

## SUCCESS OF BULKING INJECTIONS FOR PATIENTS WITH SUBOPTIMAL RESPONSE TO SURGERY FOR STRESS URINARY INCONTINENCE (SUI)

### Hypothesis / aims of study

An expanding population of women are experiencing suboptimal results with incontinence surgery. Because these patients are often reluctant to pursue further surgery, defining outcomes of alternative therapies is a critical aspect of developing treatment algorithms. This study aims to investigate efficacy of bulking agents in patients with persistent SUI following sling.

### Study design, materials and methods

Retrospective review of records of 33 patients with SUI post-sling who received bulking agents between 6/1999 and 5/2008 were evaluated for demographics, voiding symptoms, urodynamics, sling parameters, concomitant procedures, bulking agent characteristics, pads per day (PPD), outcomes, and complications

### Results

Mean patient age was 65 years (41-82) with mean follow-up of 5.6 months (0-21). The majority (70%) presented with mixed incontinence, however, detrusor overactivity was demonstrated in only 18%. Prior incontinence surgeries included 22 (66.7%) autologous fascial pubovaginal slings and 11 (33.3%) midurethral slings. Eighteen (55%) had concomitant pelvic surgery. Mean Valsalva leak point pressure was 67 cm H<sub>2</sub>O (30-100). Mean of 3 injections of commonly employed agents was performed. There was a significant reduction in mean PPD, from 5.2 to 1 (p=0.0019). While 57% reported no pad use, 8 (24%) described subjective cure, 19 (58%) partial subjective improvement, 1 (3%) no change, and 4 (12%) had worsened symptoms. Almost half (45%) of patients with mixed urinary incontinence noted improvement or cure (p=0.00032). Complications included one patient with transient urinary retention, 15% incidence of urinary tract infections and 9% de novo urgency. Overall, 82% of patients reported persistent SUI, which was not associated with number or type of injections. Urinary status did statistically correlate with outcome with 21 (96%) of mixed urinary incontinence patients vs. 6 (60%) of isolated SUI patients having post-injection SUI (p=0.0279).

### Interpretation of results

There was no association between number or type of injection or type of sling and complication, surgical outcome, urodynamic or concomitant surgery parameter. This is the first series evaluating the efficacy of bulking agents for SUI following surgical failure. Although a majority of mixed incontinence patients had recurrent SUI, bulking agents provided over 75% of women symptom improvement.

### Concluding message

This study provides essential information in planning future prospective investigations to define the value of bulking agents in refractory SUI.

<b><i>Specify source of funding or grant</i></b>	<b>none</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>Vanderbilt University IRB</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>