

Bladder Irrigation: Management of Haematuria

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Working with Aboriginal People

The ACI is committed to improving the health of all patients across NSW, particularly those who have significantly higher rates of health problems and less access to appropriate health services. Many sufferers of prostate cancer and its related complications fit into this category including those of the male Aboriginal community.

Widely available data indicates that prostate cancer is one of the most prevalent cancers to affect the Indigenous male population, with very similar mortality rates to the Non-Indigenous population. However, there may be cultural sensitivities that make complications surrounding prostatectomy and other potential causes of Haematuria to less likely be recognised and discussed openly.

An Aboriginal Health Impact Statement was undertaken prior to commencement of this project and consultation has occurred with senior Aboriginal health workers, focus groups and representative organisations. We would like to thank the key stakeholders whose contributions have informed the recommendations arising from this project. These stakeholders, including those who work closely with Aboriginal people, will continue to be involved in the implementation of the recommendations.

It is important that the appropriate steps are taken to ensure that services are delivered in culturally safe and competent ways across the project lifespan. To achieve optimal health outcomes for Aboriginal people with complications resulting in haematuria, we will need to undertake a cultural audit to identify and address the barriers to access to care and ongoing management. The audit, along with the development of culturally competent and safe services, is described in detail in Chronic care for Aboriginal people model of care.

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Glossary

CAUTI	Catheter Associated Urinary Tract Infection
CBI	Continuous Bladder Irrigation
IUC	Indwelling Urinary Catheter
PPE	Personal Protective Equipment (including protective eyewear, plastic apron/ disposable gown and gloves)
TURBT	Trans Urethral Resection of Bladder Tumour
TURP	Trans Urethral Resection of Prostate

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Introduction

This guide has information about bladder irrigation, which can be used to prevent blood clot formation, allow free flow of urine and maintain urinary catheter patency.

It has information for health professionals performing bladder irrigation, including their roles and responsibilities, compliance to relevant guidelines and required documentation.

There are three methods of bladder irrigation:

1. continuous bladder irrigation (CBI)
2. intermittent bladder irrigation via irrigation pump bag
3. manual bladder irrigation.

There is information about patient management issues, including how to deal with pain, irritation and leakages.

Clinical Skill Assessment Forms can be used to gauge compliance – see Appendices 1–2.

Health professionals

The following health professionals can perform bladder irrigation:

- medical officers
- registered nurses (RNs)
- accredited endorsed enrolled nurses
- undergraduate student nurses under the supervision of a RN
- urologists or urology registrars.

Roles and responsibilities

Medical officer	Registered nurse
<ul style="list-style-type: none">• Documents the order and clinical indication of bladder irrigation in the clinical progress notes• Reviews the bladder irrigation at least daily	<ul style="list-style-type: none">• Maintains the patient's comfort• Ensures urinary catheter patency and urine drains freely• Monitors the degree of haematuria and the presence of clots, and adjusts the irrigation fluid infusion rate accordingly• Ensures an adequate supply of infusing fluids is nearby and stored at room temperature to avoid bladder spasm• Responsible for documentation (accurate record of urine output, urine colour/degree of haematuria, presence of clots if any and if manual bladder irrigation was required)• Provides catheter care, securing the indwelling urinary catheter (IUC) appropriately to minimise movement

Competency

Prior to performing insertion of urinary catheter and/or bladder irrigation, the health professional should be able to demonstrate prior knowledge, understand the risks and to the standard set by the LHD or healthcare provider.

Compliance to relevant guidelines

The health professional should follow local Local Health District or healthcare provider guidelines on urinary catheterisation and bladder irrigation (e.g. *Adult Urethral Catheterisation for Acute Care Settings*¹).

The following other guidelines should also be followed:

- **Catheter associated urinary tract infection (CAUTI)** – Aseptic technique is required for performing bladder irrigation, catheter care and maintenance to reduce the risk of a CAUTI secondary to contamination during the procedure and break in the closed urinary drainage system. Refer to the Clinical Excellence Commission information.²
- **Hand hygiene** – A policy outlines the specific hand hygiene practices required to minimise the risk of infection.³
- **Infection control** – A policy outlines the broad principles of infection control.⁴
- **Medication handling** – The best practice principles on medication procurement, storage, prescribing, supplying, dispensing and administration at NSW public health facilities.⁵

Compliance

Compliance to these guidelines will achieve the expected outcomes:

- maintained urinary catheter patency
- maintained patient's comfort
- prevention/minimisation of clot formation
- CAUTI risk reduced.

