



# UNIVERSITÀ DEGLI STUDI DI TORINO

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## Adult corkscrew ureter

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A 35-year-old man with a history of type 1 diabetes, diabetic neuropathy and moderate to severe chronic renal disease was admitted to our hospital because of bilateral obstructive hydronephrosis secondary to fibroepithelial polyps of the bladder and of the ureter. Double J ureteral stents were inserted with complete hydronephrosis resolution and polyps were removed. The patient was lost at follow-up. Six months later he came to the Emergency Department (ED) for 2 weeks fever, resistant to prescribed antibiotics. Upon arrival at the ED, the patient was responsive, hemodynamically stable, and complaining fever. Vital signs were heart rate of 130 beats/min, arm blood pressure of 100/75 mmHg temperature 39.8°C, respiratory rate 20 breaths/min. Percutaneous oxygen saturation was 98% on room air. Physical examination revealed no palpable abdominal mass and no audible bruit was heard on auscultation. The lung sounds were clear and symmetrical with no wheezes or crackles; the heart beats were regular without murmurs. An abdominal bedside ultrasound performed by the emergency physician showed hydronephrosis of the right kidney with ureteral dilatation. The double J stent were replaced, but unfortunately, the right stent could not be replaced because of mechanical obstruction. Then, the patient was admitted. The following day he developed a septic shock with urinary cultures positive for multi-drug resistant *Klebsiella pneumoniae*. A new abdominal bedside ultrasound showed a hydronephrosis of the right kidney with an unusual ureteral dilatation. An emergency percutaneous pielostomy was performed and anterograde urethrography showed that the right ureter was twisted along its long axis with a characteristic corkscrew appearance (Figure 1). A “corkscrew deformity” of the proximal ureter is mainly due to a rare congenital anomaly that typically lacks any postnatal clinical significance (1). We probably report a rare case of secondary corkscrew deformity due to the chronic inflammation/infection and obstruction (2–4). The rarity of this entity has not allowed the clarification of its natural history and the ideal approach to its management.

### Legend to Figure

Figure 1. The urethrography shows, during the late phase contrast of infusion, the complete image of corkscrew ureter.

### References

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**FIGURE 1**

