



## The Effect of the Number of Biofeedback Training Sessions on Urinary Symptoms and Muscle Strength in Women With Urinary Incontinence: A Pilot Study

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**Background and Aim.** Urinary incontinence (UI) is a common condition in women and negatively affects quality of life. Pelvic floor muscle training (PFMT) is the first-line conservative treatment; however, adherence to home-based programmes is often poor. Biofeedback (BF) may enhance muscle activation and improve adherence, but the optimal number of sessions remains unclear. This study aimed to investigate the effects of different numbers of biofeedback sessions on urinary symptoms and pelvic floor muscle strength in women with UI.

**Methods.** Following ethical approval, physical and sociodemographic characteristics were recorded. Urinary symptoms were assessed using the Urinary Distress Inventory-6 (UDI-6), perceived quality of life and dryness using a Visual Analogue Scale (VAS), and pelvic floor muscle function using the Myomed 632 device. Twenty-seven women with UI were randomly assigned to three groups: PFMT home programme only ( $n = 10$ ), PFMT plus six sessions of EMG biofeedback ( $n = 10$ ), and PFMT plus 24 sessions of EMG biofeedback ( $n = 7$ ). Due to high dropouts in the PFMT-only group (9/10), final analysis was conducted between the two biofeedback groups after the 8-week intervention.

**Results.** No significant differences were found between the 6-session and 24-session biofeedback groups in perceived dryness, impact of UI on daily life, or symptom improvement ( $p > 0.05$ ).

**Conclusions.** Both PFMT plus six EMG biofeedback sessions and PFMT plus 24 EMG biofeedback sessions showed similar effectiveness in improving UI-related outcomes. However, adherence to PFMT alone was poor, limiting its effectiveness. These findings highlight the importance of adherence and suggest that a lower number of biofeedback sessions may be sufficient in clinical practice.

**Keywords:** Exercise; pelvic floor; biofeedback; health; urinary incontinence

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**Informed Consent Statement:** This study was approved by the Ethics Committee of Bolu Abant İzzet Baysal University. All participants provided written informed consent prior to participation. The study was conducted in accordance with the Declaration of Helsinki.

