

NOCTURNAL INCONTINENCE IS A SIGNIFICANT PROBLEM AFTER ORTHOTOPIC BLADDER SUBSTITUTION IN WOMEN

Hypothesis / aims of study

Orthotopic bladder substitution has become an established mode of urinary diversion in some women. Herein, we report on the functional outcome in 252 patients, with particular stress on the problem of nocturnal incontinence.

Study design, materials and methods

Between January 1995 and December 2006, 252 women, with a mean age of 51.5 years, underwent orthotopic bladder replacement after radical cystectomy for muscle-invasive bladder cancer. Exclusion criteria included clinically evident pelvic lymphadenopathy, bladder neck and/or vaginal wall involvement, positive intra-operative frozen section from the urethral stump and history of compromised continence mechanism. A standard radical cystectomy was conducted in the majority of cases. Some modifications were adopted after the first 100 cases to guard against chronic retention of urine. Ileal reservoirs were used, mostly in the form of ileal W-neobladder. We evaluated the patients for voiding and continence outcome.

Results

Follow-up ranged from 6 to 149 months (mean 54). Two patients (0.8%) died early post-operatively from pulmonary embolism. Local recurrence and / or distant metastasis developed in 61 patients, 12 patients died from unknown or unrelated diseases and 16 were lost to follow-up or followed for less than 6 months. Among the 201 patients eligible for functional evaluation, 44 (21.9%) had isolated nocturnal incontinence, 8 (4%) had nocturnal incontinence on top of chronic retention, 14 (7%) had stress urinary incontinence, 5 (2.5%) had total incontinence and 31 (15%) had chronic retention or significant residual urine. All women were run on imipramine hydrochloride, oxybutinin chloride, antimicrobial treatment for UTI if any and once CIC at bed time. With this regimen, 30 (58%) of these cases showed varying degrees of improvement.

Interpretation of results

Evaluation of cases with nocturnal incontinence showed that the reasons for incontinence were incompetent urethral closure, chronic retention, pouch hyperactivity and/or UTI causing transient incontinence. These patients were more bothered with their symptoms than those with chronic retention.

Concluding message

A satisfactory functional outcome is achieved after this type of operation. Nocturnal incontinence is a significant problem due to its social consequences. It can be improved by medications and CIC at bed time. However, further work is needed to prevent and to provide an optimal treatment for this problem.

<i>Specify source of funding or grant</i>	None
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Council of Urology Department
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes