Reservoir Placement

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Reservoir Placement

• Why even an issue?
  – Potentially blind procedure
    • Potential difficulty in training others
  – Different locations have different advantages and disadvantages
  – List of possible damage to structures
    • Bladder, bowel, large blood vessels, inguinal cord
Case A

- 58 male underwent un-eventful placement of 3 piece inflatable penile implant (IPP)
- Urinary retention in PACU, straight cath once and still with AUR
- Sent home with indwelling foley, to DC next morning
- Returns to ER the following day with persistent AUR
Case B

- 63 year old patient underwent placement of IPP
- 2 week postop visit he complains of left groin pain and a persistent bulge in left groin since surgery
- 3 months after initial surgery sent to USF for further evaluation
Palpable Reservoir
Case C
Case D

- 61 year old patient transferred hospital-to-hospital after persistent AUR and Constipation after IPP placement (3 days postoperative)
- Comments from surgeon reporting difficulty with reservoir placement during surgery
ORIGINAL RESEARCH—SURGERY

Tips and Tricks of Inflatable Penile Prosthesis Reservoir Placement: A Case Presentation and Discussion
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A literature review was performed July 2013 using PubMed and Medline.

“reservoir,” “inflatable penile prosthesis,” and “complication.”

Resulted in 131 results, dating back to 1984, with 88 articles excluded as they did not pertain to IPP reservoir placement or were review articles.

We did not include any cases of mechanical failure as we only wished to examine cases of reservoir placement that caused damage to the surrounding tissues.
37 cases of nonmechanical reservoir-related complications dating back to 1984:

- Erosion of the reservoir into the bladder; which comprised 15/37 (41%)
- Compression of the external iliac vein was also frequently reported noted in 5/37 (14%)
- Erosion of the reservoir into the ileal conduit/neobladder was found in 4/37 (11%)
- Small bowel obstruction was present in 4/37 (11%) cases
Anatomy

• 28 cadavers examined for measurements
  – Distance to the decompressed bladder was 5–8 cm (average 6.45 cm) at a 15–30 (22.8) degrees medial measurement from the inguinal ring
  – Filled bladder was 2–4 cm (average 2.61 cm) from the inguinal ring
  – External iliac vein distance from the inguinal ring was 2.5–4 cm (average 3.23 cm) at a 20–60 (36.4) degrees lateral measurement from the inguinal ring


Alternative Spaces

- Originally emphasized for patients:
  - Renal transplant
  - Pelvic surgeries
    - Robotic prostatectomy or cystectomy
    - Colon surgery
  - Bilateral inguinal hernia repairs
  - Previous Reservoir placement(s)

For Everyone?
Thank You