

PELVIC FLOOR MUSCLE TRAINING FOR FEMALE STRESS URINARY INCONTINENCE: FIVE YEARS OUTCOMES

Hypothesis / aims of study

Pelvic floor muscle training (PFMT) is recommended as first-line treatment of female stress urinary incontinence (SUI). However, up-to-date long-term outcomes of this treatment modality are scarce and controversial. The aim of this study was to evaluate the clinical status, lower urinary tract symptoms (LUTS) and quality of life (QOL) parameters five years after completion of PFMT program for female SUI.

Study design, materials and methods

263 consecutive women who had undergone PFMT for SUI five years earlier were eligible for the study. All patients had a history of symptoms of SUI for at least three months prior to treatment. Patients with mixed urinary incontinence, concomitant significant pelvic organ prolapse (1cm or more distal to the hymen), and those who previously underwent SUI surgery, were excluded. Baseline demographic and clinical data, as well as treatment parameters and clinical follow up were documented in a detailed computerized database. All patients underwent and completed a full guided PFMT course conducted by pelvic floor physiotherapists. Five years after completion of the guided PFMT course, all eligible patients were invited to participate in an up-to-date outcome study. Treatment outcomes were measured by LUTS and QOL questionnaires (BFLUTS, ICIQ-UI, I-QOL), as well as demographic and clinical questionnaires. The study protocol was approved by the institutional review board. Primary outcome measures comprised of five-year adherence to PFMT, interval surgery for SUI, and patients' self-assessment of LUTS and QOL. Secondary outcome measures were risk factors associated with severity of incontinence and impaired QOL.

Results

132 women who underwent PFMT for SUI five years earlier completed all study questionnaires (50% response rate). Of these, 75 (56.8%, mean age 49.8+10.8) had stopped PFMT, 55 women (41.7%, mean age 52.1+10.8) reported adherence to PFMT, and two others (1.5%) had undergone SUI surgery. Except for those who underwent surgery, almost all other women reported SUI, however their ICIQ-UI scores for frequency and amount of leakage were low (2.2+0.9, 1.18+1.04, respectively) and I-QOL score was high (96.2+13.6). Frequency and severity of LUTS, as well as QOL scores, were similar among all women regardless adherence to PFMT (Table). Positive correlation was found between lower back pain, BMI, age and parity and severity of symptoms. Further analysis of the 132 patients who did not complete the questionnaires revealed 6 more patients who underwent SUI surgery. Thus, overall, 8 patients (3%) of the original cohort underwent surgery for SUI within five years after completion of the PFMT program.

Table: LUTS and QOL questionnaires five years after PFMT for SUI

Mean±SD	No adherence to PFMT (N=75)	Adherence to PFMT (N=55)	P
ICIQ UI TOTAL	7.12±4.33	7.07±4.44	0.777
ICIQ UI FREQUENCY	1.62±1.07	1.56±1.01	0.736
ICIQ UI AMOUNT	2.18±0.88	2.25±1.02	0.686
ICIQ QOL	3.6±3.2	3.2±3.11	0.498
BFLUTS-FS	3.44±2.4	3.18±1.85	0.507
BFLUTS-VS	1.86±2	2.2±2	0.351
BFLUTS-IS	4.73±2.84	4.89±2.84	0.756
BFLUTS-SEX	0.3±0.77	0.49±1.12	0.269
BFLUTS-QOL	3.1±3.11	3.01±2.75	0.867
I-QOL- TOTAL	96.65±13.82	95.96±13.59	0.778
I-QOL-AVOIDANCE	34.29±5.32	34.05±4.85	0.794
I-QOL-PSYCHO	41.57±5.39	41.14±5.35	0.655
I-QOL-EMBARRAS	20.78±4.4	20.76±4.49	0.977

Interpretation of results

Up to 41.7% of women who underwent PFMT for SUI reported adherence to training five years later, and only few had undergone SUI surgery. However, adherence to therapy per se was not found to be associated with improved LUTS or QOL parameters.

Concluding message

Although relatively high rates of 5-years adherence to training were demonstrated among our patients, this adherence was not associated with superior treatment outcomes. Further studies are needed to establish the long-term efficacy of PFMT for SUI.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Maccabi Health Services, Israel **Helsinki:** Yes **Informed Consent:** Yes