



Service Priorities and Programmes
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Effects of extracorporeal magnetic innervation (ExMI) in the treatment of postpartum women with stress urinary incontinence (SUI): results of 3-month follow-up

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Introduction

Introduction: The International Continence Society Standardization Committee defines SUI as the complaint of involuntary leakage on effort or exertion, such as coughing, laughing, walking, running or sneezing. Prevalence of urinary incontinence in postpartum Chinese women was 9.9%, in which 80% of them were classified as SUI. Number of women with SUI following-up at the specialist out-patient clinic in the Queen Elizabeth Hospital (QEH) increased gradually by 14% from 2007 to 2011. The Department of Obstetrics and Gynaecology and the Physiotherapy Department of QEH launched a tailored program targeted for postpartum women with SUI to improve pelvic floor muscle strength and enhance the recovery. Physiotherapy program includes pelvic floor muscle training with biofeedback, voiding diary habit, baby care education and dietary advice. With technology advancement, physiotherapists incorporated ExMI in the treatment regime since October 2012.

Objectives

Objectives: To evaluate the clinical efficacy of ExMI in postpartum women with stress urinary incontinence

Methodology

Methodology: A retrospective pre- and post-test design was employed. A total of 10 patients were reviewed in the period of October 2012 to January 2013, information on demographic data, mode of delivery and assessment results were retrieved and studied. Outcome measurements included, 1) Pelvic floor electromyographic (EMG) activity; 2) 7-day voiding diary; 3) Incontinence conditions utilizing 10-point Visual Analog Scale (VAS) (0, continent; 10, complete incontinence); 4) validated QOL survey by the Incontinence Quality of Life Instrument (I-QOL); and 5) Exercise and Dietary intake logbook.

Result

Results & Outcomes: Data of 10 women (mean age= 35.1 + 5.2 years) were reviewed. The pelvic floor EMG activity had increased by 43.02% ($p < 0.005$). Episodes of leakage in the diary decreased from average 6.5 to 3.9 times per week after treatment. VAS improved drastically by 55% and the mean I-QOL score improved significantly from 62.5 to 88.7 at 3 months ($p < 0.005$). Besides, patients showed willingness to follow the exercise and dietary regime. With the encouraging preliminary results, an enhanced program of postpartum ExMI should be promoted to restore pelvic floor muscle strength more efficiently to reduce the postpartum complication on health care system.