

Bladder Management Protocol

Gynaecology

Aims

To ensure that the female urinary bladder is appropriately managed both pre and post operatively.

Catheters

Urethral catheters are hollow tubes which are inserted into the urinary bladder for the purpose of draining urine or instilling fluids as part of medical treatment.

Indications for catheters

Catheters can be used for various reasons:

Drainage:

- Acute or chronic retention
- Hypotonic bladder
- Pre and post pelvic surgery
- Measurement of urine output

Investigations:

- To obtain an uncontaminated urine specimen
- In Urodynamic investigations
- X ray investigations

Instillation:

- To irrigate the bladder
- To instill drug therapy eg. Oxybutinin, heparin etc.
- Chemotherapy

Management of intractable incontinence:

To be used **only** when all other methods have failed
(Pomfret, 1996)

Catheter Selection

It is important to choose the correct catheter for the individual patient. The following should be considered:

- Material
- Size
- Length

Material

These determine the length of time a catheter can remain in situ

- **Short term-** 0-28 days: “Teflon” coated latex (Bard)
- **Long Term-** up to 12 weeks: Hydrogel coated Latex or All Silicone/
Hydrogen coated silicone for Latex allergy (Coloplast)

Size

The smallest size should be chosen to provide adequate drainage. Larger sizes can cause irritation and bypassing of urine around the catheter. Larger sizes are usually reserved for clot drainage and stricture dilatation.

Female: 12-14CH Chose smallest size in first instance.

Length

A female length catheter (23-26cm) should always be used in women, unless they are obese or chair bound, in which case a standard length (40cm) may improve drainage.

The retaining balloon should **always** be filled with sterile water (10mls) and **never** air, tap water or saline.

Urethral Catheterisation

No formal training is necessary and any registered nurse who feels both confident and competent in this clinical procedure should be able to catheterise. Supervision sessions may be necessary and this should be discussed with the nurse undertaking the procedure and the ward manager. This procedure requires informed consent from the patient.

The insertion of an indwelling (Foley) urethral catheter should always be done aseptically by a health care professional, to prevent cross infection and the risk of contaminating the catheter. (Carapeti et al 1996).

Women have complained of pain and discomfort during catheterisation procedures. Trauma can occur during catheterisation, which in turn can increase the risk of infection. Using sterile lubrication gels can reduce these risks (Pratt *et al.* 2001)

Anaesthetic gel (Lidocaine/ Lignocaine) should be used for both male and female catheterisation as per RCN guidelines (March 2008).

If used anaesthetic gel should be applied and left for the required amount of time prior to catheterisation (as per manufacturers' instructions). This should be instilled directly into the urethra to avoid urethral trauma and stricture formation.

For the female urethral catheterisation procedure please refer to:

**The Royal Marsden Hospital Manual of Clinical Nursing Procedures
6th Edition Elimination: Urinary Catheterisation
(Available by following the Links icon on the Hospital intranet)**

Fluid Balance

- Women should be encouraged to drink 2-3 litres a day, unless restricted for medical reasons, as this maintains a flow of urine through the bladder and helps prevent constipation (Burr & Nuseibeh 1995)
- Accurate reporting using a fluid balance chart is paramount whilst catheter is in place

Infection Control

Every patient with a long term indwelling catheter will develop bacteriuria but this is usually asymptomatic. However, symptomatic infection can easily occur.

The risks of this occurring can be minimised by:

- Limiting the use of catheters
- Maintaining a closed system of drainage and use of link drainage system
- Hand washing and the use of gloves to reduce the risk of cross infection (Mulhall et al., 1991)

Drainage Systems

These should be based on an individual assessment of need. But there are some principles to consider:

- Ambulant patients should be encouraged to have leg bags (which are available in 500ml size from WHS) The bags can be worn on their thigh or calf. Bags are changed every 7 days
- Bags should be secured with leg straps or a leg bag sleeve
- Non ambulatory patients would normally have a bed bag attached directly to the catheter. This should be well supported on a catheter stand.
- The patient should be encouraged to empty their own bag whenever possible, either into the toilet or a suitable container, in order to maintain their own dignity and independence

Link System

This applies to patients who require a leg bag by day and a higher capacity bed bag at night. The bed bag is attached to the drainage tap of the leg bag with a new bed bag every night and the disposal of the used bag.

When at home the patient can re-use the bed bag for 7 nights, rinsing through with clean water and allowing to dry thoroughly

Removal of indwelling catheter

Following removal of an indwelling catheter bladder function needs to be assessed. There is a possibility of difficulty voiding with or without urinary retention. Bladders that overfill can suffer injury that could affect long-term function. Therefore after a catheter is removed a period of 'trial without catheter' (TWOC) begins.

Timing

- The catheter should be removed on the day / time specified by the medical team looking after the woman.
- If not specified then it is advisable to remove the catheter early in the morning (around 6am) to allow the whole day to assess bladder function

Procedure

- Prior to removal of a catheter, the nurse will explain the procedure to the lady and how her bladder function will be monitored.
- The patient may wish to participate and should be encouraged to fill her own fluid balance chart.
- Advise the patient to alert the nursing team if at any time after removal she is unable to void or if pain is experienced

Bladder management following removal (TWOC protocol)

- The woman should be advised to drink normally (up to 2-2 1/2 litres in 24 hours)
- She should void when she feels the need
- If she has not voided **6 hours** after the catheter is removed she should be asked to try and void
- The following should be recorded on the fluid balance chart
 1. Volume patient voided spontaneously
 2. Post Void Residual (PVR). This should be assessed by scanning or if in doubt by intermittent catheterisation

- PVR should be measured after the **first** void:
 1. If < 100ml check once more after next void.
 2. If 100-200 mls recheck after next void (within 4 hours)
 3. If second PVR <100mls the patient can be discharged.
 4. If >200mls the bladder should be emptied with an intermittent catheter. A CSU should be sent.
 5. The next PVR should be measured. (within 4-6 hours).
- If second PVR < 100 mls intermittent catheterisation is not necessary
- If the bladder needs to be drained on **2 occasions** then teaching the lady to perform intermittent self catheterisation (ISC) should be the first option, this needs to be discussed with the patient.

