

DOES PREOPERATIVE PELVIC FLOOR MUSCLE EXERCISE IMPROVE POST PROSTATECTOMY URINARY INCONTINENCE?.

Hypothesis / aims of study

Despite improvements in surgical techniques, urinary incontinence (UI) is not uncommon after prostatectomy, and it may dramatically worsen quality of life (QoL). In all forms of prostatectomy, the bladder neck is resected rendering the closure mechanism incompetent. Postoperatively continence relies on the strength and integrity of the external urinary sphincter. The aim of the study was to determine if pelvic floor muscle exercise would improve urinary incontinence in post radical prostatectomy patients.

Study design, materials and methods

A randomised controlled trial was conducted between December 2011 and January 2013. 100 patients were included in the study. Inclusion criteria were patients with localized prostate cancer and were candidates for radical prostatectomy. Patients who had met one of the following criteria were excluded from the study: (1) Patients who underwent prior pelvic organ surgeries. (2) Patients who have central or peripheral neurologic diseases. Patients were divided randomly into two groups treatment group (A) and the control group (B) 50 patients each. Both groups had a postoperative pelvic floor muscle exercise (PFME) program where only the treatment group got a preoperative PFME protocol for 2 weeks. Incontinence was measured using pad test where a patient using 0 or 1 pad was considered continent also all participants had to answer International Continence Society [ICS] male short form [SF] questionnaire.

Results

For both groups 70% of the patients were continent at 18 weeks. A greater fraction of the treatment group regained urinary continence earlier compared with the control group at 14 weeks ($p > 0.05$). Three patients in the control group required greater than 3 pads daily at 1 year and 2 in the treatment group required greater than 3 pads daily at 1 year. Two patients per group continued to use 1 to 3 pads daily at 52 weeks. Of all patients 85% regained continence by 54 weeks.

Interpretation of results

Pelvic floor muscle exercise helps in decreasing the incontinence episodes and the frequency of pad changes for an earlier return to continence after prostatectomy. PFME therapy instituted prior to radical prostatectomy aids in the earlier achievement of urinary continence. However, PFE has limited benefit in patients with severe urinary. There is a minimal long-term benefit of PFE training since continence rates at 1 year were similar in the 2 groups

Concluding message

Pelvic floor exercise and education initiated prior to surgery is an effective noninvasive intervention useful for improving the early return of urinary continence.

Disclosures

Funding: none **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** faculty of physical Therapy Ethical committee, Cairo University **Helsinki:** Yes **Informed Consent:** Yes