

Status: Standard Procedure: specifies the procedures to be followed, only in exceptional circumstances should these not be followed	Policy No: CLSP 29 Version No:1 Date Approved: 1/6/11 Review Date: 31/5/13
Title: Standard Procedure for the Irrigating (flushing) of an Indwelling Catheter	
Written by: Practice Development Coordinator	
Approved by: National Risk Management Committee	
Cross Reference: ICG 02, ICG 01, CLSPO1, CLP01, CLP02	

1.0 Purpose

The purpose of this procedure is to ensure a clean and safe practice during the irrigation (flushing) of an indwelling catheter for users of Cheshire services/centres.

2.0 Scope

All Cheshire Services where users of Cheshire services may require catheter irrigation (flushing)

3.0 Responsibility

- It is the responsibility of all staff who engage in this practice to follow this standard procedure
- It is the responsibility of service managers to ensure staff are familiar with the standard procedure and to monitor compliance.

4.0 Definitions

Irrigation is the continuous washing out of the bladder with sterile fluid (urinary catheter maintenance solution) and is administered via a urethral or suprapubic indwelling Foley catheter .They are prescribed after initial continence assessment to rule out infection and are to prevent and dissolve crystallization in the catheter or the bladder, to remove tissue debris and small blood clots and to prevent and reduce bacterial growth. Some service users may benefit by using catheter maintenance solutions to prolong the life of their catheter, avoiding the trauma of re-catheterisation. There are many potential causes of catheter blockage, and treatment should be based on clinical evidence problems associated with bowel habit, debris in urine, or crystals on catheter tip at removal.

5.0 Guidelines

Equipment

Absorbent sheet

Clamp

New catheter bag (leg bag)

Choice of Catheter flushing solution on service user's prescription

Container for warming the catheter flushing solution

Gloves and apron

Plastic waste bag

Procedure

- Explain the procedure to the service user to ensure they understand.
- Ensure the service user is in a comfortable position sitting up or lying down
- To administer, follow the manufacturer's instructions for administration of the solution, volume to be administered and time for retention of the solution.
- Make sure the flushing solution is warmed up to body temperature by immersing in warm water
- Expose the whole length of the catheter and observe for any signs of discharge (if service user is using a leg bag remove straps and place bag on the bed before exposing catheter). .
- Wash hands and put on the gloves and apron.
- Clamp the catheter. Place the absorbent sheet under the catheter junction. (Ref: ICG 02, ICG 01)
- Close the clamp and remove lid of catheter flushing solution without touching the tip.
- Squeeze the end of the catheter together just above the connection to the drainage bag (to prevent urine leaking from the catheter).
- Holding top up, disconnect the drainage bag and insert the catheter flushing solution into the catheter.
- Release the catheter.
- Slide the clamp open on the catheter flushing solution, raise the bag slightly above the level of the bladder and allow the required amount of the solution to flow into the bladder. Gentle pressure may be needed taking care initially, to start the flow (rapid instillation of fluid may be uncomfortable for the service user)
- If the fluid is to be retained for a period of time, close the clamp and place the bag on the bed. Reposition the covers and ensure the service user is comfortable for the required time.
- When the catheter flushing solution is to be removed, ensure the bag is below the level of the bladder (for gravity to facilitate drainage) open the clamp and allow the solution to drain.

- When all the solution has drained back out of the bladder, close the clamp (to prevent spillage of the solution) disconnect the solution container and connect a new drainage bag. Note the amount of fluid returned.
- If the fluid is not going into the bladder don't force it, squeeze catheter tubing to break down the sediment and try again.
- If the solution does not drain out, reposition the service user
- Observe during administration for bypassing round the catheter, bleeding or severe bladder spasm resulting in inability to retain the solution
- Stop administration if the service user becomes distressed or finds the procedure painful/intolerable.
- Make the service user comfortable, remove and dispose of equipment.
- Sign the Mar sheet and document that the maintenance solution has been administered and any complications with the procedure in Best Possible Health Catheter Irrigation (Flushing) Record
 - Report any adverse complications to Cheshire nurse, PHN, G.P. and the line manager.

Troubleshooting:

1. Administration of catheter maintenance solutions requires breakage of the closed drainage system increasing the risk of introducing infection and infection control guidelines need to be adhered to
2. Encourage service user to drink plenty of fluids and avoid bladder irritants e.g. coffee, alcohol if possible
3. Complications to be aware of with catheter care
 - The urine has a strong smell or becomes thick and/or cloudy
 - The service user develops a fever, sweats or chills
 - There is swelling around the catheter
 - The catheter stops draining or there is very little urine despite adequate fluid intake
 - There is leakage of large amounts of urine around the catheter
 - Bleeding into or around the catheter
 - The service user complains of back pain or becomes agitated

4 .Standard catheter maintenance solutions

Solution	Product	What it does
Sodium chloride 0.9%	Sodium chloride 0.9%	Will not dissolve crystal formation
Citric acid 3.23% solution (Suby G)	Dissolve crystals Unblock a catheter Minimise trauma on catheter removal	Charting a pH will allow development of an individual catheter plan
Citric acid 6% solution (Solution R)	Stronger citric acid solution for more persistent crystallisation	Strongly acidic – potential mucosal irritation

5. The pH scale

The pH scale is measured regularly to decide which type of Catheter Maintenance Solution is required. Urinary pH is a measurement of the acid – alkaline content in urine which ranges from 0 to 14 and is measured using a dipstick/Uritest. The 0 end of the scale is where the concentration is increasingly acidic. Most biological fluids are between pH 6 and pH8, there are a few exceptions to this like stomach acid. Braun recommends that if there is debris but the pH is normal 9% saline can be used to remove debris. If the pH is >6.8 and there is debris/crystals suby G is to be used and if the person is a persistent blocker and the pH is >7.7 solution R is to be used.

6.0 References

Dougherty, L. and Lister, S. (2004) *The Royal Marsden Hospital Manual of Clinical Nursing Procedures*. Sixth Edition. Blackwell Publishing, Oxford.

Mallet, J. and Dougherty, L. (2000). *The royal Marsden Hospital Manual of Clinical Nursing Procedures*. Sixth Edition. Blackwell Publishing, Oxford.

Clinical guidelines for use of Catheter Maintenance Solutions Sth Gloucester NHS 2005

Plan of catheter care

(2011) Derby City NHS

Guideline for Urinary Catheter Maintenance Solutions (2010) Newcastle upon Tyne NHS

Appendix 1

Useful documents

1. Catheter Diary
2. Intake /output record
3. Best Possible Health Catheter Diary - Catheterisation Record
4. Best Possible Health Catheter Irrigation (Flushing) Record

