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Link: https://pmc.ncbi.nlm.nih.gov/articles/PMC10031794/

Purpose of the review:
The purpose of this article was to describe the authors' experience managing sliding inguinal bladder hernias using both open and robotic-assisted laparoscopic repair techniques and to review the available literature regarding diagnosis and surgical management of this rare condition. The authors sought to compare the outcomes of open vs robotic repair and evaluate the potential advantages of robotic surgery for complex bladder-containing inguinal hernias.

Methods used:
This was a case series involving only 3 patients with sliding inguinal bladder hernias. One patient underwent the open Lichtenstein repair, while two patients underwent robotic-assisted laparoscopic trans abdominal preperitoneal (TAPP) repair with mesh. The authors reviewed each patient's presentation, imaging findings, operative details, postoperative outcomes, and follow up. They also incorporated a review of previously published literature regarding epidemiology, diagnosis, recurrence risk, and surgical treatment options for inguinal bladder hernias.

Study type: case series with literature review
Number of patients: 3
Setting: University of Pittsburgh Medical Center, United States
Interventions:
- Open mesh repair: 1 patient
- Robotic assisted TAPP repair with mesh: 2 patients

Key findings:
- Sliding inguinal bladder hernias are rare, but occur most commonly in older men with obesity, bladder outlet obstruction, and prostatic hypertrophy
    - Authors note that inguinal bladder hernias account for <4% of inguinal hernias and frequently present with lower urinary tract symptoms
    - Patients may experience significant urinary symptoms, including the need for manual compression to void
- Pre operative CT imaging is critical for diagnosis and operative planning
    - Authors emphasize that many bladder hernias are diagnosed with CT imaging and that pre-op recognition decreases the risk of intraoperative bladder injury, which may occur in up to 12% of cases if bladder involvement is not recognized
- Both open and robotic-assisted repairs were successful. In the case series, all 3 patients underwent successful surgical repair with no bladder injuries, major post-op complications, or evidence of recurrence during follow up
- Robotic-assisted repair may offer advantages over open repair
    - Authors found that robotic surgery provided superior visualization of pelvic anatomy, facilitated careful dissection around the bladder, and was associated with decreased post-op pain and shorter hospital stays
    - They suggest that robotic-assisted TAPP repair may be particularly useful for complex bladder-containing inguinal hernias

Application to my patient from H&P #2:
This article directly relates to my patient's diagnosis of a sliding inguinal hernia involving the urinary bladder and focuses on the surgical management of this rare condition. Unlike many articles that

primarily discuss diagnosis, this study compares open and robotic-assisted repair techniques and highlights important operative considerations, including preoperative identification of bladder involvement, reduction of the herniated bladder, and strategies to minimize iatrogenic bladder injury.

The most clinically relevant finding for my patient is that preoperative identification of bladder involvement allows safer surgical planning and may reduce the risk of bladder injury, which directly supports the urology consult before proceeding with hernia repair. The patient also shares many of the characteristics described in the article, including male over 50, obesity, and the need to manually compress the hernia to facilitate urination.