



Swansea Bay University Health Board

Adult Urinary Catheterisation Policy

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Contents	Page
1. Policy Statement	3
2. Scope of the Policy	
3. Responsibilities	3
4. Risk of Infection	4
5. Decision to catheterise	6
6. Consent	7
7. General Guidance	7
8. Catheter patency solutions	10
9. Decision to Remove Indwelling catheter	12
10. Documentation	12
11. Discharge from acute settings	13
 Appendices	
Appendix A - Blocked Catheter Pathway	15
Appendix B- Competency Log	17
Appendix C - Autonomic Dysreflexia	18
Appendix D -General advice	19
Appendix E – Troubleshooting	20

References

1. Policy Statement.

- 1.1 It is the policy of Swansea Bay University Health Board (SBUHB) to ensure that urinary catheter management is of the highest quality and standard, and is equitable across the organisation. This policy provides guidance on urethral, suprapubic and intermittent catheterisation for adult patients (18 years of age and older) and includes a pathway for the management of blocked catheters in all settings.
- 1.2 The aim of this policy is to encourage a best practice approach and outline the responsibilities and competencies necessary for Health Care Professionals in relation to urinary catheter management, and has been written using local and national guidelines for good practice, as well as published evidence.
- 1.3 Supporting documentation includes EPIC3 guidelines (Loveday et. al 2014), The NMC Code (2018) which outlines standards of conduct, performance and ethics for nurses. NICE guidelines for Catheter Care (2012), HOUDINI principles (Adams et al 2012), Public Health Wales 1000 Lives Improvement Campaign (2012) and Unplanned Admissions Consensus Committee, guidance for Welsh Services (2016).

2. Scope of the Policy.

2.1 The scope of this policy will apply to all SBUHB Health Care Professionals who are directly and indirectly involved in the care of catheterised adult patients in both the acute and community settings. The policy emphasises the importance of providing a high standard of clinical care and education to patients, in the light of ever increasing awareness of the potential complications associated with the use of indwelling urinary catheters.

3. Responsibilities.

3.1 Who can catheterise Accountability, Training and Competency.

Health Care Professionals, male or female, can catheterise provided they can demonstrate appropriate knowledge, training and competence. Following initial training it is recommended that a minimum of three supervised catheterisations be required to become competent in the skill. It is accepted that more may be necessary before competency can be demonstrated for some individuals. ANTT competency must be completed 3 yearly.

3.2 To practice competently you must:

- Deliver care based on the best available evidence and best practice
- Ensure any advice you give is evidence based
- You must have the knowledge and skills for safe and effective practice when working without direct supervision
- You must recognise and work within the limits of your competence
- You must keep your knowledge and skills up to date throughout your working life
- You must take part in appropriate learning and practice activities that maintain and develop your competence and performance.

3.3 Nursing/Midwifery Students:

- Year 1 students: taught the theory and practice the skills of ANTT® (university, skills lab, and on placement). They are **NOT** allowed to undertake catheterisation.
- Year 2 students: taught the theory of bladder catheterisation and undertake simulated skills practice. Following this they are then allowed to participate on placement under **DIRECT SUPERVISION**.

- Year 3 students: expected to work towards practicing under supervision; are also encouraged and supported to access local formal study sessions to gain/improve appropriate knowledge.

3.4 It is the individuals' responsibility to ensure they comply with the relevant SBUHB policies and must take into consideration their professional body's Code. Individuals are responsible for identifying their learning and development needs which should be discussed at their annual PADR.

3.5 In specifically identified settings registered Health Care Professionals may delegate the task of re-catheterisation to non-registered staff such as Health Care Support Workers on an individual patient basis. In these circumstances the registered Health Care Professional maintains accountability for the delegated task and therefore must be confident that the Health Care Support Worker who is to perform the catheterisation can demonstrate the appropriate knowledge, training and competency as per All Wales delegation guidelines All Wales Delegation Guidelines

In some instances an individual patient, relative or carer may carry out catheterisation. In these circumstances it is the Health Care Professional's responsibility to ensure that the individual has the necessary knowledge and competence to carry out the procedure and manage the catheter and drainage system, and that this is documented in the patient's records.

4. Risk of Infection due to urinary catheterisation.

4.1 Urinary Catheterisation is an intervention to enable emptying of the bladder by insertion of a catheter and is performed by healthcare staff in a variety of settings such as primary care, acute settings and long term care. The principles of catheterisation and infection control apply to all patient groups and ANTT® guidelines must be adhered too

<http://howis.wales.nhs.uk/sitesplus/888/page/64418>

4.2 It is difficult to determine the proportion of patients in primary and secondary care settings who are catheterised as variations exist between both different specialities and published studies.

4.3 The presence of a catheter can be a traumatic experience for patients and have huge implications for body image, mobility, pain and discomfort (Prinjha & Chapple 2014, RCN 2019). Urinary Tract Infections (UTIs) account for approximately 19% of all healthcare associated infections (HCAIs).

4.4 UTIs are defined by a combination of clinical features as well as the presence of bacteria in the urine. The incidence of UTIs increases with age for both male and females with an estimated 10% of men and 20% of women over the age of 65 years have asymptomatic bacteriuria (NICE 2015)

4.5 Studies have shown that 43 – 56% of all UTIs are associated with the use of a urinary catheter and 15 – 25% of hospital inpatients and 10% of residents in care homes are using long term catheters which increases the likelihood of a patient developing a catheter associated urinary tract infection (CAUTI), which can lead to life threatening conditions (Meddings et al 2014, WG 2016; Public Health Wales 2017).

4.6 Furthermore in catheterised patients bacteriuria rates occur at 3-10% per day with 100% of patients developing asymptomatic bacteriuria at 30 days with 24% will develop symptoms of a CAUTI (presence of bacteria & no clinical symptoms) (Healthcare Infection Control Practice Advisory Committee (HICPAC) 2009, Gould et al 2010, Loveday et al. 2014).

4.7 All catheterised patients will have abnormal urinalysis and routine dipstick testing is unreliable and unnecessary. If patient have symptoms indicating a CAUTI a CSU should be taken from the catheter sampling port following ANTT® guidelines (RCN 2019) **only treat if clinical signs of infection are present**. Antibiotics should **NOT** be prescribed just because of the appearance or smell of the urine, as this may represent colonisation rather than active infection. Treatment [View Guidelines - RxGuidelines](#). Where treatment is determined appropriate, consider changing long term urinary catheter once the patient has had at least 48 hours of appropriate antibiotics this may prevent further colonisation.

4.8 The financial burden of CAUTI to the NHS has been estimated as £99 million per year, with an estimated cost per episode of £1,968 partially due to delayed discharges, increased health care interventions and antimicrobial treatment (Loveday et.al 2014). Adherence to the principles of asepsis by all Health Care Professionals is key in preventing the transmission of infection in any environment. WG 1000 Lives Improvement campaign (S.T.O.P) focussed on improving use and maintenance of catheters, with the ultimate aim of preventing infection for patients.

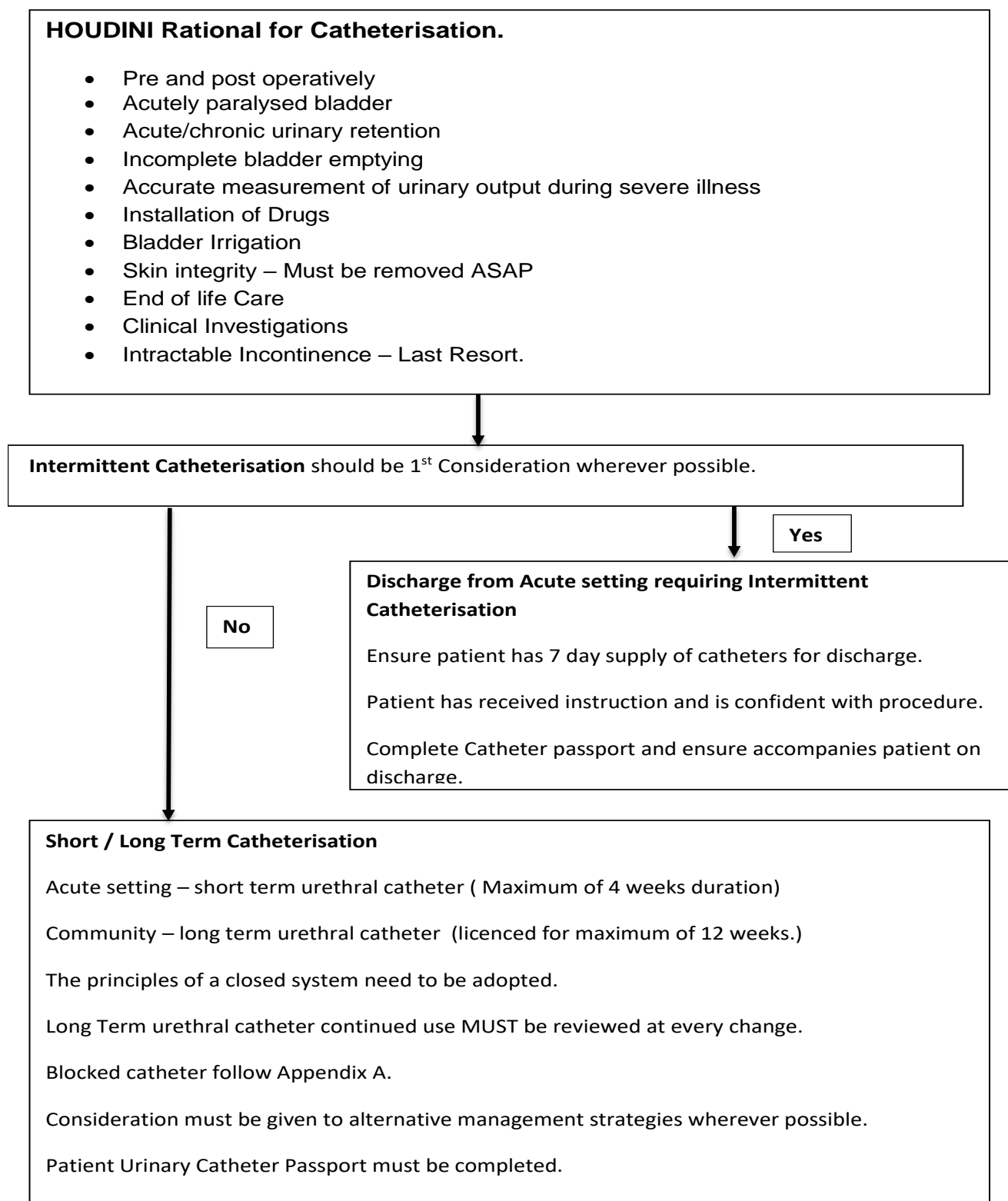
4.9 There are no robust economic assessments of the cost of CAUTI to the individual patients. Careful assessment of the most appropriate material, size and balloon capacity will ensure that the catheter selected is effective as possible, that complications are minimised and that patient comfort and quality of life are promoted (Spencer et al (2019); Waskiewicz et al 2019)

