

# Supra Pubic Catheterisation Work book 2014

Name .....

Designation and Department .....

Date .....

Date of Study Day .....



*Our Values*

**Service Teamwork Ambition Respect**



## Contents

Legal Aspects.....	4
Anatomy and Physiology.....	5
Possible Indications for Catheterisation.....	9
Advantages of Supra Pubic Catheter.....	11
Disadvantages of a Supra pubic Catheter.....	12
Problems associated with Supra Pubic catheterisation.....	12
Catheter selection.....	19
Fluid Intake .....	20
Sexuality and Body Image.....	21
Discharge.....	21
Supply of Catheter Equipment.....	22
Documentation.....	22
Procedure.....	23
References and further Reading .....	29

## Step 1

- Read the workbook and complete the pre-course assessment on training tracker (TT).
- When the TT assessment has been completed print off your certificate and bring to the session.
- Failure to attend with your certificate will mean that you will be unable to complete the study day and will need to re-book

## Step 2 - Support from your manager/mentor

- Prior to applying, ensure that your manager/mentor would like you to learn and practice this/these skill(s)
- It is hoped that during your appraisal you have reflected upon those existing skills and experiences you have acquired within your current role, and have now secured support for your further development from your clinical manager.
- On completion of this workbook, your clinical manager is required to sign the relevant section of the competency. This demonstrates their continued support for your role development regarding catheterisation.
- Please ensure that you send a copy of your completed Competency to The Academy to ensure you are entered into ESR

## Step 3 - Getting help to learn

- Identify a practice supervisor/assessor to help you achieve competency.
- You should contact a suitable practice supervisor/assessor within your work area, which will be able to guide and support you as you develop your knowledge and skills.
- The person(s) you choose must themselves be an expert and active practitioner in catheterisation and be have a current catheterisation competency.
- Formal contact with this person should be negotiated, allowing you to plan your development, review your progress, discuss and resolve any area of difficulty or uncertainty.

## Step 4 - Ensuring compliance with local guidelines and professional practice

- Ensure you have accessed, read and understood your health care organisation guidelines/policies relating to cannulation and any national guidelines that have been adapted for use in your clinical area

## Step 5 – Maintaining Competence

- This competency needs to be updated every two years with the current competency available on the intranet, you will need to:

- Read through updated competency and the relevant policies and guidelines
- Print off the competency, complete the 3.1 Competency Standard Form and keep the original for your own records, photocopy two and send one to the Academy and give one to your Manager

## Objectives

- State key aspects of relevant policies and procedures and protocols in relation to catheterisation
- Understand the legal and professional issues which apply to catheterisation.
- To identify complications associated with Suprapubic Catheterisation.
- Explore the documentation requirements.
- Demonstrate correct and safe re catheterisation on the simulation model during the follow up practical session

## Legal and professional issues



You must be registered practitioner (all disciplines).

- You must work within The Trust's Scope for Enhancing the Scope of Professional Practice
- The NMC code of conduct / HCPC Code must be applied
- You must have competency so that you are covered under the Trust's vicarious liability
- You gain informed consent and seek assistance if patient is not able to give consent
- You must use all products correctly and according to manufacturer's instructions

- Adherence to trust policies and procedures is vital
- Documentation in nursing notes must be accurate and timely.

This workbook aims to assist the learner to understand the requirements in the following areas relating to suprapubic catheterisation.

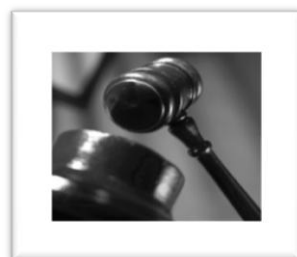
## Aim

- This work book is designed to equip you with the knowledge and skills to enable you to attain trust competency in Supra-Pubic Re-catheterisation.

## Objectives

- State key aspects of relevant policies, procedures and protocols in relation to Supra-pubic re-catheterisation.
- Identify the main anatomical and physiological points for Supra-pubic catheterisation SPC.
- To explore contra indications, advantages and disadvantages for SPC
- To identify appropriate monitoring for a patient with a SPC.
- To Identify the correct procedure for Supra-pubic re-catheterisation, safely and competently
- To examine the correct documentation required post procedure

