Hydronephrosis after Endovascular Stenting in the Common Iliac Artery

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Picture 1.

Picture 2.

An 82-year-old man was referred to the nephrology division due to a sudden increase in creatinine (from 0.7 to 1.6 mg/dL). Two months earlier, the patient had undergone endovascular treatment with stent implantation (WALL-STENT™ Endoprosthesis, Boston Scientific, Natick, USA) in the left common iliac artery for peripheral artery disease. A CT scan revealed left hydronephrosis (Picture 1). Dilation of the ureteral tract was observed from the renal pelvis to the lower ureter. The ureteral dilatation ended just proximal to the iliac artery crossing where the stent had been placed (Picture 2), thus indicating that compression of the ureter by the arterial stent was the cause of the ureterohydronephrosis. Hydronephrosis occurs as a complication of surgical reconstruction of the iliac artery (1) or ureteral obstruction due to the presence of iliac artery aneurysms (2). Recently, endo-

vascular stent grafting has become widely used. In addition to contrast-induced nephropathy and cholesterol crystal embolization, ureterohydronephrosis should therefore be considered as a renal complication of endovascular treatment of the iliac artery.

The authors state that they have no Conflict of Interest (COI).

References

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