4.10 Assessment of the patient must include consent and factors that may contraindicate catheterisation and/or pose a risk. These include:

- Rationale for catheterisation/ongoing catheterisation (HOUDINI).
When a catheter is already being used the HCP should consider if it is necessary. This can be established using the HOUDINI (Adams et al, 2012) indicators.
H – Haematuria O – Obstructed. U – Urologic surgery D – Decubitus ulcers – open sacral or perineal sore in an incontinent person. I – Input/output monitoring.
N – Not for resus/end of life care – comfort. I – Immobility due to physical restraints.
- Consent issues for adults.
- Ascertain if the patient has a prosthetic implant as there is a small risk of iatrogenic infection of prosthetic implants after catheterisation
- Cognitive status of the patient, which may raise questions regarding the patient's ability to give informed consent and safety. There is evidence suggesting that confused patients may attempt to forcibly remove the catheter which can lead to urethral trauma and potentially septicaemia
- The patient's ability to manage the catheter independently
- Carer availability in order to manage/undertake the catheter care for the patient.
- Tissue viability and skin Integrity.

5. Decision to Catheterise

Catheterisation Decision Making Tree



6. Consent

6.1 Consent is required for all aspects of urinary catheterisation and management including insertion, removal, meatal cleansing, use of patency solutions, insertions of medication etc. and must be obtained in advance of the intervention being undertaken.

7. General Guidance

7.1 The initial assessment with the patient will determine the choice of catheter and drainage system and all types should be considered dependent on the individual patient's lifestyle and needs. Patients and carers need to be involved in their care and discussion should include general catheter care, the complications of catheterisation and who to contact if a problem occurs.

7.2 The Patient Urinary Catheter Passport must be completed and given to the patients alongside a 'take home pack' including spare equipment such a catheter bag, literature on the care of their catheter with advice on fluid intake. Information given should be documented in the patient's notes in line with SBUHB record keeping policy.

7.3 Catheterisation must be carried out using sterile equipment and aseptic non-touch technique (ANTT® Appendix A) and follow the Royal Marsden clinical procedures [Royal Marsden](#) .

7.4 To avoid closure of the tract with supra pubic catheter re catheterisation should take place in a timely manner, ideally 10 -30 minutes. If a supra pubic catheter falls out and it is not possible to re-insert the patient should be urgently referred for medical attention.

7.5 If there is any difficulty when undertaking urethral or supra pubic catheterisation the procedure **MUST NOT BE CONTINUED** and medical advice must be sought.

All patients should be taught to self-manage their drainage equipment prior to discharge from Acute setting.

7.6 A referral to the patients GP and Community Nursing Team and Continence Service must be made prior to discharge if ongoing care is required e.g. District Nurse, Nursing home staff. The referral must include the rationale for catheterisation, the date of catheterisation, the size and type of catheter and any planned ongoing treatment plans. Consideration should be given to the provision of a 'spare' catheter, as community staff do not have a readily available source of equipment. A transfer of care form and Patient Urinary Catheter Passport must be completed.

7.7 For catheterisation procedures and more in-depth guidance on catheter selection, size etc. please refer to [Royal Marsden](#)

7.8 Catheter Size& length

Choose the smallest possible Charriere size catheter that will allow for adequate drainage of urine. Size 12-14ch is generally sufficient for men and women for urethral catheterisation. Unless medically indicated generally a size 16ch standard length catheter should be used for suprapubic catheterisation. Larger Charriere sized catheters

can cause urethral irritation and bypassing around the catheter and are only suitable if clots or debris are present post operatively; for urethral dilatation or occasionally for suprapubic catheterisation.

