JBR–BTR, 2014, 97: 378-379.

LETTERS TO THE EDITOR

AN UNUSUAL COMPLICATION OF URETERAL DOUBLE-J STENT PLACEMENT: URETERAL PERFORATION

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Dear Editor,

Ureteral double-J stent implantation has become a routine procedure in the management of a variety of urinary tract pathologies. Although this is a safe and simple procedure, there can be unexpected severe complications such as malpositioning, encrustation, ureteral erosion, intravascular migration, hematoma and ureterovascular fistula. Intraoperative fluoroscopic examination and postoperative imaging modalities are useful in early diagnosis and prevention of these complications. We present a case of right ureteral perforation during retrograde double-J stent implantation. To our knowledge ureteral perforation due to double-J stent placement has not been previously described.

A 68 year-old female patient referred to our clinic from a different urology clinic with a diagnosis of possible ureteral perforation due to double-j stent placement. According to her medical history, she had undergone to ureteroscopy 2 weeks earlier for right ureteral calculi but operating surgeon could not reach the stone because of tortuous ureteral segment. A double-J stent was inserted into the collecting system. But, it was understood that intraoperative fluoroscopic evaluation was not performed. Thereafter patient referred to our clinic. We took a kidney ureter bladder (KUB) radiography and detected that the proximal end of the double-J stent revolves to medial of kidney (Fig. 1). Complete laboratory evaluation was performed and the patient underwent non-contrast computed tomography (CT) which showed that the tip of stent has perforated the proximal ureter and bended at retroperitoneal area (Fig. 2). A right proximal ureter stone (10 mm) and a left renal stone (8 mm) were also detected in CT imaging. First, double-J stent was removed, and ureteroscopy was performed; the proximal ureteric stone was visualized, fragmented, and removed. Afterwards, a long-term double-J stent was inserted.

We could not find any report about ureteral perforation during ureteral double-J stent implantation

Fig 1. — Kidney ureter bladder radiography shows that the proximal end of the double-J stent revolves to medial of kidney.

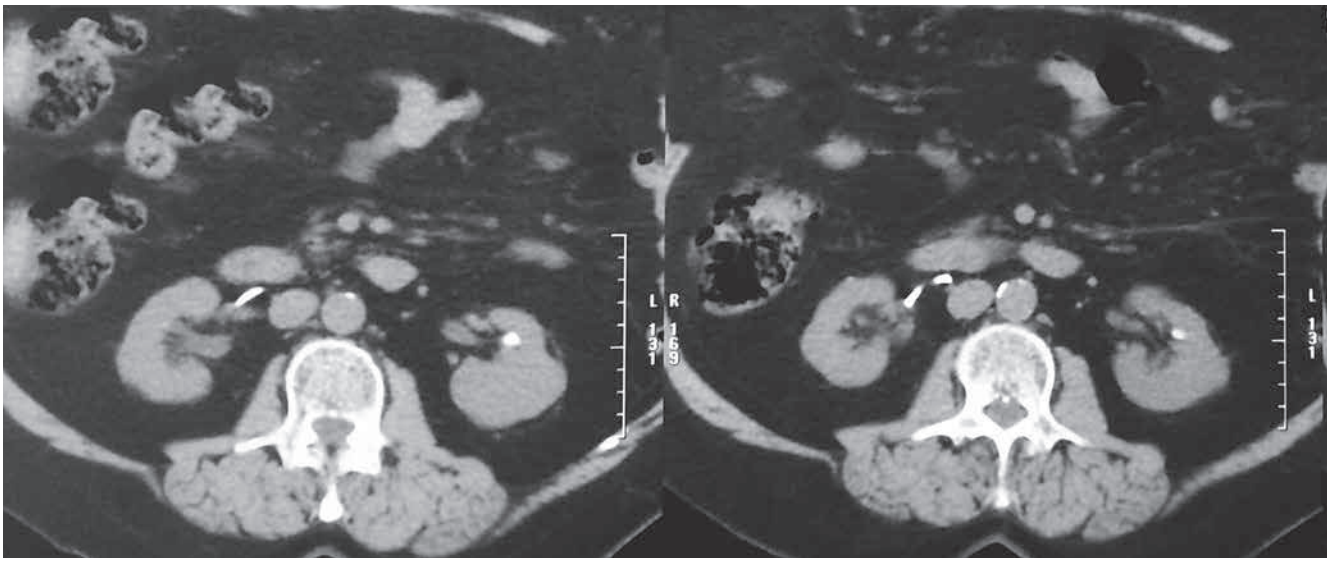

Fig. 2. — Non-contrast computed tomography shows that the tip of stent has perforated the proximal ureter and bended at retroperitoneal area.

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in the literature. Although ureteral stenting is a safe and simple procedure, there can be unexpected severe complications such as malpositioning, encrustation, ureteral erosion, intravascular migration, hematoma and ureterovascular fistula (1-4). Intraoperative fluoroscopic control and postoperative imaging modalities are useful in early diagnosis and prevention of these complications. If the patient has atypical symptoms such as gross hematuria, severe pain or renal colic after double J placement stent insterion; patient should be checked via radiologic modalities. A postoperative KUB will show an abnormal lie of the stent and CT imaging will confirm the diagnosis (4).

