Neobladder emptying failure in males: incidence, etiology and therapeutic options.

Abstract:

PURPOSE: Neobladder reconstruction is considered the best option for patients requiring cystectomy. Limited information is available about incidence, etiology and therapeutic options for neobladder emptying failure in males.

MATERIALS AND METHODS: In a retrospective study we analyzed the data of a consecutive series of 655 male patients (age range 23 to 82 years, median 63; followup range 0 to 208 months, median 36.5) who received an ileal neobladder following radical cystectomy at our institution. All patients had a complete followup until death or until December 2003. Data on all diagnostic and therapeutic procedures performed for neobladder emptying failure were collected.

RESULTS: Of 655 patients 75 (11.5%) had at least 1 episode of failure emptying the neobladder requiring some form of therapy during followup. Failure was due to dysfunctional voiding in 23 patients (3.5%) and mechanical obstruction in 52 patients (8%). Causes of mechanical obstruction were benign strictures of the neovesicourethral anastomosis (23 patients, 3.5%) or the anterior urethra (11 patients, 1.7%), neoplastic obstruction by local tumor recurrence (13 patients, 2.0%) or a nonurological malignancy (1 patient, 0.2%), and obstruction by mucosal valves (3 patients, 0.5%) or a foreign body (1 patient, 0.2%). In 38 of 52 patients with mechanical obstruction of the neobladder outlet emptying was fully
restored with endourological procedures, while in 14 of 52 patients long-term catheterization was necessary. Catheterization was the therapy of choice for all patients with dysfunctional voiding.

CONCLUSIONS: Neobladder emptying failure is of major concern but is not an argument against orthotopic diversion. The overall rate of transient or permanent neobladder emptying failure in males is high but most of the mechanical causes can be managed endoscopically, while the rate of patients with long-term catheterization for dysfunctional voiding is relatively low.