THE EFFECTIVENESS OF PELVIC FLOOR MUSCLE TRAINING IN REDUCING URINARY INCONTINENCE: DOES IT REALLY WORK? A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

Hypothesis / aims of study
Urinary incontinence is a distressing condition. Despite several randomized controlled trials have been done on the effectiveness of pelvic floor muscle training in the treatment of urinary incontinence, there is no concord on the best way to define treatment success. The aim of this systematic review with meta-analysis was to evaluate the effectiveness of pelvic floor muscle training in treating urinary incontinence.

Study design, materials and methods
Systematic literature search was carried out (up to February 2017) using relevant search terms in Medline, EMBASE, CINAHL, CENTRAL, National Library for Health, and Google Scholar. Relevant randomized controlled trials (RCTs) were selected and then analyzed by two-independent reviewers.

The primary outcome was reduction in UUI as compared to before treatment. The secondary outcomes were urinary frequency and nocturia. Only published data were used for the analysis. Meta-analysis was performed with random effects model using Review Manager 5.3

Results
The studies report variable initial success rates (42–87%) for treating urinary incontinence symptoms with pelvic floor muscle training. Four randomized trials compared pelvic floor muscle training with Sham treatment showing a significant difference favoring pelvic floor muscle training [OR: 5.04, 95% confidence interval (CI): 1.45–13.24].

Interpretation of results
Pelvic floor muscles strengthening exercise was effective in the treatment of urinary incontinence. This is certainly an indicator for why and how to start physical rehabilitation for people with urinary incontinence. However, the studies included in the review only considered short-term outcomes after initial treatment.

Concluding message
In order to recommend pelvic floor muscle training as a practical treatment option for urinary incontinence, long-term data are required.

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