



Letter

Neobladder as content in inguinal herniation—A rare late complication



Dear editor,

Secondary inguinal herniation of intraperitoneal content represents a late complication following radical cystectomy. We present a case of an inguinoscrotal hernia with Studer ileal neobladder as a content following post radical cystectomy for bladder cancer 10 years ago. Exploration revealed herniation of Studer ileal neobladder along with few ileal loops. Neobladder in hernial sac was reduced and reinforcement with prolene mesh was done. To our knowledge this is the first case report on neobladder herniation into the scrotum.

Secondary inguinal herniation of intra peritoneal contents represents a rare and late complication following procedure such as radical cystectomy with an incidence of 1.0%–9.7% [1–4]. Risk factors are smoking, chronic cough, straining on micturition or straining on defecation and obesity [5]. Symptoms are swelling with or without pain with change in urinary function. The main treatment is surgery [1,2,6]. We describe a rare case of a 69-year-old man who presented with inguinoscrotal herniation of Studer ileal neobladder following radical cystectomy and ileal neobladder for bladder cancer.

The 69-year-old male patient underwent the standard operative procedure of open radical cystectomy with bilateral iliac lymph node dissection and Studer ileal neobladder for invasive bladder cancer in 2008. The pathological stage was PT2N0M0. Patient came for follow-up for 2 years. He was voiding with abdominal pressure with a post void residue of 50 mL and requiring intermittent catheterization. There was no recurrence in that period. Then he was lost for follow-up for 8 years.

The patient presented with fever for 2 days and complaints of swelling in the right inguino scrotal region for 6 years. It was not associated with pain or lower urinary tract symptoms. He did not have constipation. On examination, there was a large swelling in the right inguinoscrotal region

with presence of cough impulse suggestive of right Inguinoscrotal hernia (Fig. 1A). Urine culture was positive and was treated appropriately in view of fever and pain. Renal biochemistry showed elevated parameters (serum creatinine 2.7 mg/dL, potassium 4.6 mmol/L and bicarbonate 18 mmol/L; suggestive of acidosis). Computed tomography revealed neobladder in the scrotum along with few ileal loops and bilateral hydro-ureteronephrosis (Fig. 1B). With a mid-line incision, exploration revealed herniation of Studer ileal neobladder along with few ileal loops through a wide neck of right inguinal ring. Neobladder and ileal loops could be easily reduced (Fig. 2A) and reinforcement with prolene mesh was done (Fig. 2B) and wound closed in layers after drain placement. Post-operative period was uneventful. Drain was removed on 7th postoperative day and the patient was discharged with catheter on 9th postoperative day. Cystogram was done at end of 3 weeks showed neobladder back in the pelvis (Fig. 2C). The patient remained asymptomatic at the end of 3 months. Follow-up ultrasound revealed decrease in the hydroureteronephrosis. He was voiding with abdominal pressure with a maximum flow of 7 mL per second and residual urine of 50 mL. He was also taught intermittent self-catheterization once daily. The patient remained asymptomatic at the end of 3 months. The renal function stabilized with a creatinine value of 1.5 mg/dL.

From the beginning of 1900s, innovative surgeons preferred the best method for replacing the original bladder, following removal for either benign or malignant disease. Main principle of bladder substitution is allowing volitional voiding through the urethra and also eliminating the need for an intermittent catheterization or cutaneous urinary stoma [7].

Complications were classified into early and late. Early if they occurred within the first 30 days after surgery and late if they occurred thereafter. Early complications are wound infection, wound dehiscence, pouch leak, bleeding, urinary tract sepsis, urine leakage (from ureter, reservoir or urethral anastomosis), chest infection and pulmonary embolus. Late complications are metabolic acidosis, inguinal hernia, need for intermittent catheterization, neobladder calculi, upper urinary tract calculi, urethroileal anastomotic stricture, febrile urinary tract infection, incisional hernia, and small bowel obstruction [7,8]. Other factors that can also play a role in both early and late complications are prior radiation therapy, diabetes, and other comorbidities [7].

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