POST OPERATIVE URINARY RETENTION (POUR)

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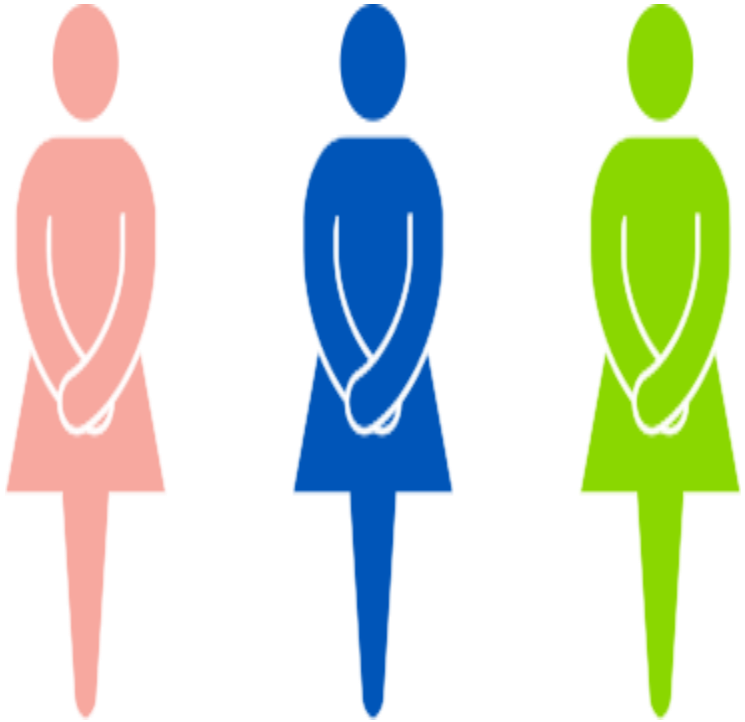
Learning objectives

- Define POUR
- Signs and Symptoms of POUR
- Potential damage of POUR
- Discuss possible causes of POUR
- Discuss pre-operative teaching regarding POUR
- Discuss patients at risk
- Describe a voiding trial procedure
- Discuss failed voiding trials and ISC

Post Operative Urinary Retention(POUR)

Defined as impaired bladder emptying with an elevated PVR



Incidence of POUR

General Surgical population rate is 4-13%

After pelvic surgery the rate is 2.5-43%

OUR PATIENTS ARE AT A HIGHER RISK

Signs and Symptoms of POUR

Urinary hesitancy

Slow stream

Suprapubic pressure/pain

Positional voids, pushing or straining

A feeling of incomplete emptying

Anxiousness

Change in blood pressure and heart rate

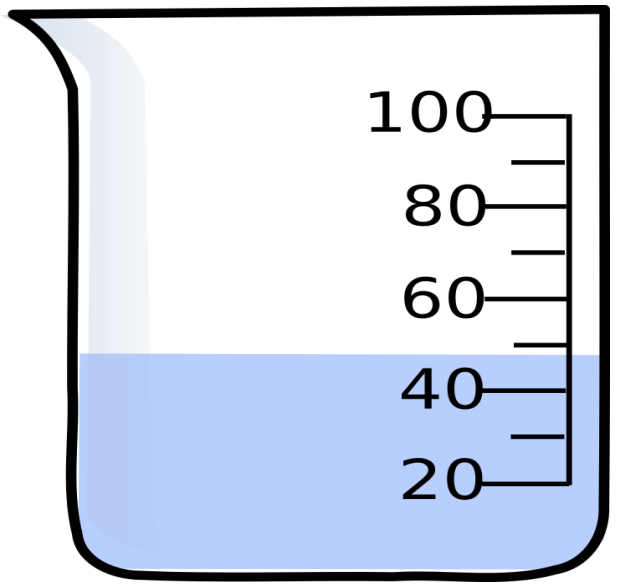
Bladder distension on palpation

Potential damage of POUR

Urinary Tract Infections

Bladder Distension

Damage to Detrusor Muscle



If the bladder is stretched too much or for too long the muscles may be permanently damaged and lose their ability to contract.