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JBR–BTR, 2014, 97: 379-380.

MISPLACEMENT OF EPHROSTOMY TUBE INTO THE INFERIOR VENA CAVA AFTER PERCUTANEOUS NEPHROLITHOTOMY

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Dear Editor,

The last step of percutaneous nephrolithotomy (PNL) procedure is the placement of nephrostomy tube to provide hemostasis, maintain adequate urine drainage and avoid urine extravasation. However some major complications can be associated with this step in a small proportion of patients. In this study, we report a case of a misplaced nephrostomy tube, through the right renal vein, extending into the inferior vena cava, after PNL operation.

A 56-year-old male patient who had a non-functioning left kidney and upper pole stone in the right kidney, underwent percutaneous nephrolithotomy (PNL) for treatment of renal stone. Percutaneous access to the collecting system was achieved using Amplatz dilators and tract was dilated up to 28 Fr. However an intense bleeding occurred and it led to termination of procedure. A nephrostomy tube was inserted and then clamped. Patient was hemodynamically stable but when the nephrostomy tube was tried to open, intense bleeding was observed again. A non-contrast computed tomography performed 24 hours later showed that nephrostomy tube in the right renal vein and up the inferior vena cava (Fig. 1). Patient

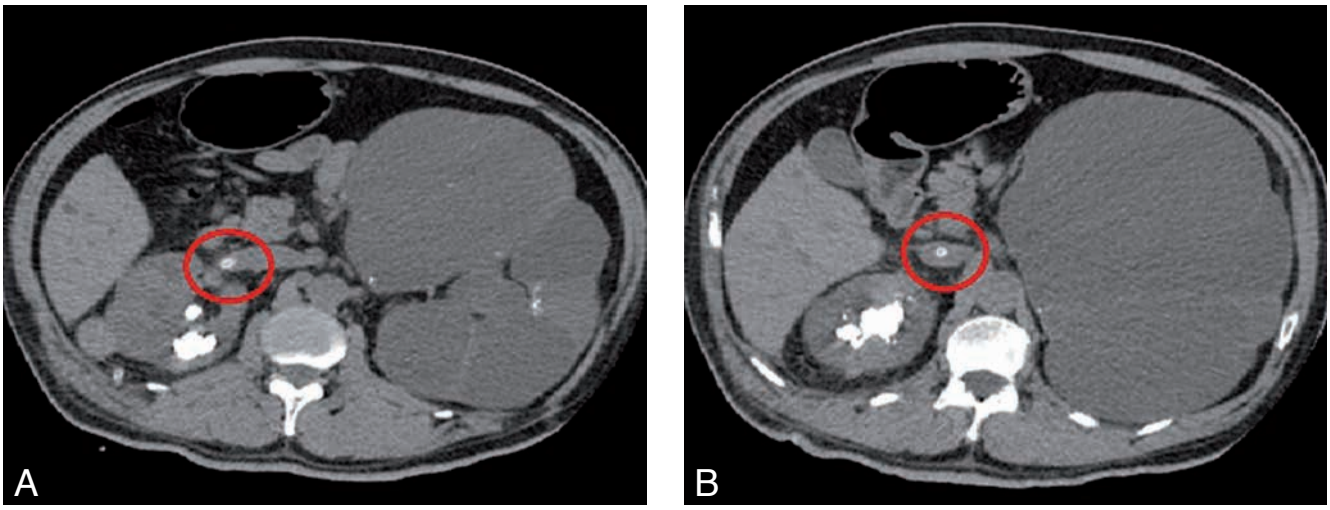

Fig. 1. — Non-contrast computed tomography showing the nephrostomy tube in the right renal vein (A) and up the inferior vena cava (B).

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was taken to the operating room, and nephrostomy catheter was pulled back into the renal pelvis under fluoroscopic visualization. No bleeding was seen after repositioning of the catheter.

PNL has significantly higher stone-free rates when compared with other endourologic procedures (1). However in differents series major complications have been identified with a rate of 0.03% to 10% (2). In this case, we reported an uncommon complication of PNL. We strongly recommend that antegrade nephrostography must be done routinely following percutaneous surgery for the control of nephrostomy tube positioning.

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ANNOUNCEMENT

Virtual colonoscopy workshop
Reading "Filet-view"
Clinique Saint-Joseph (Liège – Belgium)

Thursday 28 and Friday, May 29, 2015

- Courses run by 2 experienced radiologists
- 1 console per participant (General Electric, Philips, Toshiba)
- 10 participants maximum
- Reading, correction and explanation of 50 cases in 2 days
- 50 cases of extra corrected exercises

Clinical expertise of Dr D. Hock and Dr R. Ouhadi based on more than 15,000 virtual colonoscopy examinations since 2003.

º Hock D., Ouhadi R., Materne R., et al. Virtual dissection CT colonography: evaluation of learning curves and reading times with and without computer-aided detection. Radiology, 248: 860-868, 2008.
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Information and registration: anne-marie.mandic@chc.be

PS: The organizers reserve the right to postpone the session if the number of registered is insufficient.