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Hajek D[1], Herschorn S[1], Saltel E[1]
1. University of Toronto, Sunnybrook Hospital Div. of Urology

LONG-TERM QUALITY OF LIFE OUTCOME OF ILEOCYSTOPLASTY WITH CONTINENT ABDOMINAL STOMA.

Hypothesis / aims of study

To determine quality of life outcome of bladder augmentation and creation of a continent abdominal stoma in a cohort of patients with refractory incontinence.

Study design, materials and methods

We identified all adults undergoing ileocystoplasty with a continent abdominal stoma at a single institution between 1982 and 2006. The procedure involved detubularized augmentation with an ileal segment combined with an intussuscepted nipple valve for continence. Urethral continence procedures were done simultaneously as required and included fascial sling and/or bladder neck tapering. If the urethra was too damaged for repair, bladder neck closure was carried out. A telephone and mail survey of quality of life was carried out. Outcome measures were the ICIQ urinary incontinence short form, several questions specific to the procedure, and an overall assessment of satisfaction and willingness to undergo the procedure again.

Results

Sixty-five patients were identified, and of these, 33 (52%) completed the survey. Among the responders, 6 were male and 27 were female. Mean age of responders was 45.5 years (range 24 to 75). Thirty were neurologically impaired, and 28 were wheelchair bound. The most common diagnoses were spinal cord injury (15 patients) and spina bifida (7 patients). Pre-operative bladder management was by Foley catheter (19 patients), Foley catheter plus diapers (5 patients), intermittent catheterization plus diapers (two patients), diapers alone (3 patients), suprapubic catheter (one patient), condom catheter (two patients), or intermittent catheterization alone (one patient). Twenty-five of 33 patients underwent a concomitant bladder neck procedure (fascial sling in 13, fascial sling plus bladder neck tapering in 8, and bladder neck closure in 4). Patients were followed for a mean of 8.4 years (range 1.7 to 18.2). Mean bladder capacity improved from 235 ml pre-operatively to 500 ml post-operatively ($P<0.05$). Mean pressure at capacity decreased from 38.4 cm of H_2O to 11.8 cm of H_2O ($P<0.05$). Fifteen patients (45%) required re-operation. Re-operative surgeries included 10 procedures for bladder stones, 4 valve revisions, 4 stoma revisions, and one injection of collagen into the valve. The mean ICIQ score was 7.97 (range 0 to 20). Nine of 33 patients (27%) were fully continent from the urethra and stoma. The remainder of patients had some degree of incontinence (8 mild, 6 moderate, 4 severe). Of patients identifying the site of incontinence, 6 were incontinent from the stoma alone, two from the urethra alone, and 7 from both the stoma and urethra. Thirty-one catheterized themselves, one was catheterized by caregivers, and one had an indwelling Foley catheter. The mean interval between catheterizations was 4.7 hours. Nine patients (27%) stated that they had at least occasional difficulty with catheterization. Six patients (18%) reported a change in bowel function (diarrhea, loose stools, or increased frequency of bowel movements) and two of these required medication to control symptoms. On a scale of overall satisfaction with current urinary function (0=terrible to 6=delighted), the means score was 4.52. Thirty of 33 patients (91%) would have the operation again knowing what they know now. Of the 3 patients who would not have the operation again, one has severe bowel symptoms and two have stomal incontinence.

Interpretation of results

Quality of life assessment in this group of predominantly neurologically disabled patients with severely compromised lower urinary tract function reveals that a majority have persistent incontinence, with self-reported incontinence rates higher than those determined from chart reviews of the same population. In spite of this, a preponderance of patients would have the operation again, suggesting an improvement in urinary quality of life compared with their pre-operative status.

Concluding message

Ileocystoplasty with a continent abdominal stoma is an effective option for patients requiring augmentation who are unable to perform urethral catheterization or have severely compromised bladder outlets. Patients considering this procedure should be cautioned about the possibility of persistent incontinence, change in bowel function, and the high rate of re-operation

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HUMAN SUBJECTS: This study was approved by the Sunnybrook Hospital Research Ethics Board and followed the Declaration of Helsinki Informed consent was obtained from the patients.