Long Term Follow-up after Ileocaecal Continent Cutaneous Urinary Diversion: A Retrospective Study of a Monocentric Experience

Introduction and Objective: To assess the long term follow-up after ileocaecal continent cutaneous reservoir, and to review the late complications with their medical and surgical management.
Materials and Methods: Between January 1976 and January 2012, a total of 756 patients underwent an ileocaecal continent cutaneous urinary diversion in our institution for several aetiologies. Only 50 patient's data was available for a long term follow-up study. Complications related to the continence mechanism and the antirefluxive uretero-intestinal anastomosis were recorded retrospectively. Survival and follow-up time were calculated using the Kaplan-Meir method from the beginning of the study until the date of the last follow up.
Results: The Mean patient age was 44 years (range 22 to 60) and male to female ratio was 2:1. The most common indication for urinary diversion was bladder replacement after anterior exenteration for pelvic malignancies (31 patients; 62%) followed by morphological or functional bladder loss due to various benign conditions: vesico-vaginal fistulas (10 patients; 20%), hypospadias (2 patients; 4%), bladder exstrophy (5 patients; 10%), and complicated section of the urethra (2 patients; 4%). The mean follow-up was 19 years (9 – 36 years). A Stoma stenosis was the most frequent outlet related complication affecting 15 patients (30%) requiring reinterventions. An ischemic outlet degeneration was observed in 3 cases (6%) undergoing the creation of a new outlet .Ten patients (20%) required revision because of stoma incontinence. A neobladder calculus formation was observed in 8 patients (16%): Two patients were managed by endoscopy whereas 6 open interventions were performed to extract huge masses of stones. Six renal units (RUs) developed obstruction at the anastomotic site and were managed by open surgery. Three RUs had to be removed because of renal deterioration. Renal calculi were found in a total of 12 RUs. Kidney stones were treated by external shock wave lithotripsy (6 RUs) or by percutaneous lithotripsy (3 RUs). Ureteral stones were treated by external shock wave lithotripsy (1 RUs), endoscopic stone removal (1 RU) or by ureterolithotomy (1 RU). Finally, a dederivation was necessary in 3 patients (6%) due to a severe deterioration of the renal function and metabolic desorders.
Conclusions: The cutaneous ileocecal pouch is a safe and proven technique for continent urinary diversion in patients in whom orthotopic pouch urinary diversion is not feasible. The long term follow-up shows acceptable complication rates and offer highly satisfactory continence rates. Metabolic disorders must be prevented in order to preserve the maximum of renal units.