Guideline for Post-Operative Bladder care in Gynaecology Patients

For use in:	Day Procedures Unit (DPU), Gynaecology Inpatient Ward
By:	Clinical staff caring for women post gynaecological operative procedures
For:	Gynaecological patients.
Division responsible for document:	Women and Children's Division
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Version and Document Control:

Version Number	Date of Update	Change Description	Author
4	31/05/2022	Reduction in amount of maximum oral fluids per hour from 400mL to 200mL for patients undergoing TWOC New procedures added (colposuspension, autologous fascial sling and Bulkamid®) New contact numbers for nurses Details for bladder scanner training and linked document Timings of TWOC moved to 0730 from 0600	Thomas Gray

This is a Controlled Document

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Guideline for Post-Operative Bladder Care in Gynaecology Patients

Objectives

1. To standardise practice for management of bladder care after gynaecological surgery for women with or without a catheter
2. To diagnose poor bladder emptying postoperatively in a timely manner and to ensure no postoperative woman has large volume urinary retention (>500mL) in the postoperative period.
3. To promote the appropriate measurements of post void residuals and the appropriate use of urethral catheters
4. To support the care of patients post operatively following the removal of urethral catheters and/or vaginal packs

Rationale for the Recommendations

1 in 10 women will experience urinary retention after gynaecology surgery.[1] This may result in prolonged admission, increased postoperative pain and potential long term bladder complications.

Most women with voiding difficulties will have atypical voiding initially.

Even women who have voided may have incomplete bladder emptying with underlying urinary retention.

Symptoms of urinary retention or incomplete bladder emptying[2]

- Urinary frequency
- Slow stream
- Pain
- Incomplete emptying
- Incontinence
- Inability to void

For women with ongoing voiding dysfunction clean intermittent self catheterisation (CISC) may be preferable with low rates of urinary tract infection (UTI).[2]

This guideline will cover:

1. Bladder care for women after gynaecology operations with or without a catheter
2. Bladder care and removal of vaginal pack post prolapse surgery
3. Assessment of voiding post incontinence procedure (bulking agents, colposuspension, autologous fascial sling and synthetic midurethral sling (TVT)).
4. Trial without catheter (TWOC) following an episode of urinary retention (inpatient and outpatient)

5. Second TWOC after 1st unsuccessful TWOC
6. How to organise an outpatient TWOC

Broad Recommendations

1. All women post-operation, or after removal of self retaining catheter (SRC) should be encouraged to void within 4 hours and reviewed at this four hour point to ensure complete bladder emptying.
2. If women are symptomatic of incomplete bladder emptying post-operation they should have an assessment of post void residual (PVR) by bladder scan at the time it is suspected.
3. ALL women post prolapse surgery (anterior repair, vaginal hysterectomy, posterior repair, sacrospinous fixation, sacrocolopexy or colpocleisis) must have a bladder scan for PVR within 4 hours post catheter removal.
4. ALL women post incontinence surgery (bladder neck bulking agents (Bulkamid®), colposuspension, autologous fascial sling and synthetic midurethral sling (TVT)) must have a bladder scan for PVR within 4 hours postoperatively.
5. Vaginal packs should be removed at the same time as SRC removal unless otherwise stated.
6. It is a prerequisite that patients remain on a strict fluid balance chart. This is to determine if urine voided is appropriate for intake and may support a diagnosis of poor voiding or low urine output from poor intake.
7. Any woman with a PVR >500mLs has a SRC inserted for 1 week and outpatient TWOC.

Choice of urethral catheter:

Use a size 12 or 14, 25cm female catheter with 10mL balloon.
If Latex allergy use latex free / silicone catheter.

Removal of catheter

The catheter should be removed with a sterile 10 mL syringe
Ensure the syringe tip fits the valve securely then withdraw the sterile water slowly and steadily. A 30 mL balloon will take 30 seconds to deflate.
Gently withdraw the catheter.

Assessment of Post Void Residual (PVR)

This should be done with a bladder scanner. The user should have received training on how to use it, but no formal training package needs to be completed due to the low complexity and low/no risks of the procedure. Trustdocs Id: 18565. If no bladder scanner is available, then try to obtain one from another clinical area.