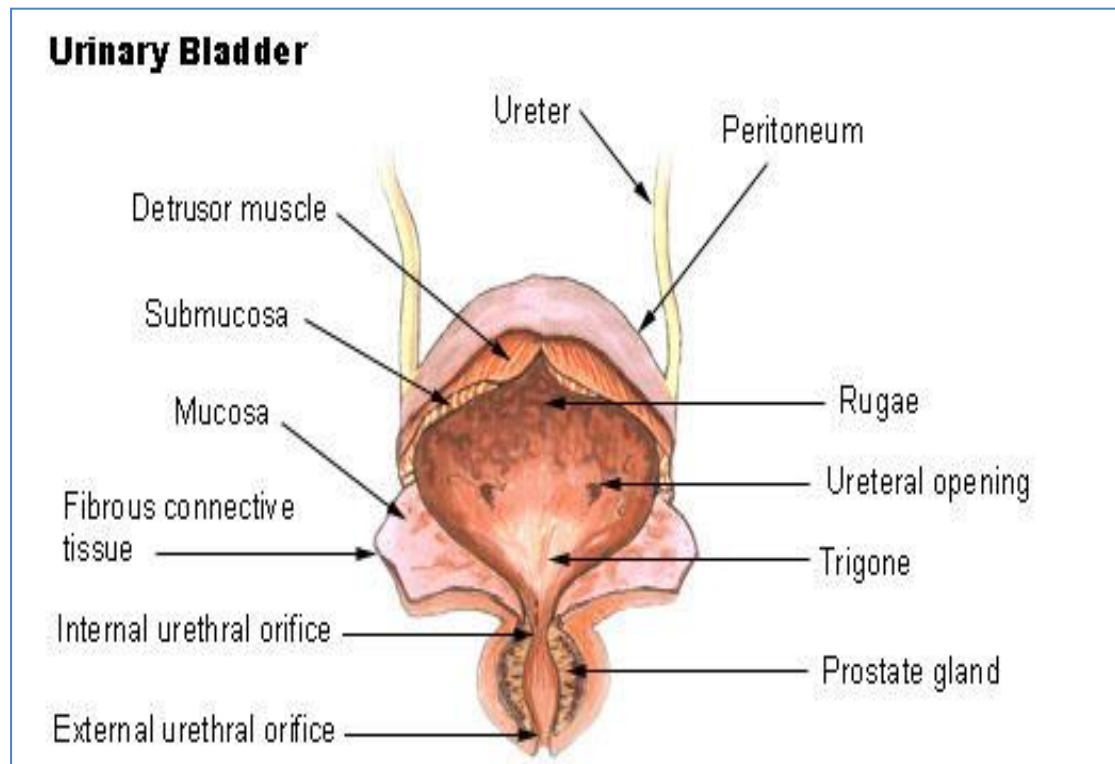
## Legal aspects



- Must be registered practitioner, Operating Department Practitioner, Emergency Department Assistant or Assistant Practitioner.
- Must work within The Trust's Scope for Enhancing the Scope of Professional Practice.
- Nursing and Midwifery Council's code (NMC) / Health and Care Professionals Council (HCPC) Code must be applied.

- Must have competency so that you are covered under the Trust's vicarious liability.
- Gain informed consent and seek assistance if patient is not able to give consent .
- Use products correctly (check expiry dates, length of use for drainage bags).
- Adhere to trust policies and procedures.
- Record Keeping.

## Anatomy and Physiology



## Kidneys

Each person has 2 kidneys, located at the rear of the abdominal cavity in the retro-peritoneum.

The kidneys receive blood from the paired renal arteries and drain into the paired renal veins.

Kidneys have homeostatic functions such as the regulation of electrolytes (Na, K, Ca), maintenance of acid-base balance, and regulation of blood pressure.

Renal function is carried out by Nephrons. Nephrons carry out three important functions:

- The control of blood concentration and volume by removing selected amounts of water solute.
- Regulating blood PH.
- Removing toxic waste from the blood.

The Nephrons remove many unwanted materials, such as urea and ammonium, from the blood, and is responsible for the re-absorption of water, glucose and amino acids. The kidneys become less effective with age; at 70 years of age the kidneys will be less efficient than someone who is 40 years of age.

They serve the body as a natural filter of blood, and remove waste products which are diverted to the urinary bladder. In producing urine, the kidneys excrete waste products such as urea and ammonium; the kidneys also are responsible for the re-absorption of water, glucose, and amino acids.

The kidneys also produce hormones including calcitriol (vitamin D), renin , and erythropoietin.

Average human produces: **1.5 litres urine / 24 hours** (affected by medication/ fluid status).

## Ureters

The **ureters** are muscular tubes that propel urine from the kidneys to the urinary bladder. In adults, the ureters are usually 25–30 cm (10–12 in) long and approx 3-4 mm in diameter.

The ureters arise from the renal pelvis on the medial aspect of each kidney before descending towards the bladder on the front of the psoas major muscle. The ureters cross the pelvic brim near the bifurcation of the iliac arteries (which they run over). This "pelvi-ureteric junction" is a common site for the impaction of kidney stones (the other being the ureterovesical valve). The ureters run poster inferiorly on the lateral walls of the pelvis. They then curve anterior medially to enter the bladder through the back, at the vesico-ureteric junction, running within the wall of the bladder for a few centimetres. The backflow of urine is prevented by valves known as ureterovesical valves.



The ureteric lumen is star-shaped. Like the bladder, it is lined with transitional epithelium, and contains layers of smooth muscle, thereby being under autonomic control.

The epithelial cells of the ureter are stratified (in many layers), are normally round in shape but become squamous (flat) when stretched. The lamina propria is thick and elastic (as it is important that it is impermeable).

There are two spiral layers of smooth muscle in the ureter wall, an inner loose spiral, and an outer tight spiral. The inner loose spiral is sometimes described as longitudinal, and the outer as circular, (this is the opposite to the situation in the gastrointestinal tract). The distal third of the ureter contains another layer of outer longitudinal muscle.

The adventitia of the ureter, like elsewhere is composed of fibrous connective tissue, that binds it to adjacent tissues.

## **Bladder**

The urinary bladder is the organ that collects urine excreted by the kidneys before disposal by urination. A hollow muscular, and distensible (or elastic) organ, the bladder sits on the pelvic floor. Urine enters the bladder via the ureters and exits via the urethra.

In males, the base of the bladder lies between the rectum and the pubic symphysis. It is superior to the prostate, and separated from the rectum by the recto-vesical excavation.

The detrusor muscle is a layer of the urinary bladder wall made of smooth muscle fibers arranged in spiral, longitudinal, and circular bundles. When the bladder is stretched, this signals the parasympathetic nervous system to contract the detrusor muscle. This encourages the bladder to expel urine through the urethra.

For the urine to exit the bladder, both the autonomically controlled internal sphincter and the voluntarily controlled external sphincter must be opened. Problems with these muscles can lead to incontinence. If the amount of urine reaches 100% of the urinary bladder's capacity, the voluntary sphincter becomes involuntary and the urine will be ejected instantly.

The urinary bladder usually holds 300-350 mls of urine; a full adult bladder holds about 500mL of urine, 15 times its empty volume. Not all specialists accept these values, some say a urinary bladder can hold about 1000 mls, but it is different from person to person. As urine accumulates, the ridged walls of the bladder, rugae, flatten and the wall of the bladder thins as it stretches, allowing the bladder to store larger amounts of urine without a significant rise in internal pressure.

The desire to urinate usually starts when the bladder reaches around 25% of its working volume. At this stage it is easy for the subject, to resist the urge to urinate. As the bladder continues to fill, the desire to urinate becomes stronger and harder to ignore. Eventually, the bladder will fill to the point where the urge to urinate becomes overwhelming, and the subject will no longer be able to ignore it.