7.9 Consideration should be given to using a smaller Charriere size at re-catheterisation when urine clears. There may be a variance based on individual needs and specialist advice must be sought. Catheters over 18ch are rarely necessary for general management and their use should be questioned.

7.10 For male and female patients standard length catheters (43cms) are recommended for general use in both the acute and community settings. Following an individual assessment performed by a specialist practitioner some female patients may benefit from female length catheters (26cms). However they are not recommended for wheelchair/ bedbound or obese patients.

Under no circumstances should a female length catheter be used on male patients or inserted supra-pubically

7.11 Catheter material

The material from which catheters are made determines how long they can be left in situ. All indwelling catheters are **FOLEY** catheters and all intermittent catheters are single use.

7.12 Balloon Size

Only insert the recommended volume of sterile water into the balloon as specified by the manufacturer's guidance. The balloon size in general is 10mls for adults.

7.13 Over inflation will not prevent a catheter being expelled.

7.14 The balloon can only be inflated **ONCE**. If the balloon is deflated then the catheter must be removed and replaced if ongoing catheterisation is required.

7.15 Larger balloon sizes should be avoided for routine use as there is a greater risk of residual urine, bladder spasm, discomfort and if expelled can cause urethral damage.

*A 30ml balloon should not be used routinely.
these are for specialist post operative use only.*

7.16 First change

Unless otherwise stated in the patients' notes/ discharge referral - The first change of both urethral and suprapubic catheter can be undertaken by a registered professional competent in the practice.

7.17 Use of gel

There is evidence that the use of a sterile urethral gel prior to both female and male catheterisation will reduce pain, discomfort and trauma (Lovelday et.al 2014, RCN 2019).

7.18 There is little evidence available to advise whether plain aqueous gel or an anaesthetic gel is most effective in reducing these symptoms and it is left to individual practitioners

to decide on behalf of the individual patients. SBUHB has a patient group directive (PGD) for the administration of the anaesthetic gel

7.19 Urine sampling

Routine collection of urine specimens for culture is not useful and is often unnecessary unless the patient is symptomatic (RCN 2019). If a patient has symptoms indicating a CAUTI then a CSU should be taken from the catheter sampling port using ANTT® for the procedure please see [Royal Marsden](#)

- 7.20** When a specimen collection is necessary a clean technique must be used, with disinfection of the needle-free sample port with isopropyl alcohol 70% and chlorhexidine 2% swab which is left to dry thoroughly prior to collection.

Urine sample for culture must not be taken from the urine collection bag

7.21 Emptying and handling urine drainage bags

Urine drainage bags should be emptied routinely when three quarters full (unless on hourly monitoring in the acute setting). When closely monitoring urine output, empty the urine bag, observe and measure before documenting in the patients record.

- 7.22** Where possible patients should be encouraged to regularly empty their own drainage bag and the importance of hand washing must be emphasised. Consideration should be given to teaching the patient and his/her carer hand hygiene in line with ABMUHB Infection Control policy (2015).

- 7.23** Drainage bags **MUST** be secured with an appropriate fixation device. To avoid skin irritation/damage alternating the site on which the drainage bag is fixed will reduce the risk.

- 7.24** When an overnight bag is required, a single use 2 litre bedside bag should be used. In order to avoid hydrostatic suction and maintain adequate drainage the bag **MUST** be kept below the level of the bladder.

- 7.25** The bag **must** be hung on a stand that prevents contact with the floor.

7.26 Closed drainage systems.

Indwelling catheters are connected to a closed drainage system such as Leg bags/catheter valves or free standing drainage bags which will normally remain connected for 5 – 7 days. More frequent disconnections for whatever reason will break the closed system and increase the risk of infection (Loveday et.al 2014).

- 7.27** Non ambulatory patients will need a **sterile** 2 litre drainable drainage bag which is attached directly to the catheter. This will remain attached for 7 days. Strict Asepsis applied when changing the drainage bag. The date of connection should be written on the catheter drainage bag in the space provided.

- 7.28** Patients with an indwelling catheter, who are not bedbound **MUST** use a suitable leg bag/ catheter valve by day and a new 2 litre single use bag each night. The leg bag/valve is not disconnected from the catheter until it is due to be changed (usually 7 days).

7.29 If catheter maintenance solutions are used a new drainage bag must be attached. Once drainage bags have been disconnected they **MUST** not be reconnected.

7.30 All catheter drainage systems are single use only and **MUST** not be reconnected.

7.31 Catheter Valves

Catheter valves can be used as an alternative to drainage systems. They are inserted into the end of the catheter allowing bladder filling and emptying. They are inappropriate for patients who have poor dexterity, cognitive impairment, poor bladder capacity, bladder over activity or renal impairment.

