A new conservative treatment for ureteral fistulas
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Introduction and Objectives: Ureteral fistula’s treatment often includes long and complex surgical and endoscopic therapies and represent a challenge for the urologist often with disappointing results. UVENTA® stent placement could represent a new option of conservative treatment for ureteral fistulas.

Methods: UVENTA® self-expanding ureteral stents are able to restore urinary flow in ureteral stenosis and to facilitate the closure of ureteral fistulas thanks to its triple layer structure made of two layers of metal mesh with interposed a PTFE membrane. UVENTA® stents are available in different lengths and diameters, and allow the coaxial overlap of the ends of multiple stents, providing a lumen of large caliber able to ensure the proper urinary flow and the possibility of further endoscopic procedures. We show the case of 65 years old man that in September 2014, undergone to left hemicolectomy, resection of upper rectum and bladder’s dome and temporary ileostomy for adenocarcinoma of the sigma in advanced stage. The postoperative period revealed a urinary leakage, dealt initially in conservative way by the general surgeon. Due to unsatisfactory results, the patient was then evaluated by the urologist and subjected to bilateral ascending pyelography highlighting the presence of a high flow left ureteral fistula in pelvic tract; he case was managed immediately with Bilateral ureteral stenting prior to placement of a UVENTA® stent. The subsequent step was a retrograde pyelography through the left stent, used to identify the site of the ureteral fistula. After hydrophilic guidewire positioning and Mono-J stent removal, the delivery system of the UVENTA® stent is advanced coaxially to the guidewire under radiological control. Once reached the desired position the stent is released from its delivery system whit pull-back technique playing a UVENTA® stent 9 FR x 20 cm allowing its simultaneous self-expansion. The next ureteroscopic control has shown the need to placement of an additional UVENTA® stent to complete fistula’s coverage. Following the insertion of a hydrophilic nitinol guidewire a new UVENTA® stent 9 FR x 12 cm has been positioned further in order that the ends of the two stent’s overlap for a length of at least 3 cm.

Results: Intraoperative retrograde pyelography showed that the stent have effectively excluded the fistula. The absence of contrast medium leakage was also documented by retrograde cystography performed after 7 days from stents positioning.

Conclusions: In our experience, the application of UVENTA® stent has proven to be an effective option in the conservative treatment of minimally invasive ureteral fistulas.