Continuous bladder irrigation

Continuous bladder irrigation (CBI) is used to reduce the risk of clot formation and maintain indwelling urinary catheter (IUC) patency by continuously irrigating the bladder via a three-way catheter.

The three-way catheter allows fluid to flow into and out of the bladder simultaneously. A large gauge IUC is used to allow for drainage of clots and debris.

The use of 0.9% sodium chloride (normal saline) is recommended. Use sterile equipment and aseptic technique.

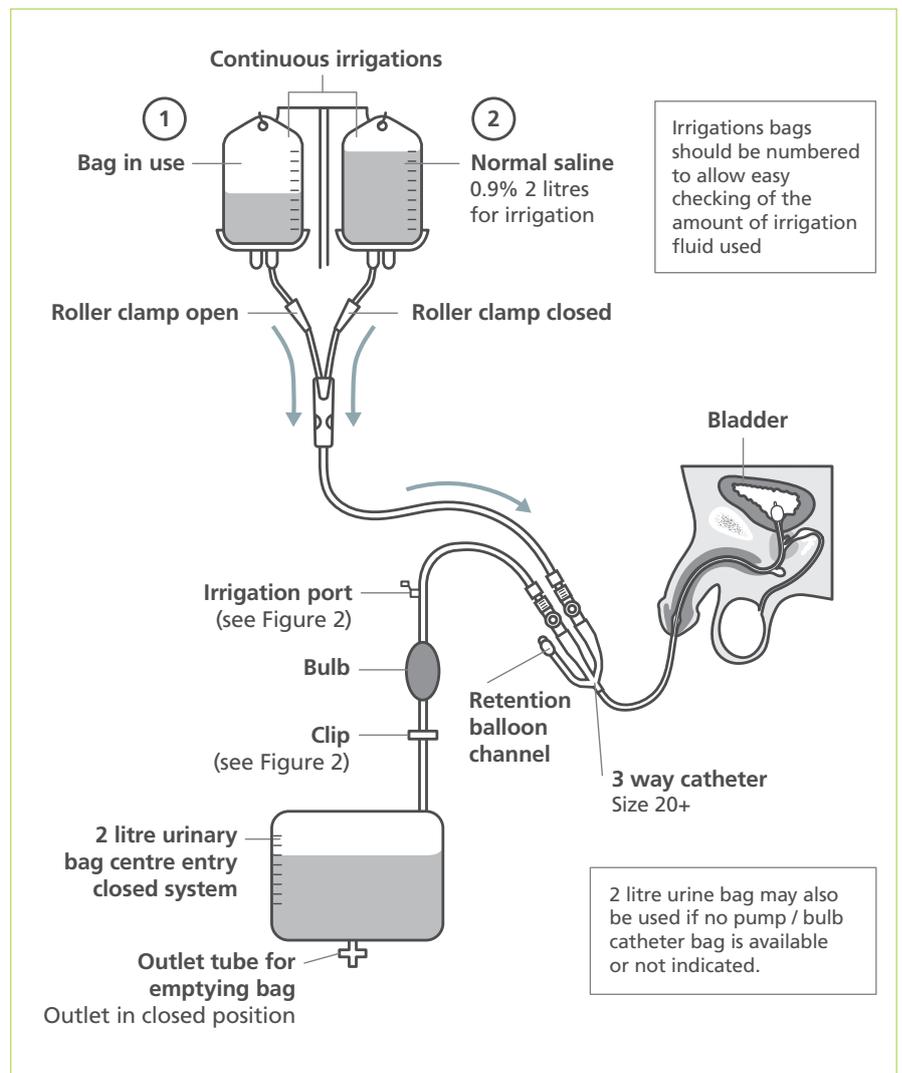
Three-way haematuria (whistle tip) catheter

A three-way standard (round) tip catheter has three ports: a large internal lumen that is reinforced to avoid collapse when the pressure of manual irrigation is applied, large drainage eyes which facilitate easier evacuation of clots, and a third port allowing for continuous irrigation. A three-way whistle tip catheter has the same features as above but the tip is different in shape. The tip is open and bevelled to facilitate drainage of blood clots. Insertion of whistle tip catheter is usually performed by urologists or urology registrars.

