent spread of bacteria into urinary tract [20]
Gather catheter and lubricant within easy reach	Ease of access to required equipment during procedure
Position in most convenient position, maybe sitting on toilet, or standing with one foot resting on edge of toilet. Show patient where to locate urethra, a mirror may be useful for initial teaching but should not be standard ongoing practice. Teach patient to locate urethra by nearby landmarks, i.e. proximity to vagina and clitoris	Facilitate easy insertion of catheter, either sitting or standing Assist when first teaching to locate urethral meatus, do not leave patient alone initially to do this Demonstration is an important part of the teaching process [29]
Instruct patient how to remove catheter from the packaging being careful to not touch the tip	To prevent accidental introduction of bacteria into bladder during catheterisation process
<p>Patient to part the labia with non dominant hand and gently insert the catheter with dominant hand into urethra until urine flows into toilet or container, encourage relaxation</p> <p>If catheter is accidentally inserted into vagina or contaminated in any way a new catheter must be used</p>	To prevent infection
<p>Once urine stops, slowly withdraw the catheter,</p> <p>If urine flow restarts, pause until bladder is fully empty</p>	To ensure bladder is completely emptied [20]
Discard catheter	
Both patient and yourself perform hand hygiene [56-58]	Prevent infection

7.4.2 Male Intermittent Self Catheterisation

Equipment Required

Soap and water or disposable cleansing wipe

Nelaton catheter – smallest size to allow adequate drainage. 12-14Fg

Lubricating jelly

Procedure	Rationale
<p>Patient to wash penis with soap and water and then hands [56-58], particularly around meatus, clean under foreskin if uncircumcised. Wipe from centre outwards. A disposable cleansing wipe can be used.</p> <p>Perform hand hygiene yourself and don non sterile gloves to assist patient as needed [56-58]</p> <p>Ensure good lighting</p>	Prevent spread of bacteria into urinary tract [20]
Gather catheter and lubricant within easy reach	Ease of access to required equipment during procedure
Instruct patient how to remove catheter from the packaging being careful to not touch the tip	To prevent accidental introduction of bacteria into bladder during catheterisation process
<p>Show patient how to lubricate the length of catheter tubing</p> <p>Anaesthetic gel may be useful when doing initial teaching, show how to insert into urethral opening [30]</p>	Prevent irritation or damage to urothelial tissue and pain for patient. Reassure some bleeding initially is not unusual [20]
<p>Hold the penis with one hand extending it almost upright from body and gently insert into urethra until it stops passing freely. Due to the direction of the urethra it is now necessary to alter the position of the penis downwards. Continue to pass the catheter until urine flows into toilet or container - explain resistance from sphincter and prostate felt in prostatic urethra is normal</p>	<p>Facilitate easy passage into bladder</p> <p>Demonstration is an important part of teaching process [29]</p>
<p>Once urine stops, slowly withdraw the catheter,</p> <p>If urine flow restarts, pause until bladder fully empty</p> <p>Instruct to return foreskin over glans if uncircumcised</p>	<p>To ensure bladder is completely emptied [20]</p> <p>To prevent paraphimosis</p>
Discard catheter	
Both patient and yourself perform hand hygiene [56-58]	Prevent infection

7.4.3 Neobladder/Stoma Intermittent Self Catheterisation

Equipment Required

Soap and water or disposable cleansing wipe

Nelaton catheter – smallest size to allow adequate drainage. Usually as recommended by Urologist.

May need larger gauge if mucous is draining from reconstructed bladder/stoma

Lubricating jelly

Procedure	Rationale
You and patient perform hand hygiene and don non sterile gloves to assist patient as needed [56-58]	
Gather catheter and lubricant within easy reach	Ease of access to required equipment during procedure
Position comfortably, some may stand in front of toilet, others prefer to sit and use container	Facilitate easy insertion of catheter Assist when first teaching do not leave patient alone initially to do this Demonstration is an important part of the teaching process [29]
Show patient how to lubricate the length of catheter tubing	Prevent irritation or damage to urothelial tissue and pain for patient. Reassure some bleeding initially is not unusual [20]
Encourage patient to gently insert into neobladder/stoma directing it until urine flows into toilet or container – if there is no drainage ensure mucous is not blocking catheter drainage	Mucous production can block catheters during drainage, if this occurs irrigation of the neobladder may be required
Once urine stops, slowly withdraw the catheter If urine flow restarts, repeat this process until bladder fully empty	To ensure neobladder is completely emptied [20]
Discard catheter	
Both patient and yourself perform hand hygiene [56-58]	Prevent infection

