

ELECTRICAL STIMULATION HAS HIGH UTILITY OUTSIDE CLINICAL TRIALS

Aims of Study

The efficacy of trans-vaginal electrical stimulation for detrusor instability has been shown in multiple clinical trials. This report describes the clinical utility of this modality in outside formal research trials.

Methods

This is a case series from a tertiary care, referral practice in a metropolitan setting. All patients listed on the equipment supplier purchase/rental lists between July 2000 and December 2001 were included. The corresponding clinical charts were reviewed to verify initial equipment acquisition and the subsequent clinical progress. Relevant demographics, anticholinergic use, and contributory medical, neurologic and surgical history were recorded. The clinical response was measured subjectively during standard clinical follow-up discussions. Patients who reported complete resolution of their presenting symptoms were defined as "cure". "Improvement" included patients who were not cured but reported improvement. All other patients were categorized as "no response".

Results

The cohort of 59 women who planned electrical stimulation treatment had a mean age of 60 years (28-83), were all Caucasian, most were parous (83%). The presenting symptoms included: urge incontinence 35 (59%), urgency, frequency without incontinence 6 (10%) and mixed urinary incontinence 17 (29%). Current use of anticholinergic therapy was reported by 20 (35%) of patients. An additional 3 (5%) reported previous anticholinergic use. Nine patients did not return following the visit in which electrical stimulation was recommended. Fifty patients acquired equipment but six did not use equipment for a variety of reasons, including changes in medical condition, costs or geographic relocation, and changes in treatment selection. The remaining patients followed up as clinically appropriate, typically within 2-3 months of initiating stimulation therapy. Sixty-six percent of those 44 patients starting therapy were cured (10 pts - 23%) or improved (19 - 43%). The improved patients reported 10-85% resolution of their symptoms with a mean resolution of 50%. Fifteen patients did not respond (34%), including five patients with known systemic neurologic disease (Parkinsons, MS).

Conclusions

Transvaginal electrical stimulation has high clinical utility outside clinical trials and results in subjective cure/improvement over 60% of treated patients who return for follow-up. Systemic neurologic disease appears to decrease response rate. This suggests that this modality should precede neuromodulation implants in the majority of patients. The clinical acceptability as measured by equipment acquisition and use is high, although 15% of patients agreeing to this form of treatment did not return for a scheduled follow-up visit.