LAS VEGAS — Although women who had more severe stress urinary incontinence were more likely to require repeat injections, they were also more likely to respond to transurethral bulking agent injection therapy, results of a retrospective review of 124 cases showed.

“Clinical and urodynamic parameters may help predict treatment response and the likelihood of needing repeat treatment, such that patients with indicators of more severe incontinence have a significantly better treatment response, although they may require repeat injections to achieve this result,” said Dr. Deborah R. Karp of the Cleveland Clinic Florida in Weston, who presented the results at the meeting.

The patients all underwent transurethral bulking with Urolast’s Macroplastique (MPQ) between July 2007 and September 2009. They had a mean age of 74 years and a mean body mass index of 28 kg/m2. Two-thirds had undergone previous anti-incontinence surgery, and 15% had previously received a different bulking agent.

A self-report incontinence severity scale was used, in which 0 was complete continence, 1 indicated one or two incontinence episodes per day, 2 indicated three or four episodes per day, and 3 indicated more than five episodes per day.

Treatment response (defined as a decrease by at least 1 point on the incontinence severity scale), was reported by 61% (76) of the women, whereas the other 39% (48) reported treatment failure (defined as either no change or an increase in the score).

Of the 76 responders, 66% (50) were treated with a single injection, whereas the rest (26) required multiple injections to achieve a response. The strongest variable associated with a positive treatment response was previous anterior colporrhaphy (odds ratio, 2.8). Other significant predictors included a maximum urethral closure pressure (MUCP) of less than or equal to 40 cm H2O (OR, 2.6), clinical reporting of mixed incontinence (OR, 2.4), use of three or more pads per day (OR, 2.1), five or more incontinence episodes per day (OR, 2.1), or a first leak of less than 50 ml on cystometry (OR, 2.0).

Factors found not to be associated with treatment response included urethral hypermobility, Valsalva leak point pressure (VLPP), previous sling, and the volume of MPQ injected, Dr. Karp reported.

A secondary analysis examined the combined group of 26 responders and 16 nonresponders who received repeat injections. Variables associated with the need for repeat treatment included indicators of more severe incontinence, including leak point pressure of 60 cm H2O or lower (OR, 7.3), history of urethroylisis (OR, 6.2), low MUCP (OR, 3.5), VLPP of 60 cm H2O or lower (OR, 3.5), five or more incontinence episodes per day (OR, 3.0), and a positive empty supine test (OR, 2.7).