## Urethral Sphincters

There are two Urethral Sphincters:

1. Internal Urethral Spincter
2. External Urethral Spincter

they are used to control the exit of urine in the bladder and through the Urethra.

The internal sphincter muscle of urethra: located at the bladder's inferior end and the urethra's proximal end at the junction of the urethra with the urinary bladder. The internal sphincter is a continuation of the detrusor muscle and is made of smooth muscle, therefore it is under involuntary or autonomic control. This is the primary muscle for prohibiting the release of urine.

The external sphincter muscle of urethra (sphincter urethra): located at the bladder's distal inferior end in females and inferior to the prostate (at the level of the membranous urethra) in males is a secondary sphincter to control the flow of urine through the urethra. Unlike the internal sphincter muscle, the external sphincter is made of skeletal muscle, therefore it is under voluntary control of the somatic nervous system.

## Possible indications for catheterisation

### 1. Obstructions

- **Prostatic Obstructions** in males
- **Urethral Stricture** - stretches urethral so it does not work properly and blocks off urine flow. It occurs when part of the urethra becomes narrowed, due to

injury from medical procedures or radiotherapy treatment or falling astride the frame work of a bike can cause damage. The length of the stricture can vary from 1 cm to the full length of the urethra.

- **Urinary Infections** can cause some scar tissue at the site of inflammation, but not all infections do this. Sexually transmitted infections, such as, Gonorrhoea and Chlamydia can cause problems as well as.
- Some babies may be born with **Urethral strictures**.
- In rare circumstances cancer can cause stricture of the urethra



## 2. Neuropathic

- **Disease Processes** - Poor transmission of nerves due to Multiple Sclerosis, spina bifida, Diabetes Mellitus, Parkinsons, spinal damage resulting in retention.
- **Nerve Damage** – Damaged nerves may send impulses to the bladder and the wrong time resulting in frequency, urgency and incontinence. Nerve damage can be caused by Childbirth, brain and spinal cord associated infections, diabetes, stroke and accidents.
- **Detrusor Muscle Failure** – The Detrusor muscle layer is arranged as layers in a fretwork pattern. As the muscle over stretches fibrous tissue forms causing a lack of elasticity and diverticulum formation.

## 3. Investigation and Treatment

**Urodynamics** – are used to discover how well the bladder and urethra are working and can be a means for diagnosis for Incontinence

- Frequency
- Urgency
- Painful Urination
- Recurrent urinary tract infections

**Treatment for Pressure Ulcers** – ‘A key factor for skin breakdown is moisture, which puts it at greater risk from maceration, friction and shearing forces, therefore the key issue is the presence or absence of wet skin ‘(Defloor 1999). If a patient is suffering from an ulcer it may be necessary to use a urethral or Supra-pubic catheter to assist with management.



**Bladder instillation** of maintenance solutions should be prescribed and should be warmed and allowed to drain by gravity and not force. Bladder Instillations do not prevent catheter associated infections. However they may be recommended in special circumstances, such as the management of blood clots.

## 4. Functional

Management of Incontractile incontinence – An indwelling catheter is the last alternative when all other treatments have failed.

### Advantages of a Supra Pubic Catheter

- No risk of urethral trauma.
- Reduced risk of catheter blockage.
- Comfort.
- To remain sexually active.
- Micturition is still possible, if the catheter becomes blocked the urine can still be drained through the Urethra.
- Easier Access to cystostomy site for independent cleansing.
- Mobility problems. It is less likely to be sat upon or accidentally pulled.
- Procedure is reversible.

### Disadvantages of a Supra Pubic Catheter

- Surgical procedure for initial insertion.
- Difficult to site in overweight patients.
- Altered body image.
- Drainage compromised



- Increased risk of bladder stones.
- Cuffing and/or encrustation of the catheter may cause trauma on removal.
- Over granulation of site.
- Practitioner may lack appropriate skills.
- Can experience urethral leakage.
- Spasm (bladder and urethral cramps) may increase

for a few weeks after the procedure.

## **Contra indications for a supra-pubic catheter** ( unless directed by consultant)

- Haematuria .
- Known bladder tumour - Pelvic cancer with or without pelvic radiation (increased risk of adhesions).
- Prosthetic devices or material in the lower abdomen and surgery carries the potential for bowel adherence to the bladder or anterior abdominal wall.
- Ascites – excessive accumulation of fluid in the abdomen which may be caused by Cirrhosis or carcinoma.
- Coagulopathy – The body's clotting process is impaired which may cause excessive bleeding.

## Problems Associated with Supra pubic Catheterisation



### Infection

Catheterisation carries a high risk of catheter-related urinary tract infection and associated problems but Suprapubic catheters are less prone to cause symptomatic infection.

Urinary drainage systems are often reservoirs for multidrug-resistant bacteria and a source of transmission to other patients and also the main risk factor for nosocomial (*infection that is favoured by hospital environment*) Urinary tract infection, because they allow micro-organisms to by-pass host defences and reach the bladder.

Infection may also occur at the site of an SPC insertion which may present as cellulites, requiring oral or intravenous antibiotics depending upon the severity or a subcutaneous abscess requiring formal incision and drainage. Such infections are more common in patients that are immunocompromised.

### Cranberries



Cranberries have been used for years for the prevention and treatment of Urinary tract infections, but no definite mechanism has been established for cranberry in the prevention or treatment of UTI's. 'The main suggestion is that cranberries prevent bacteria from sticking to the uroepithelial cells that line the wall of the bladder' (Jepson and Craig, 2008). Further studies have revealed that cranberries are ineffective at preventing UTI's and attention should be paid as there is an interaction between cranberries and patients taking warfarin.

## **Catheter Blockage**

40-50% of patients with indwelling catheters experience problems with lumen blockage either due to debris or encrustation. 70% of blocked catheters are encrusted and 60% of these are associated with bladder stones.

