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Level: Service Women's Health

Type: Protocol

Name: Catheter management and Trial Removal Of Catheter (TROC) for post-operative Gynaecology patients

Purpose

To help staff working on the Gynaecology inpatient wards with the management of catheters and Trial of Voids after Gynaecological surgery.

Scope

All Women's Health Service staff working on the Gynaecology inpatient ward.

Trial Removal of Catheter (TROC)

When there are recognizable risks for urinary retention when removing a catheter, a systematic approach to TROC that assists rapid assessment is to retrograde fill the bladder through the Foley catheter.

Procedure:

- Disconnect the urine bag
- Using sterile technique retrograde fill the bladder via the catheter with 300mls (or as tolerated) of warmed sterile saline
- Remove the IDC and ask the woman to void
- Measure the void and residual. The voided volume should be at least 200mL and the residual less than 100mL.
- If the patient is unable to void and not uncomfortable, wait a further 60mins and then try again. Strategies to help initiate voiding may include running water or voiding in the shower. If the void cannot be measured but the residual is <100mL that can be considered successful
- If TROC is successful, no further voids/residuals are required but the patient should be encouraged to record voids for the remainder of the day/until discharge (if same

day). If voids are consecutively small (<150mL) or the patient is uncomfortable, consider a bladder scan (see below).

- If RTROV process is followed the patient needs to pass urine within an hour of IDC removal. If unable to pass urine or passes <200ml with >100ml residual volume, IDC to be reinserted.

An alternative to the retrograde trial is to remove the IDC at 0600 and then measure voids and residuals as below:

- If patient has 2x successful voids > 200mls with residual <100mls, no further measurements required
- If voids 100-200mls, continue measuring voids and residuals and liase with medical staff

If voids < 100mls or residual > 300 mls resite IDC, advise Registrar or Consultant.

Post operative catheter management:

Urinary retention after gynaecological surgery must be prevented. Early warning signs require catheter management and care to avoid secondary urinary tract infection. Increasingly catheters are removed at the end of surgery, especially for laparoscopic procedures.

Prolonged or repeated catheterisation will usually be managed with antibiotic cover: e.g. Macrobid 100mg BD (1st line).

Gynaecology post-operative urinary retention should be <u>suspected</u> if there are any of the following signs or symptoms:

- Inability to pass urine spontaneously 4-6 hours after surgery
- Development of acute lower abdominal pain associated with inability to pass urine or;
- Continuous leakage of urine with a palpable bladder
- Slow hesitant intermittent stream, with straining to void, sense of incomplete emptying
- A palpable and percussable bladder
- Spontaneously voided volumes less than 100mls with residual volumes >200mls.

Nursing Management of <u>suspected</u> urinary retention:

If you are able to use the bladder scanner:

- Measure residual urine within 10 min of attempted void
- If void < 150 mls and residual > 150 mls a catheter should be inserted (using aseptic technique).

If no catheter is in situ and/or unable to use the bladder scanner:

- Insert a urethral Foley catheter (using aseptic technique) after failed/poor attempt at voiding

  If void < 150 mls and a residual > 150mls is drained the catheter balloon should be inflated and the catheter left in.

  If a catheter is placed, discuss with the medical team in terms of when to consider TROC as above. In a postoperative patient who is unable to void on the day of surgery, a catheter can be placed and then standard TROC procedure followed the next morning *without* discussion with the medical team.

If there is a Suprapubic catheter in situ:

- Clamp the SPC and encourage voiding when desire felt or by 4h post clamping.
- Following voiding, unclamp and measure 'the residual' urine volume.
- If void > 100mls or residual < 200mls, continue observations and documentation.
- If void < 100mls or residual > 200mls drains, leave SPC unclamped ('on free drainage') overnight or until medical team review.

Supra-pubic catheter can be removed after:

- Two voids > 200mls combined with residual volumes < 100mls.

Documentation

Use the Trial of Void - Gynaecology form (CapDocs ID 1.101413) and record:

1. **Every Voided** urinary volume
2. **Every Residual** volume until considered 'passed'. The residual volume must be measured within 10 minutes of voiding, either by a bladder scanner, draining the Suprapubic catheter or inserting an 'in-out' urethral catheter with sterile technique.

Measurements can be stopped when:

- A spontaneous void > 400mls,

or

- 2 successive spontaneous voids of > 200mls combined with residuals volumes < 100mls.

Related form

Trial of Void - Gynaecology CapitalDocs ID 1.101413

Appendix

Appendix 1*:* Diagnosis and management of urinary retention after gynaecology surgery flow chart

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Appendix 1

Diagnosis and Management of Urinary Retention after Gynae Surgery

Diagnosis

1. Not passed urine within 6 hours of surgery
2. Not passed urine within 6 hours after catheter removal
3. Symptoms e.g. Passing frequent small amounts of urine, pain, hesitancy, poor flow, needing to strain

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Conservative Measures

Confirm or exclude urinary retention (examination, bladder scan)
Oral analgesia, mobilization, provide privacy, warm shower

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Bladder scan or use in and out urethral catheter to measure residual urine if unable to obtain accurate reading

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Unable to pass urine after no more than 4 hours (monitor frequently) and bladder full or voided volume <100mls with residual volume >150-200m;

- Insert appropriate sized Foley catheter: Measure residual urine
- Macrobid 100mg twice daily
  Consider antibiotic cover for duration of IDC dwell period

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If residual urine < 700mls, remove Foley catheter after 24 hours (morning shift)
If residual urine > 700mls, remove Foley catheter after 48 hours (morning shift)
Treat constipation, ensure adequate analgesia.
Follow the gynaecology protocol for measuring voids and residuals and TROC after urinary retention

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Voiding satisfactory: Discharge home

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Unsatisfactory voiding 6 hours after removal of catheter or after retrograde TROC test. Organise repeat TROC 3-7 days post-discharge.

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Discuss with Registrar or Consultant regarding IDC reinsertion either on free drainage or with flip-flo valve or to consider requirement for intermittent self-catheterisation.

IDC reinsertion – consider Doxazosin 1mg (used off-license) on retrial of TROC for pelvic floor repair patients.
Ensure adequate analgesia and bowels have opened.

Gynaecologist to oversee, consider Uro-gynaecology or Urology Consultation