8.0 Catheter Management

8.1 Bladder Instillations Guidelines for manual and continuous bladder irrigation are located in the ANZUNS Clinical Guidelines Section on the website. Search for Clinical Guidelines Intravesical Instillations [1].

8.2 Principles Infection Control (CAUTI)

Catheter associated urinary tract infection (CAUTI) is a potential problem in all catheterised patients. It is the most common health care associated infection worldwide [2, 11, 31, 61, 62].

Guidelines to preventing CAUTI can be broken down into the following four sections [34]:

8.2.1 Assessing the Need for Catheterisation

It is important when assessing the need for catheterising to consider the indication. The most effective way to reduce CAUTI and catheter associated asymptomatic bacteriuria (CA-ASB) incidence is to restrict urinary catheterisation to patients whom have clear indications and remove the catheter as soon as it is no longer required [6, 31, 34, 35]. This guideline contains a complete list of acceptable indications for catheterisation in Section 3.0. Education of health care workers, care providers, patient and family members is important so that all are aware of their role in preventing urinary tract infection [3, 11].

8.2.2 Selection of Appropriate Catheter Type and Drainage System

To limit infection the correct selection of catheter type is important, consider coated catheters and size. Catheter selection including size and type is discussed in Section 6.0. Silver alloy and antibiotic impregnated catheters reduce and delay the incidence and onset of biofilm appearance in catheters in situ less than seven days. However, their influence is unknown on symptomatic infection and antibiotic resistance [3, 6, 11, 33, 35].

Intermittent catheterisation lowers the risk of CAUTI and complications. Hospitalised patients who normally perform ISC should continue to do so if possible but must use a sterile new catheter each time to decrease infection risk. ISC is usually performed in a “clean” rather than the “sterile” procedure utilised in the outpatient setting [6, 21, 31, 32].

Hygiene issues should also be considered especially hand hygiene[56-58] , cleaning the genital area, no touch technique especially tip of catheter and the correct disposal of equipment [29].

Aim to keep urine light straw colour with adequate fluid intake to assist in UTI prevention.

According to a Cochrane review there is currently insufficient evidence to state that UTI incidence in intermittent self catheterisation is affected by using a sterile or clean technique, coated or uncoated catheters, single or multiple use catheters self-catheterisation or catheterisation by others. They write it is impossible to state that one catheter type, technique or strategy is better than another [27].

When UTI is a problem when self catheterising, a review of technique to ensure appropriate hand hygiene is in place and the patient is not touching the catheter tip. For females if the catheter is inadvertently placed in the vagina a new one must be used. They should not reuse catheters. Consider underlying pathology that could be predisposing to infections e.g. calculi.

The closed drainage system is seen as a cornerstone of infection control and using one may reduce a patient's risk of CAUTI [2]. Bacteria enter the bladder of a catheterised patient in two ways. Most commonly via the intra-luminal pathway where bacteria travel up the drainage system via the catheter to the bladder, this is caused by breaks in the closed system. The second bacterial pathway is peri-urethral where bacteria travel up into the bladder alongside the catheterised urethra [55].

The closed system should be maintained at all times to minimise any breaks in the system. Maintaining a continuously closed urinary drainage system is vital and breeches such as unnecessary emptying of the urinary drainage bag or taking a urine sample increases the risk of catheter related infection [2, 4, 11, 21, 28, 34, 38, 51].

Pre-connected drainage systems with sealed catheter tubing junctions are available to minimize disconnections. They have the drainage bag pre-connected to a catheter in a sterile pack [4, 21, 35, 37].

The drainage bag needs to be positioned below the level of the patient's bladder and emptied frequently to prevent reflux, although most drainage bags are fitted with an anti-reflux mechanism [2, 6, 7, 11, 34].

