

Colovesical fistula as a long-term complication of Transabdominal Preperitoneal Plasty with self-gripping polypropylene mesh: case report

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Aim

To present a rare case of colovesical fistula caused by self-gripping polypropylene mesh migration as a late complication of Transabdominal Preperitoneal Plasty (TAPP) and to discuss the surgical management challenges.

Material & Methods

A 50-year-old male with BMI of 33 underwent bilateral TAPP for inguinal hernia in 2012. Lateral defects of about 10 mm on the right and 15 mm on the left side were found. The self-gripping meshes were implanted on both sides.

In 2022, he presented with recurrent urinary tract infections and pneumaturia. Diagnostic evaluation included cystoscopy, magnetic resonance imaging (MRI), and colonoscopy, confirming a colovesical fistula. Surgical intervention was performed, with intraoperative findings of a migrated mesh embedded in the fistula between the sigmoid colon and bladder wall.

Results

The patient underwent open resection of the sigmoid colon and bladder wall. Postoperative complications included laparotomy wound dehiscence on postoperative day six, repaired via primary closure. However, wound dehiscence recurred three days later, requiring insertion of a Vicryl mesh in the inlay position for reinforcement. The patient was discharged on postoperative day nine without further complications.

Conclusions

This case emphasizes the importance of long-term surveillance for patients undergoing TAPP, as mesh migration can lead to severe complications such as colovesical fistula. Early recognition and a multidisciplinary approach are essential for successful management.