Evaluation of the treatment outcomes of urinary incontinence by intra-vaginal electrical stimulation therapy

YEUNG KW, LUI KL, HO WF, LI CM, CHAN NH, FAN CW, TANG CN
Department of surgery, Pamela Youde Nethersole Eastern Hospital

Keywords:
Urinary Incontinence
intra-vaginal electrical stimulation

Introduction
Kegel Exercise is usually the first treatment step for pelvic floor muscles rehabilitation in the treatment of urinary incontinence. However, poor coordination of pelvic floor muscle contraction will lead to unsatisfactory treatment outcomes. Intra-vaginal electro-stimulation therapy is an alternative treatment for patients with urinary incontinence.

Objectives
To evaluate the outcomes of intra-vaginal electro-stimulation therapy for patients with urinary incontinence.

Methodology
From June 2014 to Dec 2014, female patients suffering from urinary incontinence (UI) with weak pelvic floor muscle (define as Modified Oxford Scale Grading less than 2) and failed bio-feedback were recruited into the study. A twelve weekly electro-stimulation (ES) were done each session lasting 30mins. Patients’ continence status and quality of life score were reviewed with Urinary Distress Inventory 6 (UDI-6), Incontinence Impact Questionnaire (IIQ7), no. of pad used and time between each void were evaluated. The inclusion criteria were normal cognitive and tactile function. The exclusion criteria were pregnancy, on pacemaker and pelvic organ prolapse.

Result
A total of 25 female patients were recruited age between 41-83 (mean 58.8).The average duration of UI were 4-5 years. Forty percent had mixed urinary incontinence, 48 % had stress incontinence and 12 % had urge incontinence. After 12 weeks of Intra-vaginal electro-stimulation, a reduction of UDI-6 symptom score from 7.8 to 5.9.
IIQ-7 score reduced from 9.1 to 7.1. No. of pad used reduced from 2.8 per day to 1.1 per day. Time between each void was increase from 1.4 hour to 2.9 hour. In conclusion, electro-stimulation is an effective alternative management for urinary incontinence.