INTRAVESICAL ELECTRICAL STIMULATION TREATMENT FOR OVERACTIVE BLADDER SYNDROME: A PILOT STUDY

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HYPOTHESIS/AIMS OF STUDY

• Intravesical electrical stimulation (IVES) may increase urodynamic bladder capacity and improve detrusor overactivity in pediatric patients with spinal dysraphism and neurogenic bladder
• Limited study of this treatment modality in the neurologically intact adult population
• Pilot study of safety and efficacy of IVES in women with urinary urgency and/or urgency urinary incontinence

MATERIALS AND METHODS

• IVES performed in women with OAB-wet (≥3 episodes of urgency incontinence in 3-day voiding diary) or OAB-dry (frequency ≥8/day or nocturia ≥2/night) who failed prior medical therapy
• Exclusion criteria
  • Neurogenic bladder
  • Stress-predominant incontinence
  • Recent OAB therapy
• Treatment regimen
  • 8-Fr Detruset™ IVES catheter (EMED, El Dorado Hills, CA)
  • Twice-weekly treatments for 4 weeks
• Primary outcome
  • PGI-I (Patient Global Impression of Improvement) at 3 months after initial treatment
• Secondary outcomes
  • Visual Analog Scale (VAS) for symptom severity
  • Short Form OAB Questionnaire (OAB-q SF)
  • Pelvic Floor Distress Inventory (PFDI)
  • Pelvic Floor Impact Questionnaire (PFIQ)
  • Reduction in frequency and UUI on 3-day voiding diary
• Statistical analysis
  • Paired t-tests, non-parametric Wilcoxon signed rank tests
  • p<0.05 considered significant

RESULTS

• 17 subjects completed the study
• Mean age 60.8 years
• 14/17 (82%) of subjects improved on PGI-I (Figure 1)
  • “A little better”: 11 subjects
  • “Much better: 2 subjects
  • “Very much better: 1 subject
• Improvement in bother scale, OAB-q SF, POPDI-6, UDI-6, PFIQ-bladder, urinary frequency, pad changes (Table 1)
• 1 UTI during study period

CONCLUDING MESSAGE

• IVES is safe and demonstrates efficacy during early follow-up period as measured by patient perception and validated questionnaires
• Larger studies with longer follow-up needed

DISCLOSURES

This study was funded by EMED Technologies, Inc.

REFERENCES