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CONSERVATIVE TREATMENT OF CHRONIC FEMALE URINARY RETENTION: LIFESTYLE INTERVENTION AND POSTERIOR TIBIAL NERVE STIMULATION

Hypothesis / aims of study

Female non-obstructive urinary retention represents an uncommon condition typically associated with urinary tract infection (UTI) and subsequent irritative symptoms. Aim of the study was to demonstrate the effectiveness of posterior tibial nerve stimulation (PTNS) to obtain a satisfactory bladder emptying.

Study design, materials and methods

Between September and December 2016 we prospectively recruited 20 patients aged between 35 and 72 years old presenting with uncomplete urinary retention caused by underactive bladder. All patients had a normal or hypotonic pelvic floor. Exclusion criteria were the following: patients with neurological disorders, diabetes mellitus, BMI >25, postural alternations, high grade bladder prolapse. All patients complained of increased urinary frequency, reduced/interrupted urinary output and recurrent UTIs. Patients evaluation included the following: urinary diary, pressure/flow studies with EMG, and physiotherapeutic evaluation consisting of bladder training, postural modifications in the micturition, manual voiding facilitatory maneuvers and PTNS (10 weekly sessions of 20 minutes with continuous 20 Hz 200 msec electrical stimulation). Four weeks after PTNS, patients repeated urinary diary, ultrasound evaluation of postvoid residual, and were administered a PGI-I questionnaire.

Results

At pretreatment evaluation, patients showed between 10 and 15 daily micturitions, with a PdetQmax and a postvoid residual respectively ranging between 2 and 12 cm H₂O and between 80 and 150 mL at pressure/flow studies. Four weeks after PTNS, patients showed a significant reduction in the number of daily micturitions, ranging between 7 and 9, with in a significant improvement in postvoid residual volume, ranging between 50 and 90 (p<0.05) and a PGI-I questionnaire score ranging between 1 and 3.

Interpretation of results

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Concluding message

Despite the small number of patients included, our preliminary results support the role of PTNS and physiotherapy as feasible and low-cost therapeutic options for female urinary retention. However, larger studies with longer follow-time are needed to further validate our findings.

References

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Disclosures

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