Blockage can also occur as a result of kinking of the catheter, catheter embedded into the rugae in the bladder wall or constipation. Urinary leakage can occur as a symptom of catheter blockage.

## **Catheter Encrustation**

Encrustation is caused by Proteus bacteria in the urine. Proteus produce an enzyme, urease. Urease divides the urine into carbon dioxide and ammonia, increasing alkalinity and the development of crystals .



## **Catheter Debris**

Debris is caused by urothelial cells from the bladder or tumours shedding cells, blood from infection, disease, urological surgery or trauma or from mucous.

## **Prevention**

Bladder washouts and bladder instillations seem to be more extended in clinical practice than other solutions despite the limited evidence of their effectiveness.

## **Trauma**

Supra pubic catheterisation carries the potential for bowel perforation.

This incidence of trauma during initial SPC can be reduced by using an ultrasound to ensure a safe route from skin to bladder. Trauma can also be reduced by ensuring that there is some urine in the bladder.

## **Bladder spasm**

This is best managed with anticholinergic medication. Chronic constipation may cause Bladder Spasm and it is important to ensure that the patient maintains regular bowel function with a high fibre and fluid intake.



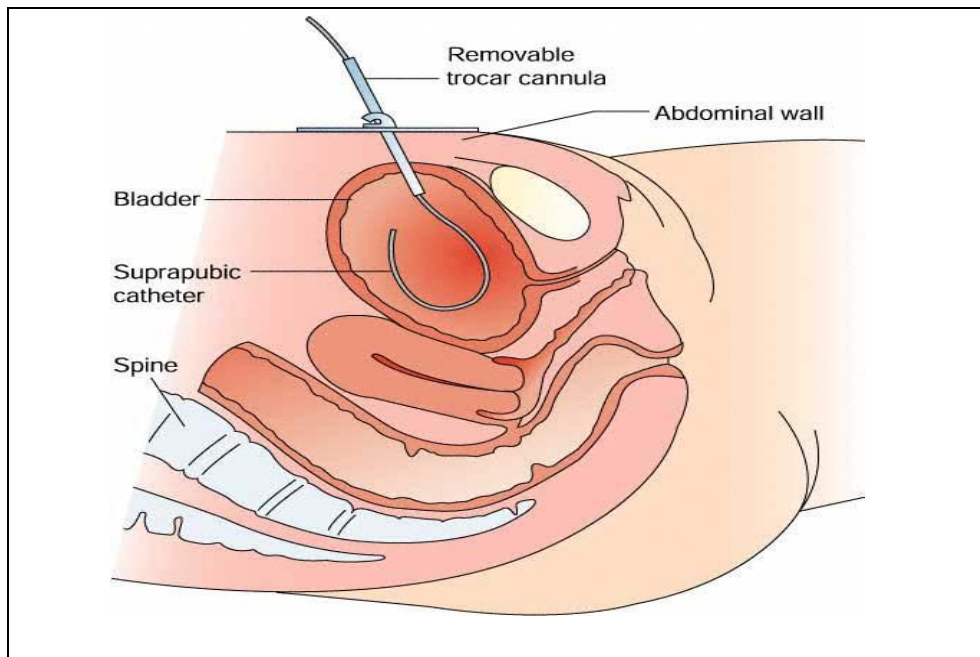
## **Bladder Pain**

SPC catheters create less pain than urinary catheters and the explanation for this is currently unclear, however, it is thought that it may be because there is less stimulation of the trigone.

## **Haematuria**

Haematuria following SPC may be resolved by irrigation through the SPC or via an additional urethral catheter.

## **Supra-Pubic Catheterisation**



## What Happens.....

Initially, a thin tube, Trocar Cannula is placed through the skin just above the pubic bone into the bladder, often with the assistance of ultrasound imaging. This catheter initially remains in place for up to a month while the tissue around it scars and forms a tract (sinus) between the bladder and the body exterior. After the formation of scar tissue is complete, the catheter is replaced periodically in order to help prevent infections.



**Re-catheterisation is a clinically aseptic non-touch technique and should only be performed by a competent practitioner who has had the appropriate training and education.**

Ultrasonic examination needed on insertion of SPC.

Trocar cannula is removed as it is only required for insertion.

Heals after about 7-10 days.

Can be cleansed with soap and water.

## Cross Section of the Bladder Wall



The Supra pubic catheter is inserted through the bladder wall under anaesthetic by a urology surgeon.

The tip of the catheter can become embedded into the mucosa between the ruga.

Over advancing of the catheter on re insertion can cause perforation of this wall on the other side of the bladder and trauma to the patient.



## Catheter Selection

- Size – Catheter sizes are measured in Charriere (ch or CH) the numbers indicate the external diameter. 1mm = 3 CH. The size that is used for Supra-pubic catheterisation is 16 Charriere
- Male catheters should be used for supra-pubic catheterisation.
- Material – Catheters come in a variety of materials, however issues that should be considered are: Allergy, tendency for encrustation and tissue compatibility.
- All catheters used should be latex free.
- Ensure that the catheter is licensed for supra-pubic use.
- The Duration depends upon the material of the catheter used; Manufacturer's instructions time frame is a maximum of 12 weeks or at a time identified as a catheter problem, such as, catheter damage or blockage.
- Stabilisation of the catheter bag must be achieved to minimise trauma, dislodgement and infection. This can be achieved by using a securement device, straps, Velcro or a pocket sleeve.



## Fluid intake

Sufficient drinking will reduce the risk of catheter encrustation and blockage.  
Regular intake of fluid maintains urinary flow and reduces the risk of infection.