The more distended the bladder is the more difficulty it will be for the patient to empty

PVR above 750 ml…there will be trauma to the bladder and it will need to rest for 5-7 days (foley to gravity)

Risk factors associated with POUR

- Anesthesia(24-72 hrs)
- Cases lasting 2+ hours
- Post operative opiods
- H/O bladder dysfunction
- H/O previous retention
- IV fluid administration over 750 ml (inhibits detrusor function)
- Age-above 50 years 2.5% higher POUR rate
- Severe fecal impaction (pressure on Trigone)
- Pre-existing neurologic conditions (example MS)
- Failure of the pelvic floor to relax

SO…HOW DO WE MANAGE POUR IN OUR OFFICE??

Preparing for the Voiding Trial

- What can we do to make the voiding trial a success….
  - Call patient after they have left the hospital
  - Assess their pain level, what are they taking for pain
  - Alternate between Ibuprofen and Norco
  - Discuss with the patient bowel activity and stress avoiding constipation
  - Review with the patient voiding trial procedure
  - Answer questions
  - OFFER SUPPORT

Voiding Trials in the office

- 3-7 days after surgical repair
- Review the surgical procedure
- Review VT in hospital
- Scheduled with the nurse between 8-9am

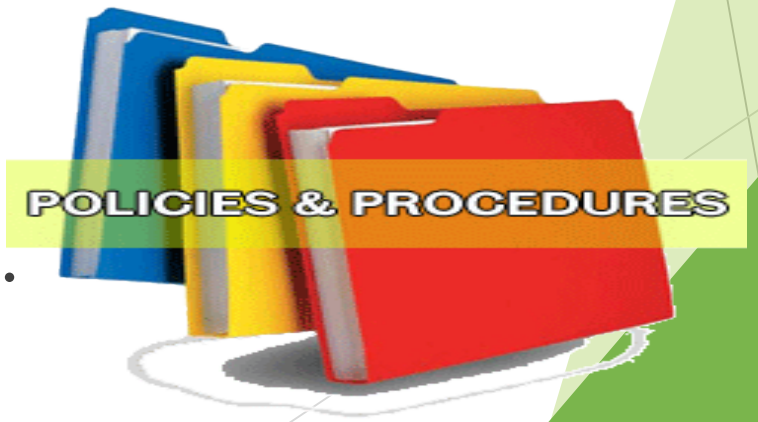
SUPPLIES FOR THE VOIDING TRIAL

- 10ml syringe
- 60 ml Toomey syringe
- Plastic beaker
- “Hat” for toilet to measure
- Non sterile gloves
- Bladder scanner
- Catheter plug

Procedure

- Confirm all urine is drained from bag/bladder
- Retrograde fill
- Fill bladder to 300 ml (adequate bladder volume)
- Deflate balloon, remove catheter
- Allow privacy, make the patient comfortable
- Assess PVR using bladder scanner or catheter

- PVR should be assessed within 10-15 min.



Assessing the Outcome

PASS

DEFINED AS VOIDING 2/3 OF THE INSTILED VOLUME

FAIL

INTERMITTENT SELF CATH

FOLEY REINSERTED WITH A FLIP FLOW

Voiding Trial discharge instructions

- ..**Voiding Trial Instructions**
- You have passed your voiding trial at ***. Please make sure you are drinking some water today. You can take your Motrin to help with any swelling from the catheter. It is important to try and empty your bladder every two hours during the day. Try and empty again at ***. If you are unable to empty, try and drink a glass of water and try again 30-60 minutes later. If you have been unable to empty your bladder by ***, which is 4 hours after leaving the office, you will most likely be uncomfortable and you will need to come back into the office. If it is after 4pm, go to an urgent care or emergency room to have a catheter placed again.
- Please call our office at (630) 527-5120 if you have any questions or concerns.

