

SEXUAL RESPONSE IN PATIENTS WITH SACRAL NEUROMODULATION FOR LOWER URINARY TRACT SYMPTOMS OR FECAL INCONTINENCE.

Hypothesis / aims of study

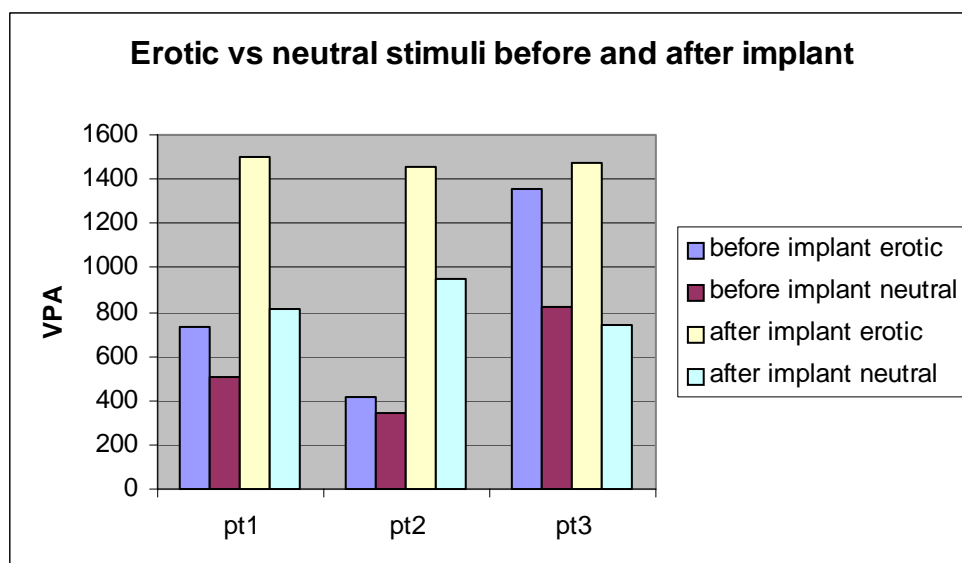
During routine patient follow-up for sacral neuromodulation (SNS) for urge-incontinence, urgency-frequency, urinary retention or fecal incontinence a number of patients reported improved sexual functioning after implant. This led to the question whether this improvement is because of physiological effects from stimulating nerves to the genital area or because of improved well-being by successful SNS therapy. This study is carried out to differentiate between the aforementioned reasons for improved sexual functioning in patients with SNS.

Study design, materials and methods

Female patients with abovementioned symptoms are included and asked to fill out three questionnaires at baseline and at 4 months after implant of a definitive Interstim SNS system. These validated questionnaires are used : the Symptoms Check List (SCL-90, Arrindell & Ettema, 1981), the Golombok Rust Inventory of Sexual Satisfaction (GRISS, Rust & Golombok, 1986) and the Maudsley Marital Questionnaire (MMQ, Arrindell & Schaap, 1985). In addition these patients underwent a vaginal plethysmography to measure physiologic response to visual erotic stimuli and at neutral stimuli both at baseline and after implant. The questionnaires are interpreted by a medical psychologist and data is statistically analyzed using SPSS 11.5 for Windows (SPSS inc., USA)

Results

Nine patients finished the baseline questionnaires. Three patients completed both the questionnaires at baseline and after implantation and both fotoplethysmography sessions. Six patients refused to undergo one or both plethysmography sessions and left the study. Therefore we analyzed only the data from the three patients who had complete data. Evaluation of the questionnaires shows no consistent differences in sexual functioning between baseline and post-implant in these three patients. The VPA (vaginal pulse amplitude) showed in all three patients increased blood flow after implant when stimulated and decreased blood flow when watching neutral videos.



Interpretation of the results

The results of this study show that sacral neuromodulation has effect on sexual functioning in female patients. These patients show increased vaginal blood flow when stimulated, but report no changes in their pre- and post implant questionnaires. Therefore this improvement is probably due to a physiologic effect of sacral neuromodulation on the genitals. This is in accordance with other experimental research where a discrepancy between physiological and mental sexual arousal in females was found. Females are suspected to be more dependent on contextual situations to achieve optimal sexual arousal. It might be interesting to assess the self reported sexual well-being after a longer period of follow-up. However larger numbers of patients are needed to confirm these preliminary results.

Concluding message

Sacral neuromodulation seems to improve sexual function. This effect seems to be caused by a direct physiological response.

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