

ILEAL ORTHOTOPIC NEOBLADDER IN FEMALE: FUNCTIONAL RESULTS FROM THREE UROLOGY UNITS

Hypothesis / aims of study

We report functional results in ileal orthotopic neobladder (ION) in women. Data were obtained through a questionnaire sent to 3 Urology Units.

Study design, materials and methods

In January and then in March 2005 a questionnaire was sent to 10 Urology Units in North-East Italy and 3 centres answered. From January 1997 to March 2005 18 women, mean age 56 years (min 45, max 67) underwent radical cystectomy and ION. Indications were organ confined bladder cancer (far from the bladder neck) in 17 and relapsing vesico-vaginal fistula in 1. The ION performed was the Paduan Ileal Neobladder (VIP) in 12 cases and ION according to Studer in 6 women. 15/18 patients are evaluable - 1 was lost at follow-up, 1 is in 15th post-operative day and 1 died 7 months post-operative for neoplastic progression - with follow-up range 7-96 months (mean 47 months).

Results

ION capacity ranges from 200 to 650 cc (mean 450). Two patients need 1-2 clean self intermittent catheterism (CIC) per day and 4 need 3-4 CIC per day (one patient doesn't urinate at all). 7/15 women complain daytime urinary incontinence (UI) - 5 use 1 pad per day and 2 need 2-3 pads per day - while 8 report nocturnal UI (occasionally some drops of urine in 1 case and 1 pad per night in 7). Totally 4 patients have a normal ION function - 6 micturitions per day without UI or urinary retention (UR) -, 5 are incontinent, 4 suffer UR and 2 present both UR and UI. In 1 case UR is due to angulation of the posterior pouch-urethral junction and depends on the pouch falling back in the wide pelvic cavity. One woman with stress-UI underwent trans-otturatory uretropexy becoming continent and another one is waiting the same procedure. No differences are detected between VIP and ION according to Studer. All patients are neoplasm-free with normal upper urinary tract.

Defecation is regular in 10 cases while 5 patients report constipation.

Eight women have sexual intercourses with vaginal lubrication and orgasm. Eleven women report normal vaginal sensitivity.

Pre-surgery evaluation of vaginal profile was performed in 9 cases and pre-surgery urodynamic examination was done in 11 cases. 4/15 women didn't undergo either urodynamic examination or urogynaecological evaluation before surgery and, among these, 1 needs 4 CIC per day, 1 has severe UI and 2 present both UI and RU.

12 women are satisfied and 3 are not (2 UI socially remarkable - 1 treated and 1 that is waiting for urethropexy - and 1 both UR and UI).

Interpretation of results

RU is more common in female than in male with ION and some authors explain female UR with mechanical causes (1). In our experience only 1/6 women presents urethro-ileal junction angulation - due to pouch falling back in the wide pelvic cavity. The cause of UR is unknown in 5 women but urethral denervation is suspected.

Daytime UI has been detected in 50% of patients but it is mild/moderate in 5 and severe in 2. As expected nocturnal UI is a little bit more common and regards 8 women.

We observed the worse results in 4 women that didn't undergo urogynaecological and urodynamic evaluation before surgery.

Concluding message

ION is becoming the first choice option also for women. 80% of our patients are satisfied with the procedure. In our opinion the positive impact on body image, together with conservation of sexual function observed in 8/15 patients, compensate possible bladder voiding disorders. Mechanical obstruction explains 1/6 case of RU in our series. ION in women should be performed after urogynaecological and urodynamic evaluation in order to detect and to treat possible fascial defects.

References

Critical evaluation of the problem of chronic urinary retention after orthotopic bladder substitution in women - J Urol 168(2), 587-92 2002