7.32 Patients need to be able to manipulate the valve to empty the bladder regularly. There is significant evidence of the benefits of patient comfort and independence; however the use of valves should be a multi-disciplinary decision.

7.33 Catheter valves can be used as a means of occluding catheter drainage therefore facilitating bladder filling before investigative procedures such as ultrasound scan, or prior to routine change of catheter.

Individual spigots or catheter clamps should never be used.

8. Catheter Maintenance Solutions.

8.1 Catheter maintenance solutions should only be used where proactive catheter changes are not suitable for the patient. The European Association of Urology Nurses (EAUN 2012) suggests the evidence around the use of catheter maintenance solutions is poor considering their invasive nature. NICE (2015) suggest they should **not** be used routinely for every patient and should only be used as a treatment preparation in special circumstances following robust clinical assessment e.g. Dissolving encrustation, management of blood clots or mucous following surgery.

8.2 A Cochrane review (Shepherd et al 2017) identified that random control trials failed to provide sufficient evidence to guide clinical practice regarding all aspects of the use of catheter maintenance solutions for long term indwelling urinary catheters. Evidence suggests that they are relatively ineffective (Turner & Dickens 2011), and it is unclear if the use of these solutions benefit or harms patients and therefore it should be questioned if the associated costs are justified. The use of catheter maintenance solutions can cause damage to the mucosa causing irritation and spasm and the risk of obstruction needs to be weighed up against the risk of CAUTI associated with interrupting the closed drainage system (Booth, 2014).

8.3 To determine the cause of blockage the catheter on removal should be examined both internally and externally. If there is no visible evidence of encrustation then it can be assumed that catheter maintenance solutions are not indicated.

8.4 Where assessment indicates that a catheter maintenance solution may be of benefit a short term **prescribed 4 weeks regime** of catheter maintenance solutions maybe indicated. However, if ineffective, discontinue use immediately. The solution prescribed should be appropriate to the condition being treated and two x 50mls solutions should be used. The effect of treatment should be systematically assessed and ongoing care planned on the individual patient’s assessed need. Catheter maintenance solutions are a medication and should be written up on a medication chart and administer by a registered professional.

Catheter Maintenance solutions are not to be used prophylactically or to attempt to unblock a non-draining catheter – appendices for troubleshooting and blocked catheter pathway.

Solution	Product Licence	Practice Notes/Caution
Citric Acid 3.23% (ph4)(G)	For the dissolution of struvite crystals which form on the catheter tip under alkaline conditions (pH 7.5-9.5)	Will dissolve encrustation. It is recommended that x two instillations of OptiFlo G should be used concurrently. The agitation property of this product should be used with care.
Citric Acid 6% (pH2)(R)	Stronger citric acid solution for more persistent crystallisation	Will dissolve crystals and is twice the strength of the “G” solution. It is recommended that x two instillations of OptiFlo R should be used concurrently. The agitation property of this product should be used with care.
Sodium Chloride 0.9%	For the washing of debris eg blood, mucus, pus from the bladder and catheter	Will not dissolve crystal formation

Catheter maintenance solutions should be used with caution in patients with spinal injury due to the possibility of autonomic dysreflexia (Appendix D).

9. Decision to remove catheter / Trial without

Reduce risk of infection – remove catheter as soon as possible following assessment of ongoing condition.

- Catheter to be removed in the morning wherever possible.
- Bladder scan performed approximately 6 hours post removal to measure post – void residual urine.
- Consideration of a catheter valve prior to trial without catheter.
- Record the condition of the catheter on removal eg
 - Deterioration in material
 - Presence of encrustation
 - Partial deflation of the balloon

The catheter can be slit along the length for full inspection if blockage or bypassing is a problem in order to identify the nature of any debris.

Advice can be sought from continence specialist nurses regarding ongoing treatment plan/need to re-catheterise.

10. Documentation

- 10.1** All documentation must be completed in line with HB policy. The Patients Catheter Passport must be fully completed on allocation and this should stay in the patient's possession and should be available for Healthcare professionals to refer to and **MUST** accompany the patient on discharge from hospital or if the patient is admitted to hospital.

11. Discharge of a patient from acute setting

The following has been developed to encourage the implementation of consistent policies for the seamless discharge of patients between hospital and community.

Review the rationale for ongoing catheterisation, if not require take out

- Ensure appropriate type and size of catheter in situ.
- Minimum 3 day supply of appropriate leg and night bags.
- Ensure patient has appropriate fixation device applied.
- Patient/carer has been taught to self - manage urine drainage system.
- Confirm that patient and his/her carer understands essential catheter care requirements and has been issued with a patient education leaflet. This should be documented in the patient's notes.
- Ensure that the Patient Urinary Catheter Passport is completed and accompanies the patient on transfer or discharge
- Complete a referral to Community Continence Service for ongoing supplies of products. [Referral for continence appliances](#)
- Liaise with District Nurse, Community Nurse, Nursing Home staff of patients regarding planned discharge date, and follow up arrangements, complete transfer of care form.
- Discuss with patient whom to contact if catheter should block, give patient information leaflet found in blocked catheter pathway (Appendix B)

11.1 Catheter changes should be carried out in the community and patients should not routinely be admitted to hospital for catheterisation or catheter management. For this reason spare equipment should always be available at home.

