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Herniation of the bladder through suprapubic catheter tract - An unusual complication

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ABSTRACT

Long-term complications of suprapubic catheters are not well documented in the literature. The common complications includes infection, stone formation, urine leakage and malignant changes. We report an unusual complication of bladder prolapse in a patient with long-term suprapubic catheterization. Due to the rarity of this complication, its management has not been well studied.

1. Introduction

Suprapubic cystostomy (SPC) is a common urological procedure performed in the management of long-term bladder drainage in neurogenic bladder patients. SPC complications are well documented and reported in the literature. It includes infection, catheter blockage, urine leak, stone formation and malignant changes. Other rare complications of SPC documented are migration of the SPC into the ureteral orifice or Hourglass deformity of urinary bladder. We report an unusual complication of SPC, which is a herniation of the bladder through the abdominal wall (SPC site). Due to its rarity, the management options have not been well studied.

2. Case report

An 84- year old male patient with neurogenic bladder secondary to multiple sclerosis (MS) presented to acute urology assessment unit with blocked suprapubic catheter. He was diagnosed with MS in 1978 which resulted in neurogenic bladder, for which he underwent insertion of SPC in 2004. Currently he is on SPC for 18 years.

On examination, patient was apyrexial and haemodynamically stable. The abdomen was soft, non-tender and the suprapubic catheter (SPC) was in situ. Bladder mucosa was herniated along with the balloon of the catheter through the SPC tract site (Fig. 1). Patient also complained decreased urinary output through the SPC.

Bladder scan revealed urinary retention of more than 400ml, despite with 16 Fr SPC silicone catheter with a 10-ml in the balloon. An attempted bladder washout was unsuccessful.

Under aseptic precaution, 16Fr urethral catheter was performed and

SPC was removed. This immediately improved urinary drainage and the protrusion of the bladder mucosa through the abdominal wall was no longer prominent. The bladder mucosa reduced back into the bladder.

Post procedure was uneventful and the patient was discharged with safety netting advice. He is currently under follow up.

3. Discussion

Suprapubic cystostomy (SPC) is a surgical connection created between the bladder and skin. Complications of the SPC are well recorded. However, limited data are available for the long-term complications of the SPC.

Nomura et al. followed 118 neurogenic bladder patients with a SPC for a period of five to ten years and reported 25% patients had bladder stone and 10% had urethral leakage.³

To our knowledge, this rare complication i.e., bladder prolapse has only been cited in the literature twice through the SPC site.

In one case by ArkaProvo Roy, prolapse was surgically repaired because of septic features in the patient. The other case reported by Young lee et al., underwent cystectomy because of necrotic malodorous bladder. The latter histopathology was suggestive of urothelial carcinoma.

To conclude, we present this rare complication secondary to SPC procedure helps in the management of the condition. In our case, patient was managed by urethral catheter and currently under follow up.

Consent

Informed consent was obtained from the patient for publication of

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 $Fig.\ 1.$ Herniation of the bladder with foley catheter balloon through the SPC site.

this case report and accompanying images.

Declaration of competing interest

The authors have no conflict of interest to reveal.

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