CASE REPORT

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Strangulated incisional hernia after suprapubic catheter insertion: A case report

Mohanraj Harilingam, Hany Balamoun, Fady Yanni

ABSTRACT

Introduction: Hernia through the suprapubic catheterization site is extremely rare. Attention is required for such hernias as they can get easily complicated by obstruction and strangulation due to its narrow neck. These are life-threatening complications. **Case report:** We report a case of a 65-year-old man who presented with a strangulated incisional hernia through the SPC site. He was managed successfully by urgent surgical intervention. **Conclusion:** Incisional hernia through the suprapubic catheterization site should not be forgotten during examination of patients with abdominal pain, to ensure prompt surgical intervention in case of strangulated hernia.

Keywords: Hernia incisional, Suprapubic catheterization (SPC)

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INTRODUCTION

Suprapubic catheter (SPC) insertion is a very common urological procedure. It is practiced widely by a variety of specialties to manage long standing voiding dysfunction or neuropathic bladders. The majority of these procedures are performed without any complications. Common postoperative complications of SPC insertion include hematuria, urinary tract infections and catheter obstruction [1]. We present a rare case of strangulated incisional hernia through the SPC site.

CASE REPORT

A 65-year-old man of Asian origin presented with sudden onset of abdominal pain, abdominal wall lump and vomiting of six hours duration. Four years back, he had transurethral resection of the prostate. Two years after prostate resection, he had retention of urine due to urethral stricture, for which he had SPC.

On examination he was hemodynamically stable. Abdominal examination revealed a tender swelling at the SPC scar site which was about five cm above the symphysis pubis. The swelling was tense and tender (Figure 1). Clinical diagnosis of a strangulated incisional hernia through the SPC scar was made. Plain abdominal X-ray confirmed small bowel obstruction. The decision was made to undertake an urgent local exploration of the swelling. The local exploration was done through a vertical incision in the abdominal wall. It confirmed a hernial sac with strangulated small bowel within the sac (Figure 2). The defect was three cm in diameter. It was widened for exposure of the surgical site. Small bowel resection and a hand sewn end to end primary bowel anastomosis were performed. The hernial defect was

Figure 1: The swelling at the suprapubic catheter scar site.

Figure 2: Strangulated gangrenous segment small bowel after exploration of the hernia.

repaired using interrupted, non-absorbable sutures. No drain was required and the patient had an uneventful postoperative recovery.

DISCUSSION

Suprapubic catheterization is a common urological procedure performed for temporary or permanent urinary diversion. The procedure requires a small incision on the skin and linea alba followed by inserting a trocar into a distended bladder and then passing the catheter through the tube channel into the bladder. Complications at the time of introducing the trocar include small bowel perforation, bleeding and very rarely ureteric obstruction by the catheter tip [2, 3]. Intermediate and long-term complications of an indwelling urinary catheter include repeated urinary tract infections, calculus formation, bladder irritation and urinary leakage. In rare cases squamous cell

carcinoma has also been reported to occur [4, 5].

Incisional hernia through a suprapubic catheter site is a rare but important complication. The possible explanation for the cause of hernia may be the trocar traversing through the peritoneum before entering into the distended bladder. Once the distended bladder decompresses and returns to the pelvis, it provides an opportunity for the peritoneal contents to herniate through the potential weakness of the trocar site [6].

A history of persistent discomfort at the site of a previous suprapubic catheter insertion, coupled with a palpable rectus sheath defect and positive cough impulse form the mainstay of diagnosis [7].

Hernias from the SPC insertion site need to be surgically repaired as the neck is narrow and the hernia is prone to obstruction. Preventive measures to avoid complications include making a low incision rather than a higher incision for the insertion of the trocar to void the distended bladder. Examination of the trocar site is necessary in a patient with a previous history of SPC insertion presenting with abdominal pain and discomfort. Urologists need to be aware of this potential complication of SPC insertion [8].

CONCLUSION

Incisional hernia through the suprapubic catheterization site should not be forgotten during examination of patients with abdominal pain to ensure prompt surgical intervention to prevent bowel strangulation rupture and other life-threatening complications.

Author Contributions

Mohanraj Harilingam – Substantial contributions to conception and design, Acquisition of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Hany Balamoun – Substantial contributions to conception and design, analysis and interpretation of data, Drafting the article, Final approval of the version to be published

Fady Yanni – Substantial contributions to conception and design, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

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