

Conclusions: Salvage spiral sling techniques are a satisfactory alternative treatment for refractory stress urinary incontinence. When synthetic material cannot be used, autologous tissue can provide similar results. When the bladder is perforated unilaterally, a lateral spiral sling can be used on the contralateral side.

Editorial Comment

This paper discusses the use of a salvage spiral urethral sling in a very difficult to treat patient population, that is, females who have failed multiple vaginal operations for urinary incontinence. The authors provide an excellent technical analysis and state that when using this technique they are able to salvage approximately three out of four. Of interest is that they describe the use of both autologous fascia as well as synthetic graft. Operative tactics are described in the event of a bladder injury at the time of dissection (laterally placed spiral sling); this is very valuable in view of the potential for injury during the periurethral dissection in this patient population with a history of multiple surgeries. In addition, the authors discuss the use of this operation as opposed to the use of artificial urinary sphincter. Given the success rate of this operation mirrors that reported for artificial urinary sphincter in female patients, it has a potential to achieve a great deal of popularity in this very difficult to treat population (1).

Reference

1. Thomas K, Venn SN, Mundy AR: Outcome of the artificial urinary sphincter in female patients. *J Urol.* 2002; 167: 1720-2.

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Long-term durability of percutaneous tibial nerve stimulation for the treatment of overactive bladder

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Purpose: The Overactive Bladder Innovative Therapy Trial during phase 1 was a randomized trial demonstrating comparable effectiveness of percutaneous tibial nerve stimulation and extended-release tolterodine during 12 weeks of therapy for frequency, nocturia, urgency, voided volume and urge incontinence episodes. In this second phase of the Overactive Bladder Innovative Therapy Trial we assessed the sustained therapeutic efficacy of percutaneous tibial nerve stimulation in subjects with overactive bladder during 1 year.

Materials and Methods: After 12 weeks subjects randomized to weekly percutaneous tibial nerve stimulation with Urgent((R)) PC were offered an additional 9 months of treatment with assessments at 6 and 12 months from baseline. Outcome measures included voiding diary data, overactive bladder questionnaires, global response assessments and safety assessments.

Results: A total of 33 percutaneous tibial nerve stimulation responders continued therapy with 32 and 25 subjects completing 6 and 12 months of therapy, respectively. Subjects received a mean of 12.1 treatments during an average of 263 days, with a mean of 21 days (median 17) between treatments. Subject global response assessments showed sustained improvement from 12 weeks at 6 and 12 months, with 94% and 96% of responders, respectively. At 12 months mean improvements from baseline included a frequency of 2.8 voids daily ($p < 0.001$), urge incontinence of 1.6 episodes daily ($p < 0.001$), nocturia with 0.8 voids ($p < 0.05$) and a voided volume of 39 cc ($p < 0.05$). Overactive bladder questionnaire symptom severity was significantly improved from 12 weeks to 12 months ($p < 0.01$) as well as from 6 to 12 months ($p < 0.01$). No serious adverse events occurred.

Conclusions: Statistically significant overactive bladder symptom improvement achieved with 12 weekly percutaneous tibial nerve stimulation treatments demonstrates excellent durability through 12 months. The durability of response demonstrates the effectiveness of percutaneous tibial nerve stimulation as a viable, long-term therapy for overactive bladder.

Editorial Comment

In this study, the authors reviewed the response of patients to percutaneous tibial nerve stimulation (TTNS) over a one year time period. Of the 44 subjects enrolled in the trial, 35 responded to the therapy and of those 35 patients, 33 chose to continue on with the treatment. As noted by the authors, this trial identified that the symptom improvements obtained after the initial 12 treatments were able to be continued with routine ongoing therapy. The authors identified that a longitudinal 30 minutes session every 3 weeks would help keep the symptomatic response durable.

This is an important paper to review especially in view of the increasing popularity of this technology for the treatment of the overactive bladder. Its efficacy, when used with patients who are refractory to medication, raises the consideration for use as a first line therapy. The fact that after the initial 12 weeks sessions, a treatment every three weeks sustains the symptoms makes it an attractive alternative to daily anti-cholinergic therapy. The economic comparisons of the two long term results will be very interesting. Also exciting is the potential use for patients in the institutional setting in which the side effects of anti-cholinergics such as cognitive disorder, xerostomia, and constipation could be avoided by an every 3 week bedside treatment.

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A multicenter, randomized, controlled trial of transureteral and shock wave lithotripsy -- which is the best minimally invasive modality to treat distal ureteral calculi in children?

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