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Case Report

Pararectal Migration of a Malleable Rod: An Unusual Late Complication

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A 75-year-old male had failed to respond conservative therapy for erectile dysfunction and had undergone insertion of a malleable penile prosthesis in 1995. Twenty years after the initial implant he presented with right-sided prosthesis localized in the buttock. There was no infection. The prosthesis was extracted through an incision in the right hip. As in the recent case, mechanical failures in malleable penile prosthesis models, can occur. Penile implant migration back to the buttock without a curve deformity is an extremely rare complication. Clinicians should be alert about possible late complications of penile prosthesis.

Key Words: Extrusion; Penile prosthesis; Prosthesis migration

Erectile dysfunction (ED) is defined as the inability to achieve or maintain an erection sufficient for satisfactory sexual performance [1]. First line therapy for ED consists of lifestyle changes, modifying drug therapy that may be causing ED, and pharmacotherapy with phosphodiesterase type 5 inhibitors. Penile prosthesis implantation is an effective treatment option for men who do not respond to pharmacological agents. The technology for penile prostheses has evolved over the last forty years [2]. After penile prosthesis implantation, some complications, including infection, erosion, and mechanical failure, can occur. The malleable penile prosthesis (MPP) has a very low mechanical failure rate. On the other hand, it also has some known problems, such as constant penile rigidity and an increased risk of erosion [3]. The inflatable penile prosthesis is also not free of complications, which can be mechanical (cylinder or reservoir tear, pump failure, tube kinking) or non-mechanical (infection, erosion). Herein, we discuss a patient with urethral erosion and unusual cavernosal perforation with migration backwards into the buttock, which were observed at different times after the MPP implantation.

CASE REPORT

A 75-year-old man presented to our outpatient clinic with the complaint of feeling the bottom of the right-sided MPP while he touched the right buttock close to the glu-

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teal skin. He also had other symptoms including pain, pain during defecation, painful sexual intercourse and feeling the tip of the right penile prosthesis at the proximal side of the penis. The patient had a 30-year history of smoking two packs of cigarettes daily. He had no history of diabetes mellitus. He underwent a thorough evaluation and was diagnosed with ED of mixed etiology. He received counseling and conservative treatment with an external vacuum device and intracavernosal injection. Because the patient and his partner had difficulty accepting the conservative treatment, he underwent an operation for MPP placement at the age of 55 years. At week 6 postoperatively after the penile prosthesis operation, the patient had sexual intercourse. There was no pain and he was well satisfied. Ten years after the MPP implantation, the left-sided prosthesis appeared at the urethral meatus due to urethral erosion and was extracted. After the operation the patient continued to have sexual intercourse. Ten years after the extraction of the left-sided prosthesis, the right-sided prosthesis moved backward and the patient could feel the bottom of the prosthesis under the buttock skin close to the perianal area. On physical examination, the right-sided MPP eroded the right corpus cavernosum and moved posteriorly. Upon physical examination there was no penile prosthesis at the left corpus cavernosum as expected. However the tip of the right-sided prosthesis was felt at the proximal side of the penis. The bottom of the prosthesis was felt by touching the buttock skin close to the perianal area (Fig. 1). A rectal examination revealed the right-sided prosthesis at the right side close to the rectum wall. There was no infection. The right-sided 20-cm MPP was removed under local anesthesia through an incision in the right buttock (Fig. 2). Upon removal, the penile prosthesis was not found to have any curve deformity (Fig. 3). The skin was closed after hemostasis. There were no postoperative complications. The patient was hospitalized for one day. We prescribed oral fluoroquinolone and anti-inflammatory drugs on discharge.

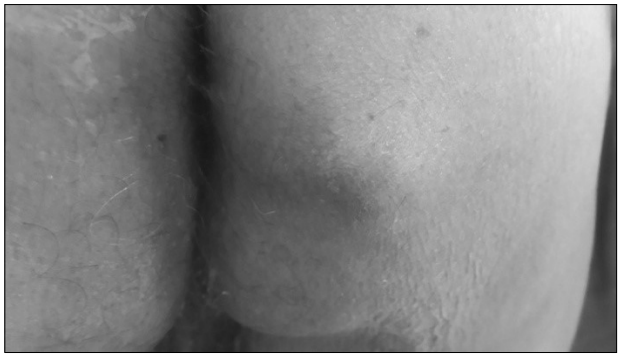

Fig. 1. A photograph showing the malleable penile prosthesis, which migrated posteriorly, passed close to the rectum wall and reached the skin of the right buttock.

