

EFFICIENCY OF EXTRACORPOREAL MAGNETIC INNERVATION (EXMI) IN URINARY INCONTINENCE: A SYMPTOMATIC ASSESSMENT

Aims of Study

Urinary incontinence (UI) is a most common disorder in aging people (incidence of 9.5 to 49%), with minimal occurrence in young. Several therapeutic and surgical modalities are available for this problem, conferring widely differing degrees of outcome in subjective and objective analyses (1,2). Electrical stimulation or magnetic innervation are the most common non-invasive methods employed for UI and studies have shown restoration of urinary continence (2,3,4). The present paper subjectively assess the efficiency of extracorporeal magnetic innervation on urinary incontinence in Singaporean patients by using NEOCONTROL™ pelvic floor therapy system.

Methods

A total of 66 patients (23 males and 43 females) were subjected to ExMI treatment for urinary incontinence. The mean age of the males and females were 55.3 ± 18.5 (range 27-77 years) and 56.2 ± 15.3 (range 29-84 years), respectively. The mean number of treatment session was 7.7 ± 3.8 and 10.4 ± 4.8 for males and females. In both group, the treatment duration was 20 minutes with a slow and fast frequencies. Subjective evaluation was done according to the questionnaires developed by NEOTONUS Inc, which assessed patients conditions before and after treatment. Patients recorded the frequencies of voids and leaks, number of pads used and the impressions of magnetic innervation therapy system as improved, slightly improved and no improvement. Improved condition of incontinence was defined as reduced frequency by 50% or more.

Results

In Men, improvement in 57.1% and slight improvement in 9.5% was recorded; while no improvement was cited by 29%. Before treatment, 88.2% men had frequency symptoms and after treatment frequency symptoms recurred in 53.8%. Because of inconvenience 13% stopped the ExMI treatment. In women, improvement in 35.1% and slight improvement in 37.8% was observed; while no improvement was cited by 24.3%. Before treatment, 66.7% women had frequency symptoms and after treatment frequency symptoms recurred only in 7.4%. Because of inconvenience 9.3% stopped the ExMI treatment. The symptom improvement rate was found to be higher in men with minimal treatment sessions. However, recurrence of frequency symptoms was more in men. In both sexes, no significant adverse events were evident, except a perineal itch in a single female patient.

Conclusions

Subjective assessment revealed that ExMI provides satisfactory outcome in the restoration of continence in male and female patients, particularly frequency symptoms, without any pain during treatment. Satisfactory outcome was more evident in men and men needs less number of treatment session than women.

(The study was done in conjunction with Society for Continence (SFCS), Singapore)

References

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