Report presented at AUA (American Urology Association) San Diego May 2016 Double Blind RCT into effects of QRS-PelviCenter on sexual function of women

Title: Effect of pulsed magnetic stimulation on sexual function in couples with incontinent partners

Introduction and Objective

The 5th International Consultation on Incontinence recommends that research in female stress urinary incontinence (SUI) should assess treatment impact on sexual function. Recent published studies have highlighted the interdependence between male and female sexual function. We evaluated the effect of the under-studied non-surgical treatment pulsed magnetic stimulation (PMS) on sexual function in female subjects with SUI and their partners.

Methods

Couples with female SUI partners, at least 21 years old and sexually active were recruited. SUI subjects received 16 or 32 PMS sessions (twice a week) depending on treatment response. Treatment responders were defined as a 5-point reduction in the International Consultation on Incontinence Questionnaire for Urinary Incontinence-Short Form (ICIQ-UI SF) (range 0 to 21). Prior to and at 6-months post-treatment, the female subjects completed the ICIQ-UI SF, while both partners completed two key parameters; i) Golombok Rust Inventory of Sexual Satisfaction (GRISS) questionnaire (range 0 to 96) and ii) single-item question on overall sexual experience, 'Over the past 4 weeks, how satisfied have you been with your overall sexual life?'. We chose the GRISS questionnaire because it is a highly recommended questionnaire by the 5th International Consultation on Incontinence with comparable male and female subscales to assess sexual function in couples, and has been translated and validated in the Malaysian population.

Results

53 of 66 couples (80.3%) completed reassessments at 6-months post-treatment. Mean reduction $(M_{diff}) \pm \text{standard error (SE)}$ in the ICIQ-UI SF score was -6.55 ± 0.46 (p<0.001). Based on the overall GRISS score, there were significant improvements in both female subjects $(M_{diff} -5.16, \text{SE } 1.31, p<0.001)$ and their partners $(M_{diff} -3.38, \text{SE } 1.21, p=0.008)$. Based on the single-item

question on overall sexual experience, there was a significant increase in the percentage of female subjects who felt 'moderately satisfied' or 'very satisfied' (p=0.032) but no significant change in their partners (p=0.330). Subgroup analysis showed that female subjects who received 32 sessions (M_{diff} -8.64, SE 2.09, p=0.015) had twice the mean reduction compared with 16 sessions (M_{diff} -4.03, SE 1.57, p=0.002). In contrast, a longer treatment duration did not lead to significant improvement in sexual function of their male partners (M_{diff} -2.23, SE 2.64, p=0.414).

Conclusions

PMS improve sexual function of both the female subjects and their partners. Increasing the number of PMS sessions may further improve female sexual function.