Equipment

- Alcohol-based hand rub
- Personal protective equipment (PPE): protective eyewear, plastic apron and gloves
- Dressing trolley
- Dressing pack
- 2x Sodium chloride 0.9% (normal saline) irrigation bags (volume as per facility procedure)
- 70% isopropyl alcohol wipes
- CBI set
- IV pole
- 6x 70% alcohol swabs
- Sterile gloves
- Waste bag
- Disposable underpad

Figure 1. Continuous bladder irrigation



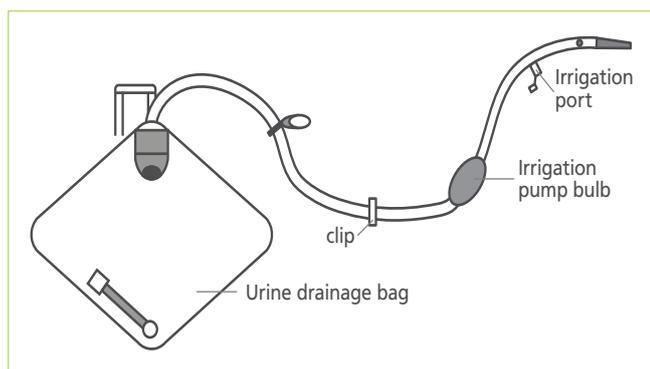
Procedure

1. Perform hand hygiene in accordance with the 5 moments in hand hygiene.⁶
2. Verify patient's identity, confirm the procedure, obtain consent and check for allergies. As part of this process:
 - Assess the patient's health literacy (understanding of the procedure).
 - Ask patient if he or she identifies as Aboriginal or Torres Strait Islander. If so, provide access to Aboriginal Liaison Officer to provide support with health literacy.
 - Provide an interpreter for patients who require it.
3. Check if a three-way Foley catheter is in situ.
Note: A three-way Foley catheter must be in situ, and if one is not in place, it must be inserted (refer to facility procedure for insertion of an indwelling urinary catheter).
4. Clean dressing trolley with 70% isopropyl alcohol wipes. Allow drying, then gather equipment, and check the sterility and integrity of sterile items. Take to the bedside.
5. Ensure patient privacy.
6. Position patient in supine position, allowing for easy access to the IUC to minimise the need for staff to twist, bend or maintain awkward static postures. Obtain assistance if required.
7. Place a disposable sheet under the patient's buttocks.
8. Empty the urine drainage bag (refer to facility procedure). Record measurement on the fluid balance chart.
9. Perform hand hygiene.
10. Put on PPE (protective eyewear, plastic apron and non-sterile gloves).
11. Ensure the IV pole is at a safe accessible height before hanging the sodium chloride flasks.
12. Insert the prongs from the irrigation set into the flasks and prime irrigation tubing, expel air and close the clamp. Do not remove the silicone protective tube from the connector at this time – hang the tubing from the IV pole. Maintain asepsis.
13. Raise and secure the IV pole to the appropriate height. *Note: When priming, open one irrigation flask only as the fluid can run from one flask to the other.*
14. Place a disposable underpad underneath the irrigation port to contain any spillage and discard gloves.
15. Perform hand hygiene.
16. Open the dressing pack and add the 70% alcohol wipes and put on sterile gloves.
17. Using sterile gauze, grasp the irrigation port with your non-dominant hand.
18. Using your dominant hand, place the sterile paper towel over the disposable sheet to create the sterile field.
19. Using your dominant hand and sterile gauze, remove the spigot from the irrigation port and discard if not attached.
20. Clean the IUC irrigation arm and port well with 70% alcohol swabs. Allow to dry.
21. Remove the silicone tube from the connector of the irrigation tubing and connect securely to the irrigation port, whilst maintaining aseptic technique.
22. Unclamp the irrigation tubing and set the rate of infusion by adjusting the roller clamp.
23. Remove the disposable sheet and ensure patient is comfortable.
24. Dispose of waste according to facility protocol.
25. Remove PPE.
26. Clean trolley.
27. Perform hand hygiene.
28. Document the procedure performed and outcome in patient clinical progress notes.