### FLUID INTAKE MATRIX TO DETERMINE SUGGESTED VOLUME INTAKE PER 24 HOURS

#### REFERENCE:

Abrams & Klevmar "Frequency Volume Charts - a indispensable part of lower urinary tract assessment" 1996 Scandinavian Journal of Neurology 179;47-53

PATIENT'S WEIGHT		MLS	FLUID OZ'S	PINTS	MUGS
Stones	kilos				
6	38	1,190	42	2	4
7	45	1,275	49	2.5	5
8	51	1,446	56	2.75	5 – 6
9	57	1,786	63	3.16	6
10	64	1,981	70	3.5	7
11	70	2,179	77	3.75	7 – 8
12	76	2,377	84	4.2	8
13	83	2,575	91	4.5	9
14	89	2,773	98	4.9	10
15	95	2,971	105	5.25	10 - 11
16	102	3,136	112	5.5	11

This matrix is to be used as a guideline and broadly it is suggested that patients fall within a margin of error of +/- 10% - the guideline applies to body frame and gross obesity should not be taken as a guide for increasing fluid. Activity levels should be taken into account

Cm/sab02/07

## Sexuality and Body-image

Patients with Supra Pubic catheters can experience both physical and emotional problems.

Emotional problems may develop because of the following:

- Lack of privacy having to rely on care givers to undergo catheter care.
- Insufficient knowledge and Education given to the patient to empower their understanding not just about catheterisation but their neurological condition.
- Cultural taboos
- A misunderstanding that people who suffer from chronic illness have no sexual needs or desires.

Advice should be part of the assessment with the patient, as sexual activities can be a challenge for the patients and will require support, honest communication and sensitivity from the nurses.

## Patient and Care giver instructions once discharged

Patients and care givers should be provided with written and/or verbal information on the following:

- Simple anatomy of the urinary tract
- What is a catheter and how it is situated within the bladder
- Hand washing and personal hygiene
- Care of the drainage system and how to obtain further supplies
- How to set up the drainage system
- How often the catheter bag should be changed
- Importance of maintaining a regular bowel routine and ensuring adequate hydration.
- Recognising infection and blockage and prevention of.
- How to deal with specific problems and where to seek further advice from, such as the Urology department
- Contact numbers for advice and support.
- Referral to the community neighbourhood team.

## Supply of Catheter Equipment



The catheter packs are supplied by the medical suppliers, via a prescription from the patient's GP or nurse prescriber; this must also include a prescription for Lubricating, anaesthetising, antiseptic gel if required. This needs to be set up to ensure that the patient has the appropriate order for when they are discharged.

Equipment should be ordered and varies according to the needs of the patient.

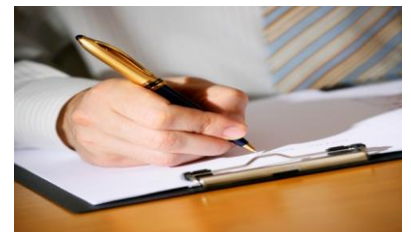
- New catheter
- Legs bags
- Night bags
- Straps or a stockinet sleeve
- Night bag holder
- Dressings if the Supra Pubic catheter Site

## Documentation

Important patient issues can be neglected without accurate and complete documentation.

The following issues should be recorded:

- Type of catheter, charriere size and length
- Amount used for inflation in the Balloon
- Expiry date of the catheter
- Date of Insertion
- Reason for re-catheterisation
- Patient's reaction to re-catheterisation and any problems encountered





- Description of urine, colour and volume drained
- Whether a specimen has been collected
- The date due for the next catheter change

Appropriate documentation should be made via patient's notes, catheter care plans and fluid charts.

## Agents used for hand disinfection

- **Alcohol based products.**
  - Most efficient agents for reducing the number of bacteria on the hands of personnel.
  - Recommended for routine decontamination of hands in all clinical indications - except when visibly soiled.
  - Not effective against spores so should not be used for patients with *Clostridium difficile*
- **Antiseptic soaps and detergents are the next most effective method.**
- **Soap and water.**
  - Recommended for visibly soiled hands
  - Before donning and after removal of gloves.
  - Hands **must be washed in soap and water** when caring for a patient with *Clostridium difficile* as this will remove spores.



## My 5 Moments for Hand Hygiene

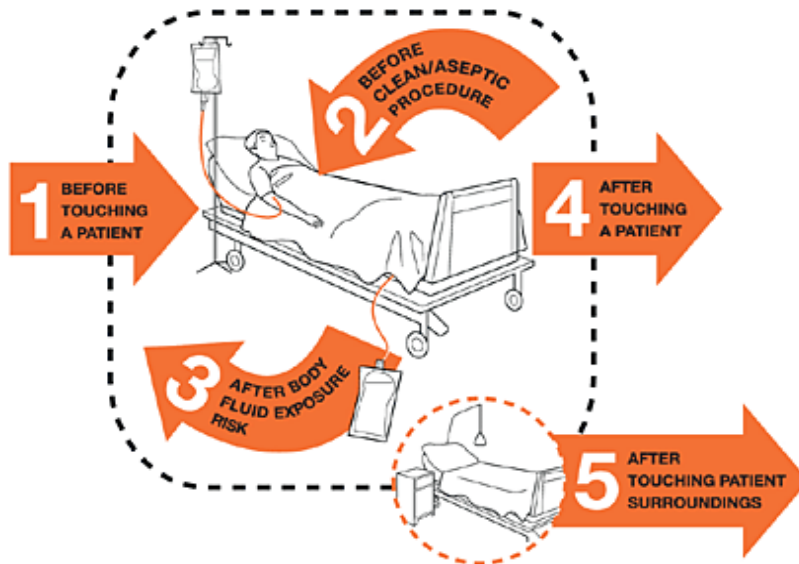
The My 5 Moments for Hand Hygiene approach defines the key moments when health-care workers should perform hand hygiene.

This evidence-based, field-tested, user-centred approach is designed to be easy to learn, logical and applicable in a wide range of settings.

