



Endourology

Operative Management of Crossover Femoral-femoral Graft Erosion into Bladder: A Case Report



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ABSTRACT

Erosion of vascular grafts is not uncommon as seen in the recent literature. There have been many case reports documenting the work up and management of erosion of these grafts into bowel. We report a case of a crossover femoral-femoral graft that eroded into the anterior bladder wall and was incidentally found as an adherent bladder stone during cystoscopy. We demonstrate the importance of having a high level of clinical suspicion for eroding vascular grafts when preoperative imaging shows close proximity of graft to bladder.

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Introduction

Erosion of vascular grafts is not uncommon as seen in the recent literature. There have been many case reports documenting the work up and management of erosion of these grafts into bowel. One case report has even shown erosion into the ureter.¹ A frequently recurring theme within these cases has been the incidence of infection.² We report a case of a crossover femoral-femoral graft that eroded into the anterior bladder wall and was incidentally found as an adherent bladder stone during cystoscopy for right ureteral stent insertion (Figs. 1–3).

Case presentation

We present an 82-year old male who presented with right flank pain and impaired renal function. On CT scan he was found to have a 5 mm proximal right ureteral calculus. The plan was to insert a right ureteral stent as part of the acute management for his impaired renal function associated with right hydronephrosis. During cystoscopy, an oblong shaped bladder stone was seen at the anterior bladder wall. The stone was also seen attached to a metal spiral shaped structure that we thought was

related to the patient's prior history of femoral-femoral graft. No attempt was made to treat the stone, and the right ureteral stent was successfully inserted. Patient subsequently had the old graft removed and a new bypass graft inserted by vascular surgery.

Discussion

As the general population ages, and patients require more intervention especially from a vascular perspective, erosion of



Figure 1. Bladder stone on the femoral-femoral graft noted on pelvic CT scan.

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Figure 2. Pelvic CT showing the bladder stone on the femoral-femoral graft with the graft crossing close to the anterior bladder wall.

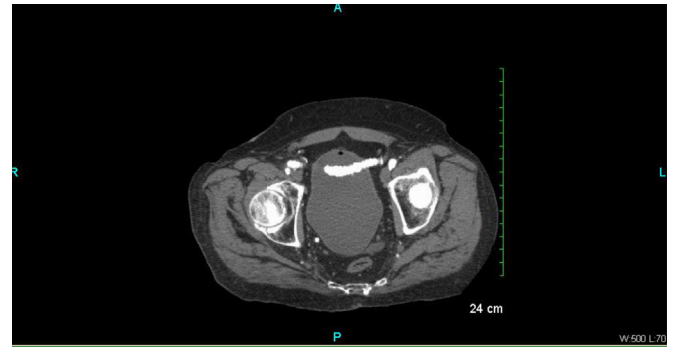


Figure 3. CT angiogram confirming the graft crossing through the bladder.

vascular grafts to genitourinary organs in addition to gastrointestinal organs must be kept on the differential. Improper identification of this graft as an adherent bladder stone could have had grave consequences for this patient especially considering that manipulation of the graft would be cystoscopic. As mentioned previously, this case has not been described in the literature based on our review. The importance of presenting this case was to add this rare complication to the urologic complication lists of non-urologic procedures. The case also demonstrates the importance of detailed surgical history including non-urologic ones when we evaluate our patients. It also reinforces the fact that thorough review of the imaging studies is imperative in surgical planning.

Conclusion

To our knowledge, this is the first reported case in the literature which demonstrates the erosion of a femoral-femoral graft to the urinary bladder. This complication can be added to the list of urologic complications caused by non-urologic procedures.

Conflicts of interest

The authors have nothing to disclose.

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