

Pelvic floor muscle training alone and in combination with biofeedback and/or electrical stimulation for urinary incontinence following prostatectomy: A meta-analysis

Priya Kannan, Stanley J. Winser, Brigitte Fung, Gladys Cheing

Abstract

Background. The efficacy of pelvic floor muscle training (PFMT) alone and in combination with biofeedback (BFB), electrical stimulation (ES), or both for urinary incontinence in men following prostatectomy is inconclusive.

Purpose. The purpose of this study was to determine whether PFMT works well alone or in combination with BFB, ES, or both in comparison with a control.

Data Sources. The databases Ovid Medline, EMBASE, CENTRAL, Scopus, and Web of Science and the specialized register of the Cochrane Incontinence Review Group were searched from study inception to August 2017. Abstract proceedings from urological meetings, including the European Association of Urology and the American Urological Association, were also searched.

Study Selection. Randomized controlled trials that compared PFMT with ES (anal, stimulation with surface electrodes), BFB, or both and no treatment, placebo, or sham were included in the review. Randomized trials comparing PFMT alone and PFMT plus BFB, ES, or both against a control for urinary incontinence following prostatectomy were also included.

Data Extraction, Synthesis, and Quality. Two independent reviewers completed data extraction and quality appraisal. The Grading of Recommendations, Assessment, Development,

and Evaluation tool was used for quality appraisal. Meta-analysis was done with software used for preparing and maintaining Cochrane reviews.

Limitations. Methodological flaws in the included studies limited internal validity.

Conclusions. PFMT alone, PFMT plus BFB and ES, and PFMT plus ES were more effective than the control for urinary incontinence following prostatectomy. The effect of PFMT plus BFB on postprostatectomy incontinence remains uncertain.