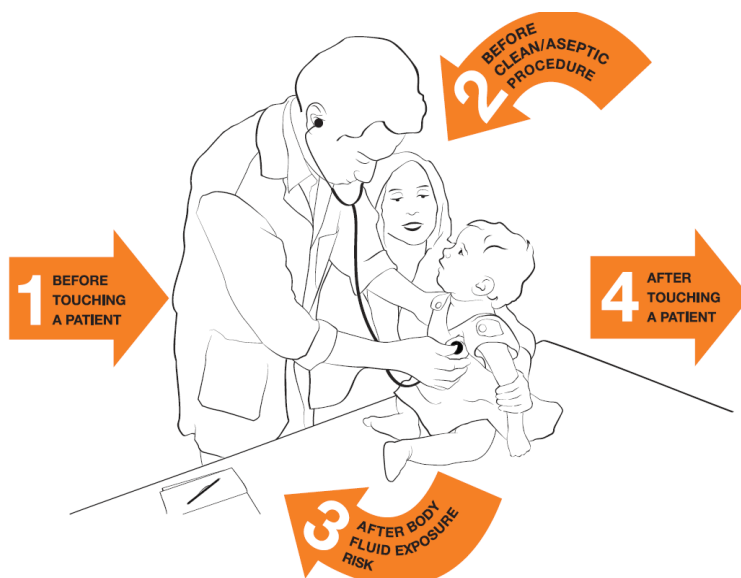
This approach recommends health-care workers to clean their hands



1. Before touching a patient
2. Before clean/aseptic procedures
3. After body fluid exposure/risk
4. After touching a patient
5. After touching patient surroundings



From the World Health Organisation (WHO)'s "guidelines on hand hygiene"



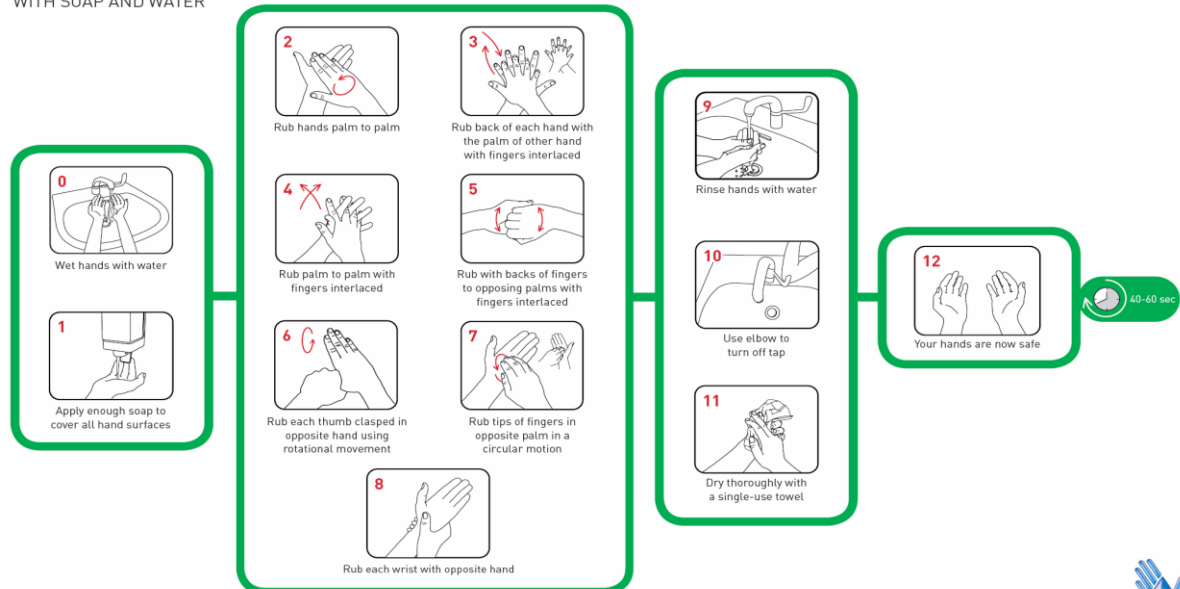
# Technique for hand washing

## HAND CLEANING TECHNIQUES

### How to handwash?

WITH SOAP AND WATER

**NHS**  
National Patient  
Safety Agency



[www.npsa.nhs.uk/cleanyourhands](http://www.npsa.nhs.uk/cleanyourhands)