11.2 A quality control system should be in place to monitor complaints and to ensure seamless transfer of care so that action can be taken in a timely manner if problems arise. Datix Online Incident Report Form must be completed so information can be collated on the number of such incidents.

11.3 When inappropriate Discharge/Transfer of care has been identified the Nurse or relevant Health Care professional should contact the relevant department to provide timely feedback. In addition a Datix Online Incident Report Form must be completed.

11.4 Online Datix Incident Reporting form must be completed for any adverse incident.

11.5 The Patient Urinary Catheter Passport is available and this **MUST** be given to **ALL** patients who have an indwelling catheter. It will replace the Catheter Record Card but the Short Term catheter care bundle must still be completed alongside the catheter passport.

Appendix A

Blocked Catheter Pathway

Is the catheter draining slowly, bypassing or appear blocked?

Yes **NO**

HOUDINI-Consider need for catheterisation; **Take out if not required.**
If catheter is necessary, continue with current management plan

Assessment

Does the patient still require catheterisation?

- Consider ISC as alternative method

Is the patient suitable for change of catheter in the community?

- If no please referral to on call urology team

Is drainage system being occluded?

- Check for kinks, twists, patient not sat on tubing, clothing not obstructing.
- Ensure fixation device is being used.

Is drainage bag over full ? - should be emptied when 2/3rds full.

Ensure the drainage bag is below the level of the bladder.

Is patient having a bladder spasm?

- Consider anticholinergic medication
- Consider smaller size catheter.

Is patient constipated?

- Treat constipation and implement ongoing bowel management plan .

Is the patient dehydrated?

- Encourage increase in fluid intake where appropriate and discuss further management with medical team/GP

Is catheter draining now?

No **Yes**

HOUDINI Consider need for catheterisation; **Take out if not required.**
If catheter is necessary continue with current management plan

- If appropriate and prescribed by a medical professional, bladder washouts can be performed using a **catheter tipped syringe** with an appropriate **solution**.
 - If catheterisation still required change catheter. Examine old catheter to identify the cause of the blockage. Check for encrustation- grittiness will be felt when catheter rolled between fingers, cut tip of the old catheter for further observations
 - Document findings in patient urinary catheter passport
- Do not use catheter maintenance solutions to attempt to unblock a blocked catheter.**

Paper copies of this document should be kept to a minimum and checks made with the electronic version to ensure that the printed version is the most recent.

Long Term Plan for the Management of Blocked Catheters

- Please ensure Patient Urinary Catheter Passport is completed and given to patient/family/carer with contact number for ongoing care needs.
- Please ensure that a referral is made to Nursing Home or Community Nursing team if the patients is suitable for ongoing management in the community setting.
- Please ensure that a referral is made to Referral to urology for ongoing management if the patient is not suitable for management in the community setting.
- Please ensure on going product request is emailed to ABM.ContinencePrescriptionService@wales.nhs.uk
- Consider HOUDINI principles and potential TWOC at every catheter change. If ongoing catheterisation required consider ISC rather than indwelling to reduce the risk of CAUTI
- Monitor fluid intake- increase where appropriate.
- Consider if the catheter is appropriate to patient needs? May need to reduce size, change type of catheter
- Monitor catheter blockages and document in patient urinary catheter passport.
- If a pattern of frequency of the catheter blocking has been identified then an earlier catheter change pattern should be adopted. e.g. blocks at 11 weeks plan catheterisation at 10 weeks.
- Contact Continence Assessors regarding potential use of catheter maintenance solutions if encrustation evident following x 3 catheter changes
- Recurrent blockages should be referred to urology for further investigations.

Appendix B

Catheterisation Competency Log

NAME OF HCP	JOB TITLE	AREA OF WORK	ASSESSOR(S) NAME	JOB TITLE

DATE	PATIENT NO	PROCEDURE AND COMMENTS	COMPETENT Y/N	HCP SIGNATURE	ASSESSOR SIGNATURE

Appendix C

Autonomic Dysreflexia

Autonomic dysreflexia is one of the most serious life threatening conditions that patients with spinal cord injury at or above the level of the 6th thoracic vertebrae can have.

The syndrome develops as a result of stimulus below the level of injury. As the spinal cord is damaged, signals are not able to pass to the brain in the usual way, therefore the body's response is to produce an exaggerated and abnormal nerve signal which will cause problems both above and below the level of injury. Below the injury the vessels constrict, go into spasm and subsequently blood pressure rises. Above the level of the injury the increased blood pressure is sensed and the response of the body is to try and relax the blood vessels, which it is only able to do above the level of the injury.