If on assessment this is not possible then an indwelling catheter will need to be inserted as per bladder management protocol.

Further advice can be obtained from the continence team or the medical team caring for the woman

Intermittent Self Catheterisation

This is the preferred way of managing voiding dysfunction in the medium – long-term. It allows a more physiological training of the bladder with more accurate monitoring of function. It also carries lower risk of infection and longer-term problems than indwelling catheters. Patients should be positively encouraged to master this skill.

For the intermittent self catheterisation procedure please refer to:

The Royal Marsden Hospital Manual of Clinical Nursing Procedures
6th Edition Elimination: Urinary Catheterisation –
Intermittent Self Catheterisation
(Available by following the Links icon on the Hospital intranet)

Supra-Pubic Catheters

A Supra-pubic catheter is one that is inserted, through an artificial tract in the abdominal wall, just above the pubic bone, and into the dome of the bladder (Shah & Shah, 1998)

Used for bladder drainage when urethral catheterisation is not possible. Initial insertion **must** be carried out by a trained medical practitioner, using a **standard** length Hydrogel coated or latex catheter (All-silicone catheter to be used if there is a latex allergy) Size 12CH or 16CH.

Caring for a suprapubic catheter is the same as for urethral catheter. Immediately following insertion of a suprapubic catheter, aseptic technique should be employed to clean the insertion site. Dressings may be required if secretions soil clothing, but they are not essential. Once the insertion site has healed (7–10 days), the site and catheter can be cleaned during bathing using soap, water and a clean cloth (Fillingham & Douglas 1997).

Bladder management post continence surgery

These operations may carry a higher rate of urinary retention and may need to be managed differently. The following protocols for bladder management should apply unless otherwise stated in the operation notes or by the medical team caring for the woman.

Cystoscopy

These could be done either under general or local anaesthetic.

The patient should void when she feels she needs to. There may be some haematuria. If the lady feels she has emptied her bladder normally no further action is needed. If the lady is unsure or has any concerns, check PVR with scanner. Further management of PVR is as per TWOC protocol.

Flexible cystoscopy patients can go home immediately post operatively if there are no voiding concerns.

Bladder neck injections

The aim of this procedure is to put a bulking agent into the urethra. Around 1/3 of the agent will be absorbed in the first 24 hours. Repeated urethral catheterisation should be avoided in these women.

- If the first PVR is <100 mls bladder monitoring discontinues and the patient could be discharged.
- If PVR 100-200 mls repeat after next void. If still +100 mls liaise with medical team looking after patient or continence team.
- If PVR + 200mls insert an indwelling catheter for 48 hours then for TWOC

Slings

e.g. TVT, TVT-O, TOT, fascial slings

Women returning from theatre with an indwelling catheter should have the catheter removed as specified in the operation note, or by medical team caring for her. The TWOC protocol should then be followed.

The women who return from theatre without a catheter will have had their bladders emptied in theatre. These women must be encouraged to drink normally and allow their bladder to fill normally. They should be advised to pass urine when they feel their bladder is comfortably full, (a maximum of 6 hours post-op).

Their PVR must be checked.

- If PVR is <100 mls check next void.
- If PVR 100-200 mls check next void (within 4 hours)
- If second PVR <100mls the patient can be discharged.
- If PVR >200mls the bladder should be drained with an intermittent catheter, the PVR must be measured after the next void (within 4-6 hours)
- If third PVR > 200mls longer term bladder management needs to be discussed with patient. She should be encouraged to learn ISC. If she is unable to learn insert an indwelling catheter and remove in 48 hours and follow TWOC protocol.

Botulinum toxin (BOTOX) injections

Botulinum toxin paralyses muscle. It is injected into the bladder in women with overactive bladders who have not responded to simpler treatments.

90% women will have normal voiding after administration. 10 % of women will experience some transient urinary retention (Moore et al WUS spring meeting 2008). This can last up to a year.

All patients should be aware of the possibility of this occurring and the possibility of having to learn / perform ISC. Many will have already been taught by their continence team.

BOTOX however does not start taking effect until day 5. therefore immediate post-op management is as for simple cystoscopies. The women must have a follow-up appointment in Suite 17, made prior to discharge from the ward,

Any woman admitted with retention following administration of BOTOX is unlikely to void. She must be taught ISC.

Other continence Procedures

Other procedures e.g. colposuspensions will be performed infrequently. The bladder management of these women will be as specified by the medical team caring for them.

Continence Team

If at any time there are any queries on the management of any bladder please do not hesitate to contact a member of the continence team. We are based in suite 17, extension 5384.

Specialist Nurses

Lynne Owen – Continence Advisor

Gwen Davies- Assistant to Continence Advisor

Medical Staff

Simon Emery – Consultant Urogynaecologist

Monika Vij - Consultant Urogynaecologist

Jeremy Gasson – Consultant Gynaecologist

L Owen

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