Deep Lateral Transurethral Incisions for Recurrent Bladder Neck Contracture: Promising 5-Year Experience Using a Standardized Approach

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OJBECTIVE: To evaluate our 5-year experience with deep lateral transurethral incisions of bladder neck contracture (TUIBNC), identify risk factors associated with failure of procedure, and assess outcomes of men subsequently treated for concomitant or de novo stress urinary incontinence (SUI).

MATERIALS AND METHODS: We reviewed 50 consecutive patients who underwent TUIBNC between June 2007 and January 2012. TUIBNC was standardized to include initial dilation followed by deep transurethral incisions. All patients were evaluated cystoscopically after a 2-month interval; those with recurrent bladder neck contracture (RBNC) underwent a second TUIBNC. For patients with concomitant SUI, we assessed the timing between TUIBNC and subsequent artificial urinary sphincter (AUS) placement and its outcome. Perioperative characteristics were reviewed to identify factors associated with failure.

RESULTS: Of the 50 patients analyzed, most were refractory, 78% having failed previous TUIBNC. After TUIBNC, 72% required no further surgery for obstruction at a mean follow-up of 12.9 months. Of the 14 who failed initial TUIBNC, 7 underwent repeat TUIBNC with success, representing an overall success rate of 86% after 2 procedures. Significant factors associated with treatment failure were >10 pack/year smoking history (P = .039) and ≥ 2 previous endoscopic BNC procedures (P = .03). Of 39 men (78%) with concomitant SUI, two-thirds underwent AUS placement after an average of 2.9 months after TUIBNC. Only 2 of 26 (8%) patients required repeat transurethral procedures after AUS placement for RBNC.

CONCLUSION: Deep lateral TUIBNC alone is a highly effective treatment modality for RBNC. Smokers and those having 2 or more previous transurethral procedures appear to have greater risk for failure. Subsequent AUS placement can be safely performed with >90% long-term urethral patency.