Adapted from World Health Organization Guidelines on Hand Hygiene in Health Care

**cleanyourhands®**  
campaign

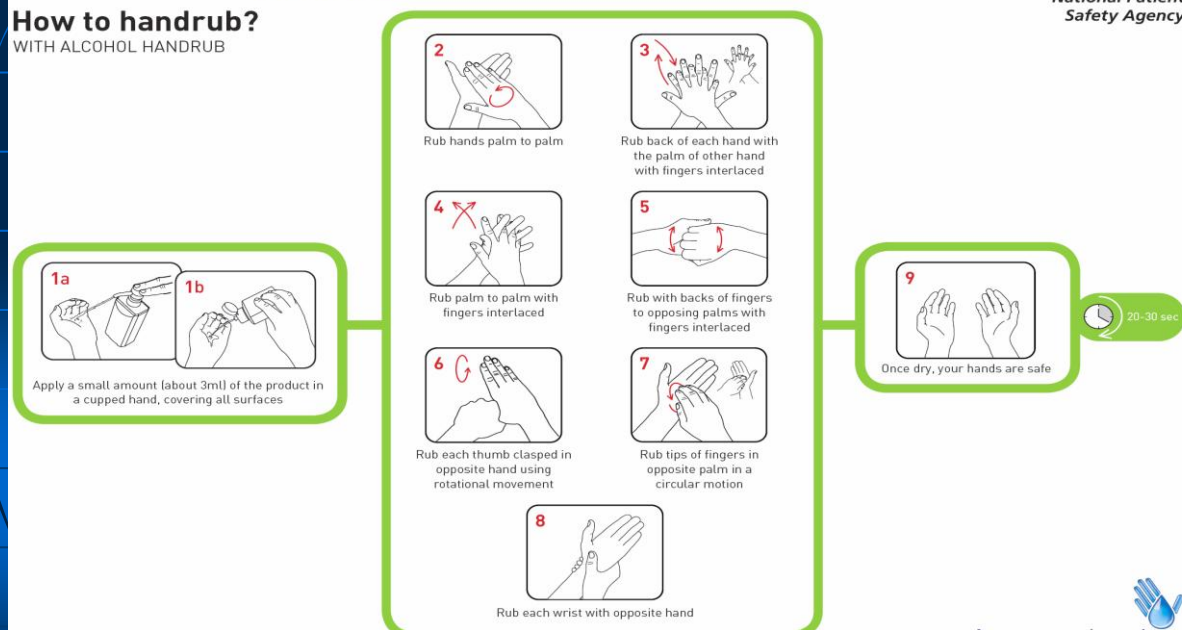
# Technique for applying gel

## HAND CLEANING TECHNIQUES

### How to handrub?

WITH ALCOHOL HANDRUB

**NHS**  
National Patient  
Safety Agency



[www.npsa.nhs.uk/cleanyourhands](http://www.npsa.nhs.uk/cleanyourhands)

Adapted from World Health Organization Guidelines on Hand Hygiene in Health Care

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campaign

## Gloves and Hand Hygiene

### When to Wear Gloves!

- If you are likely to come across any blood or body fluid you should wear gloves.
- You should put gloves onto decontaminated hands immediately before the procedure requiring their use and you should remove them immediately after the procedure.
- You must then decontaminate your hands before touching anything else.

### Why Wash Your Hands?

It's important to wash your hands after glove removal because:

- You can contaminate your hands while removing the gloves
- Some gloves leak and hands can become contaminated as a result
- The substances that cause latex allergy will be removed.



## Aprons

- Correct use of plastic aprons is also important in protecting yourself and preventing cross infection.
- Aprons are single use and must be changed between patients.
- You must use an apron to protect your uniform and clothing from body fluids and micro organisms.
- You can easily change an apron but you are unlikely to have a change of uniform or clothes available.
- Your apron will also protect patients from any micro organisms you may have picked up on your uniform.
- Use an apron when:
  - there is a risk that your uniform or clothes may be contaminated with blood or body fluids
  - your uniform is in close contact with patients or patient care equipment

## Equipment for Re-catheterisation of a Supra-pubic catheter

- Sterile dressings pack
- Normasol sachet
- Swab impregnated with 2 % chlorohexidine and 70% Isopropyl alcohol
- Male catheter
- Lubricating, anaesthetising, antiseptic gel
- Sterile syringe
- Sterile gloves

## Procedure

Procedure	Rationale
Demonstrates correct patient identification	
Explain and discuss the procedure with the patient and obtain verbal consent	Ensure that the patient understands the procedure and gives valid consent
Check patient's documentation for history and details about supra-pubic catheterisation, especially the volume of sterile water in the balloon.	
Screen the bed by closing curtains	To maintain patient's dignity and comfort
Assist the patient into a supine position on the bed with legs extended, if possible	
Wash and dry hands and use alcohol hand rub.	To reduce the risk of infection
Put on a disposable apron	
<b>Hospital Only</b> Prepare the trolley, cleaning with Clinell wipes before placing all equipment required onto the bottom shelf, checking that items are in date and fit for the purpose.	Top shelf acts as a clean working surface
<b>Hospital Only</b> Take the trolley to the patient's bedside, disturbing curtains as little as possible.	To minimise airborne contamination
Open Catheterisation pack; remove from outer wrapping and place onto sterile field.	To prepare equipment
Using Aseptic non-touch technique open other equipment and place onto the sterile field.	To reduce the risk of introducing infection into the bladder and cystostomy site
Remove sheet and patient's clothing to expose supra-pubic catheter site. Place a disposable pad under the patient's buttocks and thighs	To ensure that urine does not leak onto bedding or bed clothes
Release the retaining straps on the drainage bag	
Wash and dry hands and apply alcohol hand rub.	Hands may have become contaminated when opening outer

	packaging
Put on sterile gloves	To reduce risk of cross infection
Place sterile towels from catheterisation pack across the patient's thighs and under the existing catheter on the lower abdomen.	
Clean the entry site with 0.9 % sodium chloride solution, swabbing away from the body or in the community wash area with soap and water, encouraging patient to do this themselves if possible. Wrap a sterile topical swab around the existing catheter at the point in which it enters the abdomen.	To reduce the risk of introducing infection
(If required) Apply sterile, lubricating, anaesthetic gel to the supra-pubic catheter site and leave to allow to work for 3-5 minutes.	Use of local anaesthetic reduces the risk of discomfort for the patient.
Having checked the volume of water in the balloon, from patient documentation, use 10 ml syringe to deflate the balloon.	To confirm how much water is in the balloon and to ensure the balloon is completely deflated.
Ask the patient to breathe in and then out; as the patient exhales, gently but firmly with continuous traction, remove the catheter,  (NOTE length and angle of catheter within bladder and use as a guide as to how far to insert new catheter).	
Dispose of catheter and drainage bag	
Remove sterile gloves, apply alcohol gel and apply the next set of sterile gloves	To reduce risk of infection
Place the receiver containing the catheter on the patient's lower abdomen and attach the catheter directly to the drainage bag. Remove top of catheter packaging and using dominant hand, gently insert catheter into supra pubic insertion site until urine starts to flow.(5-10 cm approximately)	
Gently inflate the balloon, ensuring that the catheter is draining before hand.	To ensure that the catheter is in the bladder.
Withdraw the catheter slightly until resistance is felt and secure the drainage system	
Attach the catheter to the drainage system if not already done so	To maintain patient comfort and prevent infection.
Secure the catheter. Ensure that the catheter lumen is not occluded by the fixation device. Remove Gloves	
Cover the patient and ensure that they are comfortable, in hospital ensure that the call bell is within easy reach.	To maintain patient privacy and dignity.
Dispose of equipment into clinical waste.	To prevent environmental contamination
Draw curtains back and restore environment.	