Intermittent bladder irrigation via a closed system

Intermittent bladder irrigation via a current indwelling two-way catheter which requires a special urinary drainage system which has an irrigation port to connect to irrigation fluid. The closed catheter system is maintained to minimise risk of CAUTI.⁷

Figure 2. Bard irrigation pump bag¹



Source: Bard Australia Ptd Ltd

This intermittent irrigation system can be used for:

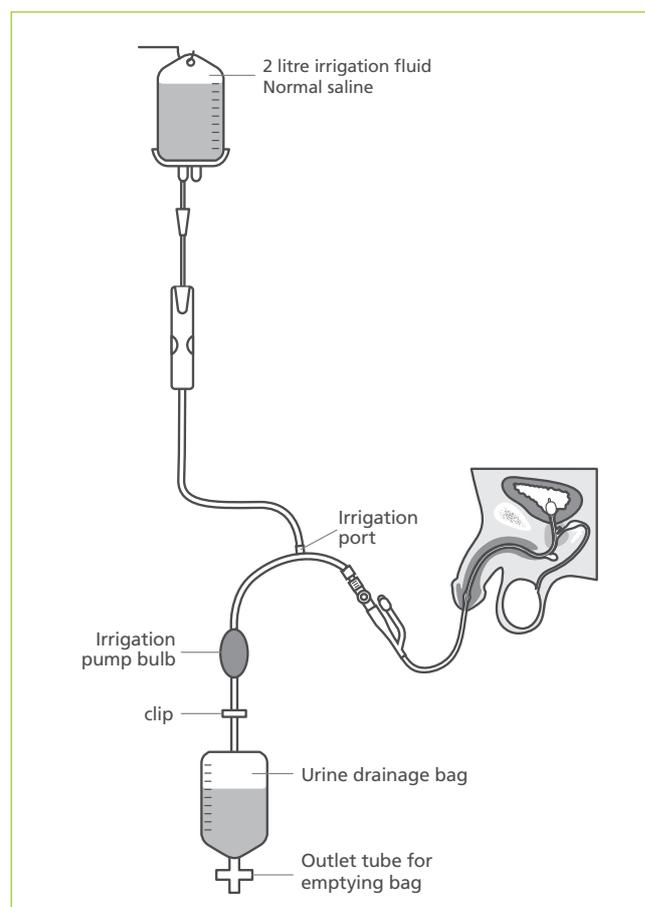
- Moderate haematuria in a patient who had a two-way catheter – this system can be the first-line treatment. The catheter does not have to be changed to a three-way for continuous irrigation, and changed back to two-way when haematuria settles.
- Palliative patients whose catheters are frequently blocked with clots or debris – this system will minimise the discomfort associated with catheter changes.
- Problematic supra-pubic catheter – this is more preferable than manual irrigation, which breaks down the closed catheter system constantly

Equipment

Refer to Figure 3.

- Irrigation set (single spike)
- Irrigation fluid: 1–2 litre Sodium Chloride 0.9% for irrigation (use IV Sodium Chloride 0.9% if not available)
- Bard irrigation pump bag (2 litre urine collection bag with T irrigation port and hand pump bulb)²
- Underpad (bluey)
- Chlorhexidine 0.5% with 70% alcohol wipes
- Non-sterile gloves
- PPE
- IV pole
- Irrigation chart/Fluid balance chart

Figure 3. Intermittent bladder irrigation via two-way catheter (closed system with Bard irrigation pump)



¹ Note: The Bard irrigation pump bag is an example of a product that may be used. This does not constitute a recommendation or requirement. LHDs or facilities may use any brand of irrigation system.

Procedure

1. Perform hand hygiene in accordance with the 5 moments in hand hygiene.⁸
2. Verify patient's identity, confirm the procedure, obtain consent and check for allergies. As part of this process:
 - Assess the patient's health literacy (understanding of the procedure).
 - Ask patient if he or she identifies as Aboriginal or Torres Strait Islander. If so, provide access to Aboriginal Liaison Officer to provide support with health literacy.
 - Provide an interpreter for patients who require it.
3. Position patient for easy access to the catheter whilst maintaining patient's comfort.
4. Hang irrigation fluid bags on the IV pole, attach to irrigation set and prime irrigation set, maintaining asepsis of irrigation set. Ensure that the clamp on the irrigation set is closed.
5. Don goggles, impervious gown and non-sterile gloves.
6. Place underpad below catheter connection.
7. Swab T irrigation and catheter drainage ports with chlorhexidine swabs and allow to dry.
8. Connect the irrigation to the T irrigation port (use sterile gauze to remove the cap of the port).
9. Connect irrigation pump bag to catheter (use sterile gauze to remove spigot or old urine bag).
10. Clamp the irrigation pump bag (the clamp is located above the drip chamber of the urine bag).
11. Start the irrigation. Set the administration rate by adjusting the roller clamp. Run 50–100mls of sodium chloride into the bladder.
12. Turn off the irrigation fluid.
13. Squeeze the hand pump gently to flush the bladder via gentle pressure. (If unsure how to use the hand pump, squeeze the tubing directly above the pump instead.)
14. Unclamp the catheter to allow urine, debris and clots flow into the drainage bag.
15. Document outcome in patient clinical progress notes including:
 - the date and time of procedure
 - the indication for the procedure, including the patient's clinical signs and symptoms
 - the outcome, i.e. the colour and type of drainage, presence of clots and patient's tolerance of the procedure
 - the fluid balance chart volume in the volume return.