DISCUSSION

Several case reports of atypical erosion secondary to migration of penile prosthesis to neighboring tissues have been published. They include reservoir or rod migration to the bladder and pump tubing erosion to the scrotum or urethra. The most common complication after MPP implantation is rod erosion in the urethra [3-6]. Urethral catheterization is the most common cause of urethral erosion.

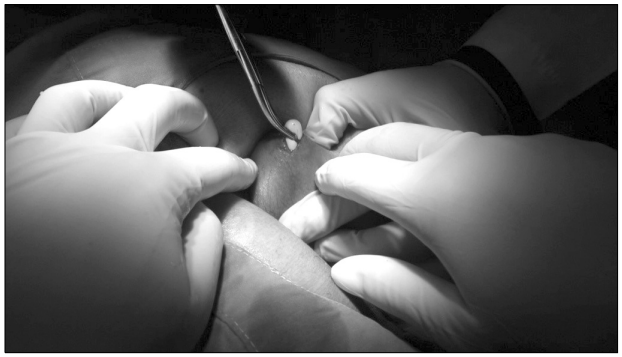

Fig. 2. The extraction of the malleable penile prosthesis with a simple surgical procedure.

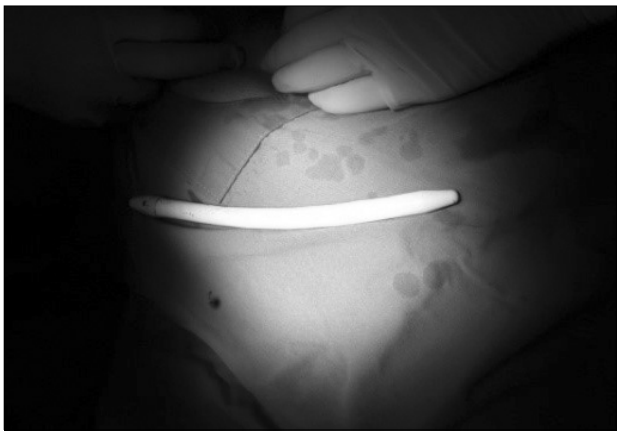

Fig. 3. A photograph of the 20-cm straight malleable penile prosthesis which was extracted from the patient's buttock.

Although the MPP generally perforates into the urethra, it can also extrude through the glans or corporeal shaft [3]. There are two common hypothesis about urethral erosion. The first one is the compression of the urethra especially the fossa navicularis by the rod of the MPP and friction by the catheter [7]; and the second one is the constant internal pressure of the MPP in patients especially those who have a lack of sensation [3]. In our patient, both urethral erosion by the left-sided MPP and right cavernosal perforation by the right-sided MPP moving backwards to the buttock were present. Urethral erosion occurred 10 years after MPP implantation and right cavernosal perforation 20 years after. Although there are several previous reports about urethral erosion after MPP implantation, to the best of our knowledge the recent case is the first with backward perforation of the corpora cavernosum after MPP implantation, with movement of the rod posteriorly, passing close to the rectum wall and reaching the skin of buttock close to the perianal area. Possible reasons for cavernosal perforation were damage to the corpus cavernosum during use or perioperatively and improper fixation of the cylinder. In our case, there was no cavernosal perforation requiring fixtation during the operation. Therefore we could not explain this complication. Gacci et al [8] reported an 84-year-old-man who experienced spontaneous unilateral rod erosion through the urethra 20 years after implantation of an MPP. In this case the patient had vascular and renal insufficiency. In another case report, a 73-year-old man had spontaneous rod erosion 11 years after MPP implantation, due to permanent urethral catheterization [7]. Previous reports proposed that aging is a potential predisposing factor for urethral erosion by MPP [7,8]. But spontaneous late erosion of the urethra and corpora cavernosum by the rod of an MPP has been reported in a patient who was only 45-year-old and the erosion occurred 23 years after placement. The patient in that case had no systemic disease that might cause insufficient tissue strength. In the previous two cases of urethral erosion by the MPP, the rod protruded from the urethra, and therefore, extraction from the urethra as a simple surgical procedure was performed [3,8]. In our case we extracted the rod by a simple surgical procedure under local anesthesia. We did not consider reoperation for MPP implantation because of the high risk of infection and the patient's age. But in the last case mentioned above, the authors did not perform simple extraction because the rod had integrated with the neighboring tissue during the previous twenty years. Clinicians should be alert for late complications of penile prosthesis implantation even in relatively young patients without any known predisposing factors. Simple surgical techniques should be favored for the removal of a penile prosthesis that could cause the erosion of the corpora cavernosa and/or urethra.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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