



## Efficacy of Biofeedback Training on Bladder Dysfunction and Quality of Life in Paraplegic Patients

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**Abstract : Objectives:** To evaluate efficacy of biofeedback training on treatment of bladder dysfunction and quality of life in paraplegic patients. **Methods:** Thirty male paraplegic patients within 6 to 18 months after injury, ages ranged from 20 to 35 years, participated in this study for a treatment period of six weeks; they were divided into two equal groups. Patients in group I were treated with pelvic floor exercises two times weekly, while patients in group II were treated with biofeedback training plus pelvic floor exercises two times weekly. All subjects were assessed for; 1) voiding cystometry, 2) EMG of pelvic-floor muscles, 3) QUALIVEEN questionnaire (short version). **Results:** There was significant improvement in group II and non-significant improvement in group I in values of an EMG biofeedback assessment of pelvic-floor muscles. There was highly significant improvement in group II in the bladder volume at the first desire to void and at maximum cystometric capacity, the detrusor pressure at maximum flow rate, the maximum flow rate, detrusor stability and significant improvement in bladder compliance while there was no significant difference in group I in the bladder volume at the first desire to void and at maximum cystometric capacity, the bladder compliance and detrusor stability & significant improvement the detrusor pressure at maximum flow rate & highly significant improvement in the the maximum flow rate. There was highly significant improvement in group II and non-significant improvement in group I in the Qualiveen questionnaire. **Conclusion:** Biofeedback training should be considered as valuable adjacent to conventional treatment in the control of bladder dysfunction & optimizing quality of life in paraplegic patients.