Issues to note

Irrigation pressure – Bladder irrigation (squeezing the hand pump) must be done gently as it is possible to suck part of the bladder wall (urothelium) into the eye of the catheter, causing pain and trauma to the bladder.¹⁰

Urine output – Subtract irrigation fluid to calculate accurate urine output.

Frequency of irrigation – This is determined by the degree of bleeding and the amounts of clots and/or debris returned. If bleeding or clots are persistent, continuous bladder irrigation is indicated

Manual washout – Manual washout is also accessible by using 50ml catheter-tip syringe via the T irrigation port, to maintain the closed system.

Pressure during bladder irrigation

Bladder irrigation (squeezing the hand pump) must be done gently as it is possible to suck part of the bladder wall (urothelium) into the eye of the catheter, causing pain and trauma to the bladder.⁹

Manual bladder irrigation for managing clot retention

Manual bladder irrigation is used to clear the bladder and catheter of blood clots and restore catheter patency.

Manual bladder irrigation involves flushing a three-way urinary catheter manually with a catheter tipped syringe and sterile sodium chloride 0.9% (normal saline) to evacuate all clots, followed by continuous bladder irrigation to minimise the risk of further clot formation and over distention of the bladder.

The optimal outcome is removal of the clots from bladder, with the urine draining freely. Some sub-optimal outcomes include:

- overdistention of the bladder
- inability to unblock the IUC, requiring catheter replacement
- development of a CAUTI secondary to contamination during the procedure
- a break in the closed urinary drainage system.

Prior to undertaking the procedure, the nurse, medical officer or student should be able to demonstrate prior knowledge and perform manual irrigation safely and to the standard set by the LHD or healthcare provider. Manual irrigation must be gentle as the increased pressure in the bladder can result in suture disruption or bladder perforation with resultant extravasation of urine. Sterile equipment and aseptic techniques are used – see procedure instructions.

Ordering and documenting manual bladder irrigation

Whilst not contraindicated in patients who have had deep resection of bladder tumours, open bladder or renal transplant surgery, manual bladder irrigation must be ordered and documented by urology registrar or urologist and be performed by an experienced clinician.

If in the first 24 hours post-transurethral resection of prostate (TURP) the catheter cannot be unblocked, the urology registrar or consultant urologist must be notified. Nursing staff (unless an experienced urology nurse) and resident medical officers must not attempt re-catheterisation unless authorised by urology registrar or consultant urologist. This is due to the risk of prostatic capsular perforation or sub-trigonal catheter placement on reinsertion.

Signs and symptoms of a blocked catheter

- No urine flow from the catheter.
- Suprapubic distention and lower abdominal pain becoming more pronounced as the bladder fills.
- Urine leaking around the catheter (bypassing).
- Development of vaso-vagal symptoms, such as sweating, tachycardia and hypotension.
- Autonomic dysreflexia in patients with a spinal cord injury (SCI).

Equipment

- Alcohol-based hand rub
- 1 catheter pack
- 1 catheter tip 50mL syringe 70% alcohol swabs
- 1 bottle 500mL sterile sodium chloride 0.9% (normal saline)
- Sterile kidney dish
- 1 sterile urinary drainage bag
- Disposable underpad (bluey)
- Non-sterile jug/receptacle on bottom of trolley
- Sterile gloves
- PPE