The patient may present with mild or severe symptoms and can include

- Severe headache
- Flushing, blotching of skin or pallor below level of the injury
- Hypertension
- Slow pulse
- Sweating
- Palpitations
- Blurred vision

Bladder problems are the most common cause of autonomic dysreflexia and may be as a result of

- An overfull bladder
- Bladder calculi
- High pressure voiding
- Urinary tract infection
- Instrumentation eg cystoscopy, catheterisation
- A defective system eg kinked tubing, a drainage bag that is overfull

Autonomic Dysreflexia is a life threatening condition and the immediate treatment includes

- Removing the source of the stimulus
- Reducing blood pressure – this can be done by placing the patient in an upright position of no more than 40°
- Catheterising the patient if the bladder is overfull and the patient is unable to void
- Untwisting any tubing
- Medication eg an antihypertensive or sublingual nitrate

<https://www.rcn.org.uk/-/media/royal-college-of-nursing/documents/publications/2019/september/007-522.pdf?sfns=mo>

Appendix D

General Advice

Fluid Advice

Unless restricted for medical advice an adequate fluid intake should be encouraged as this will maintain a flow of urine through the bladder and help prevent constipation. This should be at least 1.5 – 2 litres per day depending on individual patient health status. If the urine becomes too concentrated there is an increased risk of infection.

General Hygiene

Hand washing before and after handling a catheter or drainage system is essential. Wash the area around the catheter with unperfumed soap and water. Avoid the use of perfumed soaps, bubble bath, talc or oils when bathing. Showering is preferable to bathing if this is available.

Cranberry Juice

Studies indicate that cranberry juice if taken regularly helps to prevent infection. Cranberry capsules are available if the juice is not acceptable. Cranberry juice should be used with caution with patients on Warfarin/arthritis or with multiple sclerosis.

Constipation

If constipation is identified, please complete the All Wales Bladder and Bowel Care Pathway.

[All Wales Bladder and Bowel Tool.](#)

Urethral discomfort

This may be caused by distension of the urethra by too large a catheter, or occlusion of the para urethral glands. This may lead to infection, urethritis or an offensive discharge around the catheter. Ensure that appropriate selection of catheter is undertaken.

Post-Menopausal Women

May experience discomfort due to atrophic vaginitis. Use the smallest possible catheter and consider topical oestrogen unless there are contraindications to doing so

Appendix E

Troubleshooting

Catheter Problem	Possible Reason	Possible Solution
Urine not draining	Incorrect positioning of the drainage bag above the level of the bladder can prevent good flow of urine	Check tubing and ensure drainage bag is below level of the bladder
	Drainage tubing may be kinked	Check catheter
	Catheter may be blocked by debris	Gentle flush of the catheter with sterile water or saline using a catheter tip syringe. NB. Not catheter maintenance solution Remove and re-catheterise Consider using a catheter valve to encourage natural flushing of the catheter lumen.
	Incorrectly sited catheter, it may be in the urethra and not fully in the bladder. Check for constipation/ dehydration/ renal failure. Bladder Spasm	Consider re-catheterisation Seek specialist advice Encourage fluid intake. May need a smaller catheter Consider anti Cholinergic medication
Haematuria	Trauma or infection	Observe output and document severity of haematuria. Treat infection if patient is symptomatic.
	Tension on catheter due to inadequate support.	Ensure catheter and drainage system is appropriately secured and supported
	Persistent haematuria.	Seek medical advice if haematuria persists maybe due to prostatic enlargement, carcinoma, raised INR, calculi Encourage fluid intake

Bypassing of urine around catheter	May indicate presence of infection	Obtain catheter specimen of urine using needle free sample port
	Bladder spasm or instability	Consider use of antimuscarinic medication
	Constipation	Increase fluid intake and dietary fibre intake
	Incorrect positioning of drainage system	Check drainage bag is in correct position below the level of the bladder
	Catheter too large	Change to smaller charrier catheter size
	Catheter blocked by debris.	Remove and re-catheterise after removal, cut catheter along its length and check for encrustation. Consider a programme of catheter maintenance solution if encrustation is evident.
Pain or discomfort	The “eyelets” of the catheter may be occluded by urothelium due to hydrostatic suction	Raise the drainage bag above the level of the bladder for about 15 seconds only
	May be an indication of infection	Obtain catheter specimen of urine
	Inadequate fixation device	Use of correct fixation device
Catheter retaining balloon will not deflate	Valve port and balloon channel may be compressed	Check no external compression problems.
	Faulty valve mechanism	Valve port should always be aspirated slowly. If done forcefully the valve mechanism may collapse. Remove the syringe and try another. Deflation can sometimes be achieved by inserting an additional 1-2 ml only of sterile water into the valve port then slowly aspirating again. If attempts to deflate the balloon fail, medical advice must be sought. ON NO ACCOUNT SHOULD ANY PART OF THE CATHETER BE CUT.