Wash hands and apply alcohol hand gel	
Record all relevant information; this should include reasons for re-catheterisation, date and time of catheterisation, catheter type, length and size, amount of water instilled into the balloon, manufacturer and batch number of catheter and sterile, anaesthetic, lubricating gel, volume and appearance of urine and any problems negotiated with this procedure and a review date to assess need for continued catheterisation or date of change.	To provide a point of reference or comparison in the event of later queries.

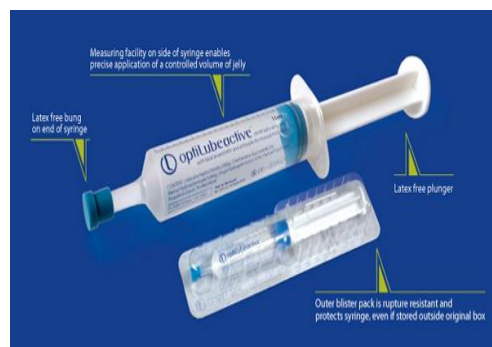


### REMEMBER.....

- Monitor the patients condition as part of catheter care, reviewing after 20 minutes to ensure urine drainage
- Inform patient of daily catheter care or for nursing staff to comply with this to prevent infection.
- Explain the need for 2-3 litres fluid intake in 24 hours.
- Educate patient in regard to care of the closed drainage system, if this is to remain in long-term, include relative or carer in their care.

## Lubrication

### Instillagel / Optilube - Anaesthetic Antiseptic Lubricant



Both are sterile gel containing a local anaesthetic and antiseptic presented in a sterile package.

Active ingredients are (in each 100 grams):-

- Lidocaine Hydrochloride (Local anaesthetic) 2.000g
- Chlorhexidine Gluconate Solution (Antiseptic) 0.250g
- Methyl Hydroxybenzoate (E218) (Antiseptic) 0.060g
- Propyl Hydroxybenzoate (E216) (Antiseptic) 0.025g

in a gel made with Hydroxyethylcellulose, Propylene Glycol and Purified Water.

The gel comes in disposable syringes each containing either 6ml or 11ml.

## What the gel does

The gel is used when putting a tube or instrument into a body cavity. It contains a local anaesthetic to prevent pain and antiseptics to reduce the risk of infection getting in, while lubricating to make the process smooth.

## Before the gel is used

Instillagel™ or Optilube is contra-indicated if:-

- If patient has ever had a reaction to a local anaesthetic
- Patient has previous allergic response or hypersensitive reaction to E216 and E218 (also called parabens) or any of the other ingredients
- If the gel will be in contact with damaged membranes

Care should be taken when using Instillagel and Optilube:-

- If patient has any cardiac history or is on cardiac medication
- If patient has hepatic problems
- Diagnosed epilepsy

## After using the gel

As the patient may feel a little sleepy, advise not to drive or use machinery

## How the gel is used

The gel is available in two sizes - 6ml and 11ml.

Usually the complete contents of the size suitable for the procedure will be used. The syringe is removed from its sterile package by tearing off the backing paper. Before removing the blue cap from the end of the syringe, free the plunger by gently pressing

it. Remove the cap. Insert the nozzle into the opening of the area to be anaesthetised and press the plunger slowly to push out the gel. The anaesthetic takes about 4 to 5 minutes to work after the gel has been used.

## **Has the gel any side effects?**

Patient might feel a slight stinging just after the gel is used, but this stops as soon as the anaesthetic starts to work. Most people find that there are no problems after the gel has been used but there may be a slight soreness when the effect of the local anaesthetic has worn off.

## **Storage of the gel**

The gel should not be used after the expiry date shown on the package. Store below 25 degrees centigrade.

The syringe is for single use only. If the complete contents are not used, the syringe and remaining gel must be thrown away.

## **Prescribing**

This gel must be prescribed or given under a Patient Group Direction. Please refer to the Intranet for more information



## Relevant policies and Further reading

Marsden Manual of Clinical Nursing Procedures  8th edition (2011)	Trust intranet
British Association of Urological Surgeons (BAUS) Supra pubic catheter practice guidelines	<a href="http://www.baus.org.uk/AboutBAUS/publications/spc-guidelines">www.baus.org.uk/AboutBAUS/publications/spc-guidelines</a>
Consent Policy (2012)	Trust Intranet
Trust policy – Clinical guideline for Supra pubic Catheterisation (adults) (2011)	Trust Intranet
Mental Capacity Act (2005)	OFSI website  <a href="http://www.ofsi.gov.uk">www.ofsi.gov.uk</a>
Trust Policy - Framework for Enhancing the Scope of Professional Practice Policy (2008)	Trust intranet
Nursing and Midwifery Council (NMC) - Record keeping: Guidance for nurses and midwives (2009)	NMC Website  <a href="http://www.nmc-uk.org">www.nmc-uk.org</a>

Nursing and Midwifery Council (NMC) - The Code: Standards of conduct, standards and ethics for nurses and midwives (2008)	NMC Website <a href="http://www.nmc-uk.org">www.nmc-uk.org</a>
Skills for Health – CC04 Manage Supra-pubic Catheters (2010)	<a href="https://tools.skillsforhealth.org.uk/competence/show/html/id/1003/">https://tools.skillsforhealth.org.uk/competence/show/html/id/1003/</a>
Royal College of Nursing (RCN) – RCN guidance for catheter care (2008)	<a href="http://www.rcn.org.uk/_data/assets/pdf_file/0018/157410/003237.pdf">http://www.rcn.org.uk/_data/assets/pdf_file/0018/157410/003237.pdf</a>
NPSA Minimising Risks of Supra pubic Catheter Insertion (adults only)	<a href="http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=61917">www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=61917</a>

<http://www.nursingtimes.net/management-of-urinary-retention/203913.article>

volume 101 issue 18 3 may 2005 jane gosling

**Jepson RG, Craig JC. (2008)** *Cranberries for preventing urinary tract infections*. Cochrane Database System Review  
<http://www.ncbi.nlm.nih.gov/pubmed/18253990>