Procedure

1. Perform hand hygiene in accordance with the 5 moments in hand hygiene.¹¹ Observe hygiene throughout the procedure.
2. Verify patient's identity, confirm the procedure, obtain consent and check for allergies. As part of this process:
 - Assess the patient's health literacy (understanding of the procedure).
 - Ask patient if he or she identifies as Aboriginal or Torres Strait Islander. If so, provide access to Aboriginal Liaison Officer to provide support with health literacy.
 - Provide an interpreter for patients who require it.
3. Clean dressing trolley with 70% isopropyl alcohol wipes, allow drying, gather equipment, check sterility and integrity of sterile items and take to the bedside.
4. Ensure patient privacy.
5. Position patient in supine position, allowing for easy access to the IUC to minimise the need for staff to twist, bend or maintain awkward static postures. Obtain assistance if required.
6. Place a disposable sheet under the patient's buttocks.
7. Place blue disposable underpad under the catheter and drainage bag connection.
8. Place non-sterile jug/receptacle on bottom of designated procedure trolley.
9. Perform hand hygiene.
10. Open the catheter pack and add 50mL syringe, alcohol swabs, sterile drainage bag.
11. Pour sterile chloride 0.9% into kidney dish.
12. Perform hand hygiene.
13. Put on PPE (eye protection, disposable gown/plastic apron and sterile gloves).
14. Draw up 50mL of sodium chloride 0.9%.
15. Using both hands, place the gauge squares around the catheter drainage port and drainage bag connection.
16. Disconnect the catheter from the drainage bag, then discard the drainage bag and gauze under the catheter port to create a sterile field.
17. Using the dominant hand place the sterile paper towel over the disposable sheet and under the catheter port to create a sterile field.
18. Clean the catheter drainage port well with the 70% alcohol swabs and discard.
19. Warn the patient that the next step will be painful/uncomfortable. Using 50ml volumes of sodium chloride 0.9%, irrigate the catheter by flushing in and drawing back on the plunger to evacuate any clot or debris. Take care to avoid splashing that could lead to exposure to body fluids during the procedure. If resistance is encountered, reasonable pressure can be applied (except following renal transplant or bladder surgery). Empty each syringe directly into the non-sterile jug/receptacle on the bottom of the trolley.
20. Continue to irrigate with 50ml volumes until you achieve a clear or clot free return.
21. Connect a new drainage bag and secure the catheter.
22. Recommence continuous bladder irrigation.
23. Remove disposable sheets and ensure that the patient is comfortable.
24. Remove PPE.
25. Dispose waste according to local policy.
26. Perform hand hygiene.
27. Calculate the difference between volume in and volume returned.
28. Document outcome in patient clinical progress notes including:
 - the date and time of procedure
 - the indication for the procedure, including the patient's clinical signs and symptoms
 - the outcome, i.e. the colour and type of drainage, presence of clots and patient's tolerance of the procedure
 - the fluid balance chart volume in the volume return.

Required documentation

Clinical progress notes

- Indication/order for irrigation, e.g. post TURP or transurethral resection of bladder tumour (TURBT)
- Report on clot retention, haematuria and catheter blockage
- Method of bladder irrigation: continuous bladder irrigation (CBI), intermittent bladder irrigation via irrigation pump bag and manual bladder irrigation
- Complications, such as bladder spasm, lower abdominal pain, leakage around catheter, negative fluid balance
- Medical review at least daily
- Order for cease irrigation

Fluid balance chart

- Infusion amount, urine output, degree of haematuria, presence of clots
- Calculate true output i.e. subtract the volume out from the volume in for the true urine output.

For example, if the patient has had a 2L irrigation bag emptied twice, and the total output is 2400mL, the true urine output is 400mL (2400mL output – 2000mL irrigation fluid).

- Clinicians may choose to record the patient information in a bladder irrigation chart prior to entering the information to eMR.

Patient management

If the amount of drainage is less than the irrigant infused

- Turn off the irrigation and check for kinks, loops or clots in the catheter or drainage bag tubing.
- Palpate the bladder and note any patient pain or discomfort. Performing a bladder scan may be useful to determine bladder volume. Try 'milking' the IUC to dislodge clots.
- Check the height of the IV pole and for overflowing of the drip chamber (can affect patency).
- Recalculate input and output, i.e. calculate the urine volume: volume in – volume out = urine volume.
- Use of a closed intermittent irrigation system (preferred) or manual irrigation may be required if obstruction is the cause (refer to facility guidelines). If unsuccessful, notify the relevant medical officer.

If there is an increase in haematuria or clots present

- Increase the infusion rate and observe the drainage and patient comfort.
- Use of a closed intermittent irrigation system (preferred) or manual irrigation may be indicated if obstruction is suspected to aid in clot evacuation (refer to facility guidelines). If unsuccessful, notify the relevant medical officer.

If the patient is experiencing pain

- Turn off the irrigation and check for kinks, loops or clots in the catheter or drainage bag tubing.
- Palpate the bladder to determine distention.
- Check drainage to determine if output is adequate.

