Delayed complication of pelvic lymphocele: Ileal conduit obstruction

Sanket S. Bankar, Ganesh K. Bakshi, Gagan Prakash, Nilesh P. Sable¹

Departments of Surgical Oncology and ¹Radiology, Tata Memorial Centre, Ernest Borges Marg, Parel, Mumbai, Maharashtra, India

ABSTRACT

Radical cystectomy is the standard treatment for muscle invasive bladder cancer. Lymphocele is a common sequalae of pelvic lymphadenectomy. We report an unusual presentation of pelvic lymphocele developing after radical cystectomy reconstructed with an ileal conduit where the patient developed obstruction of the ileal conduit loop due to external pressure of the lymphocele. Catheter drainage of the conduit relieved the symptoms and a computerized tomography scan showed a large lymphocele causing acute angulation and resultant obstruction of the ileal conduit. The patient was treated with percutaneous drainage of the lymphocele and remains symptom-free on follow-up at 1 year.

Keywords: Ileal conduit, pelvic lymphadenectomy, percutaneous drainage

INTRODUCTION

Lymphoceles commonly develop following radical cystectomy with pelvic lymphnode dissection. Lymphoceles are detected radiographically in 27–61% of patients and become symptomatic in 2–9.1% of patients.^[1] We report an unusual presentation of pelvic lymphocele developing after radical cystectomy reconstructed with an ileal conduit where the patient developed obstruction of the ileal conduit loop due to external pressure of the lymphocele.

CASE REPORT

A 50-year-old lady presented to the outpatient department of our hospital with symptoms of abdominal distension and pain associated with

For correspondence: Dr. Ganesh Bakshi, Uro-Oncology Services, Department of Surgical Oncology, Tata Memorial Centre, Ernest Borges Marg, Parel, Mumbai - 400 012, Maharashtra, India. E-mail: gkbakshi1973@gmail.com

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gradually decreasing urine output from the ileal conduit. She had undergone radical cystectomy and bilateral pelvic lymphadenectomy with ileal conduit reconstruction for muscle invasive bladder cancer 5 months earlier. There was history of a similar episode of ileal conduit obstruction being relieved by catheterizing the conduit 1 month back. Ultrasonography (USG) of the abdomen showed bilateral mild hydroureteronephrosis with distended ileal conduit. Computerized tomography (CT) scan of the abdomen with contrast study of the ileal conduit showed a large lobulated collection in the pelvis that was causing an upward displacement of the conduit and subsequent obstruction to outflow [Figures 1 and 2]. A diagnosis of pelvic lymphocele was made on percutaneous aspiration of approximately 1.5 L of straw-colored fluid, which, on cytological examination, showed lymphocyte-rich effusion and creatinine levels matching those of serum. Symptoms were relieved after aspiration of the lymphocele. However, the lymphocele reformed with recurrence of symptoms within 2 days. A pigtail catheter was then placed in situ under CT imaging guidance. It was removed after 2 weeks as the output was minimal. A repeat USG was performed on follow-up, which showed minimal residual fluid in the pelvis and complete resolution of hydroureteronephrosis. The patient has remained asymptomatic since aspiration of lymphocele and has normal functioning urostoma after a follow-up of 1 year.

DISCUSSION

Radical cystectomy is the standard treatment offered to patients with muscle invasive bladder cancer. Being an



Figure 1: Lymphocele compressing both ureters

extensive surgery, it involves the urinary, gastrointestinal and lymphatic systems and thus has scope to develop multiple complications. Systematic pelvic lymph node dissection with radical cystectomy is of prime importance as it allows accurate staging of the disease as well as removal of undetected micrometastasis to the draining lymph nodes.^[2] Use of more extended dissections has led to an increase in complications including the development of lymphoceles. The incidence of lymphoceles after pelvic lymphadenectomy is approximately 2–9%.^[1] Lymphoceles are detectable within 3-8 weeks postoperatively. Those occurring later than 1 year after surgery raise the suspicion of a recurrent disease.^[3] Lymphoceles can present with pain, lower extremity edema secondary to compression of pelvic vasculature, signs of infection or, rarely, with deep venous thrombosis of the lower extremities. Our patient underwent standard bilateral pelvic lymphadenectomy. A lymphocele causing obstruction of the ileal loop conduit is a very unusual presentation and has never been reported. CT imaging is ideal to diagnose postoperative lymphocele as well as other possible complications related to radical cystectomy.^[4] Modes of treatment of pelvic lymphocele include percutaneous aspiration and catheter drainage, sclerotherapy and laparoscopic or open surgical marsupialisation of the cyst. Pigtail catheter drainage serves well to decompress the lymphocele and further induce fibrosis. It is usually tolerated well by patients and solves the problem. This helped in our patient also, causing decompression of the lymphocele and inducing fibrosis, preventing further recurrence. Decreasing the incidence of lymphoceles requires a meticulous surgical technique with proper identification and ligation or clipping of the lymphatic vessels.^[5]



Figure 2: Lymphocele compressing the catheterized conduit

CONCLUSION

Lymphoceles occur commonly after pelvic surgeries. This patient came with ileal conduit obstruction due to lymphocele as delayed presentation. Appropriate imaging such as USG or CT scan helps in diagnosis. Conservative management of such a lymphocele should be performed, and is usually successful.

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