The Studer Orthotopic Neobladder: Long-Term (More Than 10 Years) Functional Outcomes, Urodynamic Features, Complications

Introduction and Objectives: Radical cystectomy and urinary diversion have been the standard treatment of invasive bladder cancer. We analyzed the long-term (greater than 10 year postoperatively) complications and urodynamic findings in a single center series of patients who underwent cystectomy and Studer ileal neobladder substitution.
Materials and Methods: A retrospective chart review of 108 Studer pouches constructed from 1990 to 2011 was performed. We analyzed our data in terms of long-term outcomes (above 10 years). Complications, incontinence, voiding difficulties, upper urinary tract changes, overall satisfaction, and urodynamic findings of the reservoir are obtained.
Results: We evaluated 19 of 50 patients who passed above 10 years from the operation. Another 31 patients were not traced in 7, 15 and 9 patients due to death from recurrence, death from exacerbation of comorbidity and contact loss, respectively. In complications, 6, 5, 5 and 2 patients had atrophied kidney, moderate to severe hydronephrosis, chronic recurrence of pyelonephritis and voiding difficulty due to bladder neck stricture that were using CIC intermittently, respectively. One patient underwent operation due to intestinal obstruction. From 7 patients who had incontinence, all showed intermittently at night and 2 patients showed even in day-time. In postoperative satisfaction, 14, 5 and 0 answered 'satisfied', 'so so' and 'unsatisfied'. Maximum bladder capacity was 484.1±119.2 ml, maximum flow rate (Qmax) was 13.6±9.7 ml/sec and post-void residual urine volume was 146.8±82.7 ml in urodynamic study.
Conclusions: In our experience, long-term outcomes of the Studer orthotopic ileal neobladder may be performed with an acceptable complication rate and good functional results. We strongly advocate its use when possible.