If there is leakage around the catheter (bypassing)

- Assess for obstruction.
- Assess for bladder spasm.
- Avoid cold irrigation fluid.
- Ensure the IUC is secured to the patient's thigh to minimise catheter movement.

If the patient becomes confused or agitated post TURP

TURP syndrome occurs when there is an overload of irrigation fluid through the prostatic sinuses during the operative procedure that can lead to confusion, hypertension and hyponatraemia. This is uncommon.

- Assess patient for orientation to time, person and place and notify relevant medical officer of patient's changed status.
- Ensure relevant information is available for the medical officer to review, including time of change in orientation, administration of any pain relief, amount of irrigant infused and true output (i.e. subtract the volume in out from the volume in = true urine output).

Appendix 1

Clinical Skill Assessment Form: Continuous Bladder Irrigation for Clearing Clot Retention

Name of Assessee		Signature of Assessee	
Ward/Location		Date of Assessment	
Name of Assessor		Signature of Assessor	

Performance Criteria	YES	NO
Professional Attitude and Patient Communication		
Introduced self to patient.		
Explained that the procedure is being observed and assessed.		
Gained verbal or inferred consent from the patient.		
Addressed any patient concerns that may have arisen during the procedure.		
Patient Assessment and Planning		
Explained the procedure to the patient.		
Assessed patient's health literacy and asked if he/she identifies as Aboriginal or Torres Strait Islander.		
Stated indications and reasons for the bladder irrigation.		
Followed the requirements for patient preparation as per facility policy.		
Identified and planned for potential difficulties.		
Continuous Bladder Irrigation (Procedure)		
1. Performed hand hygiene.		
2. Verified the patient's identity, confirmed procedure, obtained consent and checked for allergies. If necessary, referred to Aboriginal Liaison Officer or interpreter provide support with health literacy.		
3. Ensured that a three-way Foley catheter was in situ/inserted if necessary.		
4. Cleaned dressing trolley with 70% isopropyl alcohol wipes, allowing for drying, gathered equipment, checked sterility and integrity of sterile items and took to the bedside.		
5. Ensured patient privacy.		
6. Positioned patient in supine position, allowing for easy access to the IUC to minimise the need to twist, bend or maintain awkward static postures. Obtained assistance if required.		
7. Placed a disposable sheet under the patient's buttocks.		
8. Emptied urine drainage bag according to facility procedure and recorded measurement on the fluid balance chart.		
9. Performed hand hygiene.		
10. Put on PPE (protective eyewear, plastic apron and non-sterile gloves).		

Performance Criteria	YES	NO
11. Ensured the IV pole is at a safe accessible height before hanging the sodium chloride flasks.		
12. Inserted the prongs from the irrigation set into the flasks and primed irrigation tubing, expelling air and closing the clamp. Did not remove the silicone protective tube from the connector. Hung tubing from the IV pole. Maintained asepsis.		
13. Raised and secured the IV pole to the appropriate height. (Used one irrigation flask only.)		
14. Placed a disposable underpad underneath the irrigation port to contain any spillage. Discarded gloves.		
15. Performed hand hygiene.		
16. Added the 70% alcohol wipes to the dressing pack and put on sterile gloves.		
17. Used a sterile gauge to grasp the irrigation port with the non-dominant hand.		
18. Used dominant hand to place the sterile paper towel over the disposable sheet to create a sterile field.		
19. Used dominant hand and sterile gauze to remove the spigot from the irrigation port (discarded if not attached).		
20. Cleaned the IUC irrigation arm and port with 70% alcohol swabs and allowed to dry.		
21. Removed the silicone tube from the connector of irrigation tubing and connected securely to the irrigation port, whilst maintaining aseptic technique.		
22. Unclamped the irrigation tubing and set the rate of infusion by adjusting the roller clamp.		
23. Removed the disposable sheet and ensured the patient was comfortable.		
24. Disposed of waste according to facility protocol.		
25. Removed PPE.		
26. Cleaned trolley.		
27. Performed hand hygiene.		
28. Documented procedure and outcome in patient clinical progress notes. Calculated the difference between volume infused and volume returned.		
WH&S Issues Identified and Applied		
Identified the following aspects of WH&S and performed a risk assessment prior to performing the bladder irrigation.		
Positioned patient to minimise need to twist, bend or maintain awkward position. Obtained assistance if required.		
Maintained aseptic technique.		
Use of personal protective equipment (facial protection, gown/apron, gloves).		
Correctly disposed of waste.		
Performed hand hygiene in accordance with 5 Moments for Hand Hygiene.		

