



Service Priorities and Programmes
Electronic Presentations

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Evidence-based practice: systematic review of utilizing Extracorporeal Magnetic Innervation (ExMI) for patients with incontinence

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Introduction

Incontinence is a common problem, with prevalence up to 31% in urinary incontinence and 8.7% in faecal incontinence among Asians. In 2011, the number of patients suffering from incontinence attending specialist out patient clinic at the Queen Elizabeth Hospital (QEH) increased up to 2012. Health education, dietary advice and pelvic floor exercises are common conservative methods used by physiotherapists and has been proven to be effective. Recently, a new technology: Extracorporeal Magnetic Innervations (ExMI) is incorporated in the continence care program in Physiotherapy Department of QEH since Oct 2012. It was adopted as a new form of conservative treatment for stress, urge and mixed urinary incontinence in women in the USA. However, the optimal operating parameters to achieve most desirable effects in patients with incontinence are still lacking.

Objectives

To analyze the optimal parameters of ExMI and evaluate its efficacy on patients with incontinence

Methodology

Systematic review of randomized controlled trials (RCTs) and uncontrolled trials without limitation in age, gender and years of publication were taken. Databases searched including Medline, Web of Science, PEDro and CINAL

Result

29 articles were identified and 15 articles were finally included in this review after exclusion and screening. Results supported the use of ExMI for continence care of patients with urinary or faecal incontinence, as reflected in improvement of symptoms, episodes of leakage, pelvic floor muscle strength and quality of life. Common parameters included maximum tolerated intensity, 20mins treatment duration with the first 10mins at 10 Hz, followed by another 10 mins at 50 Hz, applied twice per week for 8 weeks. With reference to the Scottish Intercollegiate Guidelines Network, ExMI in treating female patients with urinary incontinence was level A evidence. This systematic review supported the use of ExMI in treating patients with urinary or faecal

incontinence. The efficacy of this physiotherapy conservative modality was proven and optimal parameters in applications were identified. Further study on its use on local population will be carried out to provide better continence care for our needy patients with incontinence.