Retubularizing the Augmentation Ileocystoplasty Pouch to Form an Ileal Conduit Urinary Diversion

Introduction and Objective: Patients with neurogenic bladder or bladder pain syndrome/interstitial cystitis (BPS/IC) may respond inadequately to bladder augmentation and require conversion to an ileal conduit. We present the outcomes and long-term follow-up of patients who failed initial ileocystoplasty and subsequently underwent conversion to an ileal conduit urinary diversion utilizing the retubularized pouch from the initial bladder augmentation.
Materials and Methods: We reviewed all patients at our centre who underwent conversion to an ileal conduit utilizing the pouch from the initial augmentation ileocystoplasty. The indications for surgery, work-up, clinical outcomes, and complication rates were assessed. Global response assessment (GRA) based on patient-reported symptom response was used to provide a subjective measure of overall treatment effectiveness.
Results: Ten patients with BPS/IC and two with neurogenic bladder underwent conversion to an ileal conduit and were followed for a mean of 71 months. Pre-operatively, patients had at least one LUTS reported as severely bothersome, and consistently more than three symptoms reported as at least moderately bothersome. The most common indications for surgical conversion after prior ileocystoplasty were persistent incontinence and/or bladder pain. All conversions were successful with few early complications. Late complications occurred more frequently, the most common being recurrent urinary tract infections (4), parastomal hernias (5), ureteric strictures (2). Subjective clinical improvement was reported by 40% of patients based on GRA. Half of the patients underwent additional invasive urinary tract surgery to further treat their underlying symptoms.
Conclusions: Surgical outcomes were associated with long-term complications that could be mostly managed with conservative therapy; however, half of the patients required additional invasive surgery. Less than half of patients were satisfied with their post-conduit symptom response. This reflects the challenges faced in managing the debilitating symptoms of a complicated patient population who have already failed several, more conservative therapies. This has not been reported in previous studies. Nevertheless, several patients still achieved symptom control when no other treatment options were available to them. Therefore, surgical conversion to an ileal conduit utilizing the retubularized ileocystoplasty pouch should be considered a viable treatment option in patients who have exhausted more conservative management of their LUTS.