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Letter to the Editor

A rare complication of penile prosthesis: Migration to the posterior gluteal groove

Engin Ozbay[1], Remzi Salar[1], Emrullah Durmus[1], Arif Aydin[2], Halil Ferat Oncel[1], Ismail Karlidag[1]

[1]Sanliurfa Mehmet Akif Inan Training and Research Hospital Clinic of Urology, Sanliurfa, Turkey
[2]Necmettin Erbakan University, Meram Faculty of Medicine, Department of Urology, Konya, Turkey

Dear Editor,

Corporal perforation is a rare complication during penile prosthesis implantation. The treatment depends on the type of intraoperative perforation.This report presents the case of a 60-year-old male that had undergone penile prosthesis implantation 13 years earlier in 2006 due to erectile dysfunction associated with diabetes. Six months after the procedure, the prosthesis on the left side was removed since it extruded through the glans penis. Atrophy and deformity developed on the left side of the glans penis. The patient continued to use a unilateral malleable prosthesis. However, the penile deformity worsened, and he began to have difficulty in sexual intercourse and experienced intermittent pain in the perineal region. A physical examination revealed atrophy and deformation of the penis on the left side of the glans penis. Pelvic computed tomography was performed, in which the proximal end of the right penile prosthesis was visualized in the posterior gluteal groove (Figure 1). No sign of inflammation was detected around the prosthesis. The prosthesis was not seen in the right proximal corpus (Figure 2). The malleable prosthesis that was intraoperatively removed was 22 cm in length. An area of perforation was noted in the right proximal crus. The proximal part of the area where the perforation ended could not be dilated nor the proximal part of the left crus. The distal section of the left crus contained areas of advanced fibrosis. During the operation, prosthesis cylinders of 14 cm in length were successfully placed in each corpus individually and existing prosthesis was successfully replaced with a new, two-piece penile prosthesis.

The perforation focus was repaired. An artificial erection was achieved. Postoperative infection or erosion was not observed. The patient started to use the prosthesis after the eighth week. He no longer had perineal pain.