8.2.3 Catheter Insertion

Aseptic technique and sterile insertion must be adhered to [2, 6, 24, 31, 63].

Cleanse meatus with appropriate agent and lubricant as per local policy from single use containers [3, 6, 7, 30, 34, 55].

Hand cleansing as per local infection control policy – must wear sterile gloves for insertion [56-58].

Prophylactic antibiotics are not recommended at insertion or replacement of IDC unless otherwise recommended e.g. Joint replacement [6, 7].

If patient develops symptomatic CAUTI remove or replace indwelling catheter (provided it had been indwelling longer than 7 days). Replacing/removing catheter allows for faster resolution of symptoms [11, 24, 31].

Obtain fresh urine specimen if recatheterised or mid stream urine if catheter remains out, then commence antibiotics [11, 24, 31, 37].

8.2.4 Catheter Maintenance

Perform hand hygiene immediately before and after any contact with catheter, SPC site or related equipment [2, 3, 56-58].

A closed drainage system must be maintained for best practice in preventing CAUTI [2, 3, 6, 11, 24].

In patients with long term catheters urine samples should only be taken if the patient is symptomatic of UTI.

If considering commencement of antibiotic for UTI, a urine sample should be taken prior to commencement of antibiotics [24, 31].

There is limited evidence on how often to change catheter bags, best practice suggests when they become damaged, contaminated, malodorous, at catheter changes and in accordance with manufacturers recommendations [2, 3, 35, 36]. There is no benefit on catheter associated infection when anti-bacterial solutions are added to drainage systems [31, 34, 35]. The general guide is that these bags should be changed while in hospital every 3 days and 5-7 days in the community or as governed by local policy [36].

Routine bladder washouts should only be performed if there is a clinical indication for doing so e.g. clot evacuation [8].

If a catheter becomes blocked or is bypassing it must be changed if in place longer than seven days. Assess that bypassing is not due to bladder spasm where replacement is not indicated.

Position drainage bag below the level of bladder and empty regularly. It should never be in contact with the floor [2, 6, 11].

Use separate containers for each patient when emptying multiple catheter bags [3].

Bladder irrigation and washouts do not prevent catheter associated infection [3, 64].

Catheter irrigation with sodium chloride 0.9% should not be used routinely to reduce catheter associated bacteriuria, CAUTI or obstruction in patients with long-term indwelling catheterisation [31].

Routine irrigation of the bladder with antimicrobials is not recommended [6]. Further research is needed on the benefit of irrigating the catheter with acidifying solutions and this remains an unresolved issue.

In the patient with a long term catheter if blockage occurs, change the catheter and perform manual bladder irrigation to clear the bladder of clot or debris causing the blockage. If obstruction is due to haematuria following prostate or bladder surgery, manual or continuous bladder irrigation is recommended to prevent blood clotting and blocking the catheter. Changing a catheter following

radical prostatectomy or surgery involving urethral anastomosis of any kind is not to be done without the Urologist's authorisation.

8.3 Documentation

On completion of the procedure, record information in the relevant documents. This should include:

- Date and time of catheterisation
- The indication for catheterisation/change of catheter and clinical need for the continued use of an indwelling catheter should be reassessed regularly[2]
- Catheter type, length and size
- Amount of water instilled into the balloon
- Any problems during the procedure
- In uncircumcised males that the foreskin has been returned over the glans penis
- Colour and amount of urine drained immediately (residual volume in previously uncatheterised patients)
- A review date to assess the need for continued catheterisation or date of next anticipated change of catheter
- Name of nurse

9.0 Abbreviation List

ANZUNS	Australia and New Zealand Urology Nurses Society
BCG	Bacillus Calmette-Guerin
BPH	Benign Prostatic Hyperplasia
CAASB	Catheter Associated Asymptomatic Bacteriuria
CAUTI	Catheter Associated Urinary Tract Infection
CH	Charriere
FG	French Gauge
FR	French
IDC	Indwelling Catheter
ISC	Intermittent Self Catheterisation
PPE	Personal Protective Equipment
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl Chloride
SPC	Suprapubic Catheter
TGA	Therapeutic Goods Administration
TURP	Trans Urethral Resection of Prostate
UTI	Urinary Tract Infection

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