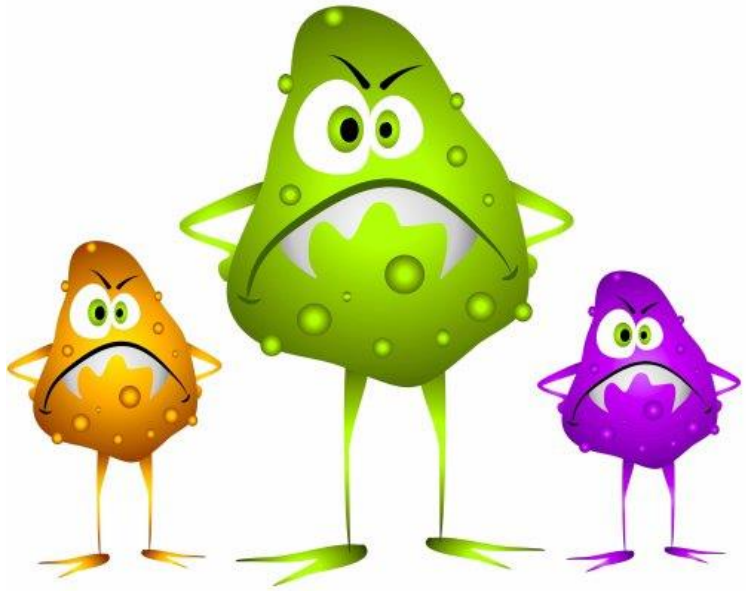
Considerations with the Voiding Trial

- Assessing constipation and their pain level—very important
- Patients with a history of DO will be a challenge
- UTI's can be a direct complication of POUR
- Early vs late POUR
  - Can be caused by narcotics
  - Infrequent voids lead to increased bladder volume
  - Drinking too much water over short period
  - Increasing constipation

Tips and tricks…

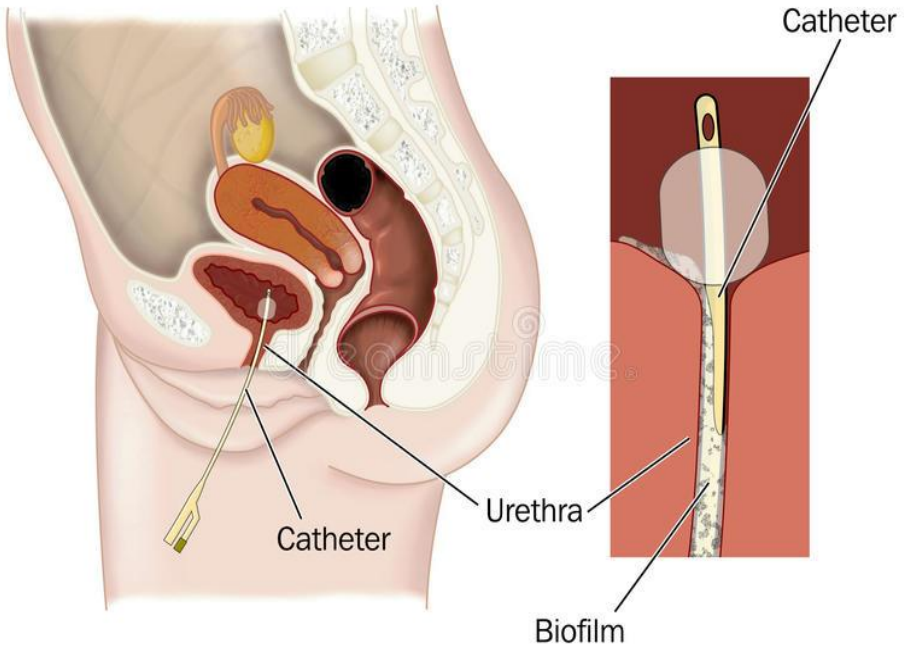
- Turn on the water
- Sit in a bathtub with warm water
- Run warm water over the perineum
- Peppermint oil in the toilet or on a cotton ball
- Allow privacy and time to void
- Double voiding

Intermittent Self Cath



- Preferred method
- Less risk of UTI's…THINK BIOFILMS
- ISC can lead to faster resolution of POUR
- Instruct patient to keep track of voided and residual volumes
- If PVR's are consistently below 100 ml they can stop
- If their PVR's are over 500 ml they need to cath more often (protect kidneys)
- Arrange supplies for the patient

WHY ISC MAKES A DIFFERENCE



Screening and possible anticipation of POUR

- Pre-op patient education
- Identify high risk patients
- Assess pre-op UDS
  - Failure of the pelvic floor to relax (EMG)
  - Valsalva voiding
  - Peak flow rates (Qmax <15 ml/s)
  - Detrusor pressure during the void
  - High post void residuals

Lastly…

- Theses patients are scared and frustrated
- Lots of calls and hand holding
- We need to offer support
- Let them know this is a bump in their recovery and not a complication.

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