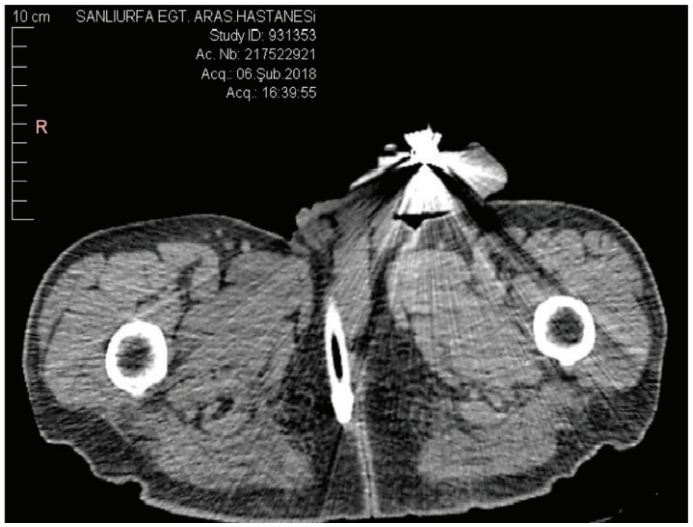

Figure 1. CT image is showing penil prosthesis at posterior gluteal groove

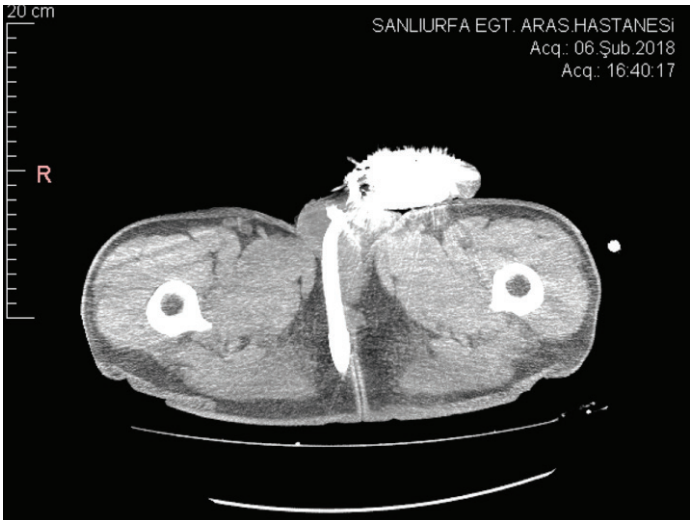

Figure 2. CT image is showing no inflamatuar reaction around the prosthesis

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Corresponding Author: Remzi Salar, Sanliurfa Mehmet Akif Inan Training and Research Hospital Clinic of Urology, Sanliurfa, Turkey
E-mail: salarem@gmail.com

Penile prosthesis implantation is a tertiary treatment for erectile dysfunction. Due to the high satisfaction rates of the patients and their partners, this treatment is widely used throughout the world (1). Intraoperative complications caused by penile prosthesis implantation includes corporal perforations, penile rupture, and urethral perforation, while postoperative complications can be listed as mechanical deterioration (below 10%), infection (1-3%), and erosion of prosthesis reservoir into the bladder or bowel or vascular erosion (3).

Intraoperative corporal perforations can be seen in two different regions: proximal and distal. During dilation of the corpus, care should be taken not to apply excessive force and push the dilator forward. During dilatation, the different length of the two corpora suggests perforation. As a precaution, the distal tip of the dilator should always be palpated during dilatation. Uncontrolled force should not be applied to the dilator (5).

Proximal-type injuries can be repaired by covering the perforated area with an absorbable patch, known as the plug and patch method (4), or it may be recommended to leave it to secondary healing(3).In distal-type injuries, the procedure can only proceed if it is possible to repair or patch the injured area (4). During corporal dilatation, perforation of the penile septum and the cross-over of the dilator to the contralateral corpus may also be observed. In these cases, a Hegar dilator should be placed on the side confirmed to be appropriately dilated (2,3). If urethral injury occurs during corpus dilatation, the patient would be catheterized, and the procedure should be postponed for four to six weeks. After the completion of corpus dilatation on one side, if there is urethral injury during the dilatation of the other side, the prosthesis is placed on the intact side, a urethral catheter is inserted, and the procedure of the other side is postponed for four to six weeks (5). In our case, perforation of the right proximal corpus was overlooked intraoperatively. In the long term, the patient began to experience symptoms due to the mechanical damage of the prosthesis and presented to our clinic. At that time, we detected the perforation. However, from the first operation to the presentation to our clinic, severe fibrosis had developed in both proximal corpora.Predisposing factors for corporal erosion include excessive dilatation, excessively large cylinder use, penile numbness or cold glans, or exposure of the corpora tunica to high pressure due to the prosthesis waskept inflated for a long time (2). When the case presented to our clinic, the malleable prosthesis on the left side had been removed because it had perforated the glans penis. The patient continued his sexual life with a unilateral prosthesis. Since the patient's prosthesis was not replaced again, a severe fibrotic area was observed in the left distal corpus.

Improper penile prosthesis implantation may lead to the development of fibrosis in the corpus penis and atrophy in the glans penis. These complications can complicate the next step of surgical treatment and may even cause serious problems between the physician and the patient. In order to avoid such problems, the basic principles of treatment should in no way be compromised. Penile prosthesis replacement can be successfully performed while still complying with these principles. To the best of our knowledge, there is no other report in the literature presenting a case with a defective unilateral malleable prosthesis left untreated for this long. In this case report, we aimed to demonstrate the need to be careful about the short- and long-term complications of penile prosthesis implantation and emphasize the importance of patient follow-up.

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Engin Ozbay ORCID: 0000-0001-7102-3064
Remzi Salar ORCID: 0000-0002-5078-9367
Emrullah Durmus ORCID: 0000-0001-5021-8495
Arif Aydin ORCID: 0000-0001-8691-090X
Halil Ferat Oncel ORCID: 0000-0003-4043-5597
Ismail Karlidag ORCID:0000-0002-7161-7687

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