If no bladder scanner is available then assessment of PVR is with a catheter using sterile technique, by a trained member of staff.

Procedures

1. **Gynaecology surgery (not incontinence or prolapse surgery) with or without an indwelling catheter.**

a. Recognition of voiding dysfunction

a.i. Women are encouraged to void within 4 hours of the completion of their operation or removal of catheter

a.ii. If this is reported as normal void with a sensation of complete emptying nil further input is needed

b. Assessment and management of raised PVR

b.i. Should be done if voiding is not normal by 4 hours, or there are symptoms suggestive of incomplete emptying at any time post operatively

b.ii. If PVR >150mL measure next void and residual at 4 hours

b.iii. If PVR is between 300 – 500 mL re-insert SRC – TWOC 24 hours (This is usually done as an inpatient)

b.iv. Volumes >500mL insert SRC – TWOC 7 days in outpatients (refer with emailed form as outlined below), provide oral antibiotics while catheter is in situ

2. **Prolapse repair patients with a catheter +/- vaginal pack in situ post operatively**

a. Removal of catheter and pack

a.i. Catheters should be removed at 0730 hours the day following surgery, unless otherwise stated in the postoperative plan or if patient not yet mobile.

a.ii. Vaginal packs, if present, should be removed at the same time as the catheter unless specified otherwise.

a.iii. Encourage moderate oral intake (advise not in excess of 300mL/hr)

a.iv. Normal voiding should be supported by mobilising to toilet, adequate analgesia, warm shower, running water

b. Recognition of voiding dysfunction

b.i. Women are encouraged to void within 4 hours of catheter removal, if this is not reported as normal they should be asked to void 2 hours later even if no desire

b.ii. Fluid balance chart is essential with measured voids

c. Assessment and management of raised PVR

c.i. ALL prolapse repair women will need assessment of PVR by 4 hours of removal of SRC

c.ii. Management is summarised in following table.

3. **Incontinence surgery with colposuspension or autologous fascial sling**

a. Removal of catheter

a.i. Catheters should be removed as per the operation note instructions or after a medical review the following day, and may be individualised for each patient.

a.ii. Encourage moderate oral intake (advise not in excess of 300mL/hr)

a.iii. Normal voiding should be supported by mobilising to toilet, adequate analgesia, warm shower, running water

b. Recognition of voiding dysfunction

b.i. Women should feel the urge to void within 4 hours of catheter removal

b.ii. Fluid balance chart is essential with measured voids

c. Assessment and management of raised PVR

c.i. ALL coloposuspension and autologous fascial sling women will need assessment of PVR by 4 hours of removal of SRC

Management is summarised in following table.

4. **Post bladder neck bulking agents (Bulkamid®) or mid urethral synthetic mesh sling (TVT).**

Most women will return to ward without a catheter and require a completed trial of void prior to discharge home. Procedure is identical to that in DPU.

a. Recognition of voiding dysfunction

a.i. Women are encouraged to void within 4 hours of the completion of their operation

a.ii. Fluid balance chart is essential with measured voids

b. Assessment and management of raised PVR

b.i. ALL women post Bulkamid® or TVT procedure require assessment of PVR by 4 hours of return from theatre

b.ii. Management is summarised in the following table

5. **Organising an outpatient TWOC**

A specific referral form for this can be found here Trustdocs Id: 14365.

Please complete the form and email it to the Urogynaecology Team:

urogynae@nnuh.nhs.uk

This will reach the Urogynaecology secretariat and link to the consultants and specialist nurses for actioning. You can also write for advice to this address for specific queries not addressed by this pathway and you will usually receive a response the same working day (Monday-Friday). Outside of these times for advice you should contact the on-call gynaecology consultant team.