		This is not safe practice and may result in migration of the catheter into the bladder.
Accidental removal of catheter with balloon fully inflated	Confused patient	Reassess need for catheter and consider alternative methods to manage their bladder emptying.
	Severe bladder spasm/patulous urethra	Recatheterise if in retention. NB Use of a larger catheter will not prevent expulsion of catheter.
Resistance when inserting catheter	Bladder Spasms	Reassure patient so they relax.
	Enlarged Prostate	Advise to cough
	Anxieties	Seek medical advice.
	Constipation	Treat constipation

References

Adams D, Bucior H, Day G and Rimmer J-A (2012) HOUDINI: make that urinary catheter disappear-nurse led protocol, *Journal of Infection Prevention* 13(2):44-46

ABMUHB (2015) Wound management policy: Abertawe Bro Morgannwg University Health Board.

ABMUHB (2015) Infection control policy: Abertawe Bro Morgannwg University Health Board.

ABMUHB (2016) Consent to treatment policy: Abertawe Bro Morgannwg University Health Board.

Booth F (2014) Principles underlying urinary catheterisation in the community. *Journal of Community Nursing* 28 (5) 72-77

Dougherty L, Lister S (2015) *The Royal Marsden Manual of Clinical Nursing Procedures*, 9th Edition, Professional Edition Wiley-Blackwell

European Association of Urology Nurses (2012) Evidence-based Guidelines for Best Practice in Urological Health Care. Catheterisation Indwelling Catheters in adults Urethral and Supra-pubic. EAUN Arnhem

Gould CV, Umscheid CA, Agarwal RK, Kuntz G & Pegues D, (2010). Guideline for prevention of catheter-associated urinary tract infections 2009. *Infection Control & Hospital Epidemiology*, 31(04) 319-326.

Healthcare Infection Control Practice Advisory Committee (2009) Guidelines for prevention of catheter associated Urinary Tract Infections.

Loveday HP, Wilson JA, Pratt RJ, et al (2014) Epic 3: National evidence based guidelines for preventing healthcare associated infections in NHS hospitals in England. *Journal of Hospital Infection*. 2014; 86(1) S1-70.

Meddings J, Riogers MAM, Krein SL, Fakhri MG, Olmsted RN & Saint S (2014) *Reducing unnecessary urinary catheter use and other strategies to prevent catheter associated urinary tract infections: an integrative review*. *British Medical Journal Quality and Safety* 23(4); 277-289

Murphy C, Fader M, & Prieto J (2014) Interventions to minimise the initial use of indwelling urinary catheters in acute care: a systematic review. *International Journal of Nursing Studies*. 51 (1) 4-13

NICE (2012) *Healthcare-associated infections: prevention and control in primary and community care*. London: National Institute for Clinical Excellence

NICE (2015) *Urinary Tract Infections in Adults* NICE clinical guidelines. Available from www.nice.org.uk/QS90

Nursing & Midwifery Council. (2018). *The code: Professional standards of practice and behaviour for nurses, midwives and nursing associates*. London: Nursing & Midwifery Council.

Prinjha S and Chapple A (2014) *Patients' experience of living with an indwelling urinary catheter*. British Journal of Neuroscience Nursing 10(2):62

Public Health Wales (2017) National Point Prevalence Study of Healthcare Associated Infection, Device usage and Antimicrobial Prescribing.

Public Health Wales (2012) *1000 lives Plus Improving care, developing quality S.T.O.P campaign*. Cardiff: National Leadership and Innovation Agency for Healthcare, Public Health Wales.

Royal Collage of Nursing (2019) *Catheter Care: RCN Guidance for all Health care Professionals*. London RCN

Shepherd A, Mackay W & Hagan S (2017) *Washout policies in long term indwelling urinary catheters in adults*. Cochrane Database of Systematic Reviews 2017.

Spencer S, Makie M, & Shaw K (2019) *Decreasing catheter associated uiorary tract infection in urologic oncology patients discharged with an indwelling urinary catheter: A quality improvement project*. Journal of Perianaesthesia Nursing 34(2) 394-402

Turner B, Dickens N (2011) Long-term Urethral Catheterisation. *Nursing Standard* 25 (24) 49-56

Waskiewicz W, Alexis O & Cross D(2019) *Supporting patients with long- term catheterisation to reduce the risk of catheter associated urinary tract infections*. British Journal of Nursing 28(9) s4-s17

Welsh Government (2016) Unplanned Admission Consensus Committee *Reducing Unplanned Admissions to Hospital as a Result of Urinary Incontinence: Guidance for Welsh Services*. Cardiff

[ABMUHB Record Keeping policy](#)

[1000Lives Improvement STOP campaign](#)

[RCN – Bowel Care https://www.rcn.org.uk/-/media/royal-college-of-nursing/documents/publications/2019/september/007-522.pdf?sfns=mo](https://www.rcn.org.uk/-/media/royal-college-of-nursing/documents/publications/2019/september/007-522.pdf?sfns=mo)



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