Appendix 2

Clinical Skill Assessment Form: Manual (Intermittent) Bladder Irrigation for Clearing Clot Retention

Name of Assessee		Signature of Assessee	
Ward/Location		Date of Assessment	
Name of Assessor		Signature of Assessor	

Performance Criteria	YES	NO
Professional Attitude and Patient Communication		
Introduced self to patient.		
Explained that the procedure is being observed and assessed.		
Gained verbal or inferred consent from the patient.		
Addressed any patient concerns that may have arisen during the procedure.		
Patient Assessment and Planning		
Explained the procedure to the patient.		
Assessed patient's health literacy and asked if he/she identifies as Aboriginal or Torres Strait Islander.		
Stated indications and reasons for the bladder irrigation.		
Followed the requirements for patient preparation as per facility policy.		
Identified and planned for potential difficulties.		
Continuous Bladder Irrigation (Procedure)		
1. Performed hand hygiene.		
2. Verified the patient's identity, confirmed procedure, obtained consent and checked for allergies. If necessary, referred to Aboriginal Liaison Officer or interpreter provide support with health literacy.		
3. Cleaned dressing trolley with 70% isopropyl alcohol wipes, allowing for drying, gathered equipment, checked sterility and integrity of sterile items, and took to the bedside.		
4. Ensured patient privacy.		
5. Positioned patient in supine position, allow for easy access to the IUC to minimise the need to twist, bend or maintain awkward static postures. Obtained assistance if required.		
6. Placed a disposable sheet under the patient's buttocks.		
7. Placed a blue disposable sheet under the catheter and drainage bag connection.		
8. Placed a non-sterile jug/receptacle on bottom of designated procedure trolley.		
9. Performed hand hygiene.		
10. Opened the catheter pack and added 50mL syringe, alcohol swabs, sterile drainage bag.		

Performance Criteria	YES	NO
11. Poured sterile chloride 0.9% into kidney dish.		
12. Performed hand hygiene.		
13. Put on PPE (eye protection, disposable gown/plastic apron and sterile gloves).		
14. Drew up 50mL of sodium chloride 0.9%.		
15. Used both hands to place the gauge squares around the catheter drainage port and drainage bag connection.		
16. Disconnected the catheter from the drainage bag, then discarded the drainage bag and gauze under the catheter port to create a sterile field.		
17. Used the dominant hand to place the sterile paper towel over the disposable sheet and under the catheter port to create a sterile field.		
18. Cleaned the catheter drainage port well with the 70% alcohol swabs and discarded.		
19. Warned the patient about pain and discomfort. Used 50mL volumes of sodium chloride 0.9% to irrigate the catheter by flushing in and drawing back on the plunger to evacuate any clot or debris. Emptied each syringe directly into the sterile receptacle.		
20. Continued to irrigate with 50mL volumes until you achieve a clear or clot free return.		
21. Connected a new drainage bag and secured the catheter.		
22. Recommended continuous bladder irrigation.		
23. Removed disposable sheets and ensured that the patient was comfortable.		
24. Removed PPE.		
25. Disposed waste according to local policy.		
26. Performed hand hygiene.		
27. Calculated the difference between volume in and volume returned.		
28. Documented the outcome in patient clinical progress notes including: <ul style="list-style-type: none"> – the date and time of procedure – the indication for the procedure, including the patient’s clinical signs and symptoms – the outcome, i.e. the colour and type of drainage, presence of clots and patient’s tolerance of the procedure – the fluid balance chart volume in the volume return. 		
WH&S Issues Identified and Applied		
Identified the following aspects of WH&S and performed a risk assessment prior to performing the bladder irrigation.		
Positioned patient to minimise need to twist, bend or maintain awkward position. Obtained assistance if required.		
Maintained aseptic technique.		
Use of personal protective equipment (facial protection, gown/apron, gloves).		
Correctly disposed of waste.		
Performed hand hygiene in accordance with 5 Moments for Hand Hygiene.		

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- 4 Clinical Excellence Commission. Infection control policy (PD2007_036). Available at: https://www1.health.nsw.gov.au/pds/ArchivePDSDocuments/PD2007_036.pdf
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- 7 Tenke P; Kovaces B; Johanssem B; Matsumoto T; Tambyah P; Naber K. European and Asian guidelines on management and prevention of catheter-associated urinary tract infections. *Int J Antimicrob Agents* 2008; 31(1):68-78.
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