Table 1: Assessment and Management of PVR post incontinence or prolapse surgery

Volume voided	Diagnosis	Action	Ongoing management
2 voids each in excess of 200 mL within 4 hours of Bulkamid® or TVT.	Normal voiding	Confirm normal voiding Bladder scan residual <150 mL after the second void	Cease measurement, clinic follow up as per consultant instructions.
Small volume (<200mL) frequency (1-2 hourly) denotes incomplete emptying	Likely incomplete emptying	Bladder scan residual measurement after second void IF voided volumes are increasing (and are > residuals) and residuals decreasing to <150 mL continue trial without catheter If voided volumes are not increasing during the next two hours and residuals ≥ voided volume see next row	Discharge home with contact number for Gynaecology outpatients answer phone (01603 286 734 08.30 – 17.00 hrs). Out of hours contact Cley Ward 01603 289 953. Follow up as per consultant instructions. (Urogynaecology nurse specialists 01603 641 381)
If unable to pass urine AND residuals > 150 mL 4 – 6 hours post operatively.	Overt or covert urinary retention	Insert SRC – short female size 12. Check latex allergy. Prescribe antibiotics while SRC insitu	Discharge home. Give contact numbers. Trial without catheter in Gynaecology outpatients in one week with Specialist Nurse in one week. Email patient details to urogynae@nnuh.nhs.uk to arrange.
If unable to pass urine 4-6 hours	Dehydration or possible	Continue TWOC for now, but arrange urgent	Call surgeon for medical review, or on-call gynaecology

post-operation AND residual is <150mL this suggests dehydration/bladder injury and a medical review is required	bladder injury	medical review	registrar/consultant if they are unavailable/off site

4. Trial without catheter (TWOC) after an episode of initial retention managed with re-insertion of SRC

Fluid intake

Ask patient to drink moderately (**not** in excess of 200 mL per hour).

Record fluid input on a fluid balance chart.

Voided urine

Dip stick second voided urine - if positive to nitrates send MSU sample.

Prescribe antibiotics as per antimicrobial prescribing guideline for urinary tract infection if dip stick positive to nitrates.

Check previous MSU results.

Assessment and management of PVR.

Bladder Scan after second void.

Table 2: Second TWOC after an episode of retention managed with reinsertion of SRC for one week

2 voids, each >200mL USS resid </=150mL	Home, clinic follow up as planned
USS resid >150 but <200mL voided volumes in excess of falling residuals	Encourage double voiding Home, clinic follow up in 6/52

USS resid >150 with voided volumes < residual	SRC for 1 week, then outpatient appointment for second TWOC Antibiotic prophylaxis Consider with flip flow valve if suitable Contact urogynaecology senior registrar or specialist urogynaecology nurse bleep 0113. (Tel 1381) Teach CISC if appropriate (all patients undergoing autologous fascial sling and some undergoing colposuspension will have been taught CISC and can begin to do this after failing second TWOC), clinic follow up in 6/52, provide contact no. for GOPD 286734 or ask operator for bleep number 0113 (To contact 1381)

5 **Third TWOC after initial and second TWOC failed – Outpatient.**

Procedure as for 4. TWOC after episode of retention
Consider changing antibiotic if dipstick positive to nitrates
Table 3: Second TWOC (outpatient)

USS resid </=150ml	Home, clinic follow up as planned
If voided volume less than double the residual volume	Vaginal examination to assess for haematoma Teach CISC if appropriate Or SRC with flip flow valve Urogynaecology MDT discussion if needed

6. Clinical Audit Standards derived from Guideline

Should be carried out annually in the following way:

Retrospective study of patients notes who have had trial without catheter against the standards set in this guideline.

Readmission rates with urinary retention up to six weeks following discharge and trial without catheter.

7. Summary of Development and Consultation process undertaken before Registration and Dissemination

The Guideline was drafted by the authors above and is intended for all clinical staff caring for gynaecological patients during and following trial without catheter.

8. Distribution list / Dissemination Method

To be placed on the hospital intranet.

9. References / Source Documents

1. Bødker B, Lose G. Postoperative urinary retention in gynecologic patients. Int Urogynecol J (2003) 14: 94–97

2. Hakvoort R, Thijs S, Bouwmeester F, Broekman A, Ruhe I, Vernooij M, Burger M, Emanuel M, Roovers J. Comparing clean intermittent catheterisation and transurethral indwelling catheterisation for incomplete voiding after vaginal prolapse surgery: a multicentre randomised trial. BJOG 2011;118:1055–1060.