



American  
Urological  
Association

Advancing Urology™

# Bladder Drainage

Medical Student case-based  
learning

# Case Presentation

- **Chief Complaint:** Suprapubic pain
- **History of Present Illness:**
  - A 72 yo man with a h/o BPH presents to the ER with worsening suprapubic pain and inability to urinate X 6 hours. He was recently taking several antihistamines for seasonal allergies.

# Case Presentation

- **Past Medical History:** Hypertension, hyperlipidemia
- **Past Surgical History:** Mechanical Aortic Valve replacement (2016)
- **Medications:** Lipitor, Plavi
- **Social History:** Retired, life-long nonsmoker
  
- What would you do next?

# Case Presentation

- **Physical Exam:**
- Afebrile HR 110 BP 150/67
  - Appears in distress, writhing in pain
  - No CVAT; palpable bladder to the level of the umbilicus
  - Uncircumcised phallus
  - DRE: enlarged prostate without nodules
- What is your next step?

# Case Presentation

- In the ER, a basic metabolic panel is ordered & a 16 Fr standard Foley catheter is placed; the balloon is inflated
- The patient reports even worse pain at this point; frank blood drains via the catheter with no urine output

# Case Presentation

- What is your next step?
  - Catheter balloon is likely inflated in the prostatic or bulbous urethra
  - Can irrigate the Foley to evaluate if catheter is in the right position
  - If the catheter does not irrigate well, deflate the balloon and see if the catheter can be advanced into the bladder OR remove the catheter altogether
  - Use bedside ultrasound if available

## Case Presentation

- Assuming the existing catheter cannot be advanced into the bladder, what type of catheter and size would you try next?
  - Can use viscous Lidocaine for local anesthesia
  - Best to try with a coudé catheter, given the patient's history of BPH; 18 Fr is a good starting size to allow for good hand irrigation, as the patient now has hematuria

## Case Presentation

- Coudé catheter placement is similar to standard catheter placement, except that the directionality of the catheter, with the curved tip pointing upward, must be maintained during catheter advancement.



## Case Presentation

- The 18 Fr coude' catheter is placed by you. What measures can you take to ensure the catheter tip is in the bladder prior to inflating the balloon?
  - Urine return
  - Hub the catheter
  - Irrigate the catheter

## Case Presentation

- Following your catheter placement, 1L of pale pink urine is drained from the bladder via the Foley.
- What would be an indication to initiate continuous bladder irrigation?
  - Gross hematuria with poor catheter drainage as a result

## Case Presentation

- What instructions would you give the ER/ patient?
  - Monitor for post-obstructive diuresis
  - Encourage the patient to hydrate
  - Periodic catheter clamping is not recommended
  - Start tamsulosin 0.4mg daily after discussion of side effects including retrograde ejaculation
  - Call with worsening hematuria/ poor catheter drainage
  - Hold antihistamines as they can cause urinary retention as a side effect
  - Return to the office in 7-14 days for a voiding trial