Hollywood, Fla. — The single-incision midurethral sling is a safe and effective treatment for stress urinary incontinence, with an 89% cure rate at 1 year after the procedure, based on the results of a small prospective study.

Although the intraoperative complication rate was low—6%—a cystoscopy should be performed immediately after the sling procedure to rule out any inadvertent ureteral injury, Dr. Bilal Kaaki said at the annual meeting of the AAGL.

In his series, “there were two intraoperative complications—one bladder perforation and a urethral perforation,” said Dr. Kaaki, an ob/gyn in Waterloo, Iowa. “A cystoscopy can rule out any such injuries.”

Dr. Kaaki reported on his series of 31 patients who underwent the procedure at Allen Memorial Hospital in Waterloo.

The patients’ average age was 56 years (range, 35-82 years).

Their mean body mass index was 32 kg/m²; they had borne an average of three children. All had a diagnosis of stress urinary incontinence, and 16% had undergone previous surgery for urinary incontinence.

The sling—a hammock-shaped polypropylene mesh—was inserted transvaginally through a single incision at the midurethral level.

The self-fixating tips were anchored in the obturator internus muscles.

Tension was adjusted intraoperatively by response to the cough stress test.

Patient response was measured at baseline and at 1 week, 2 months, and 1 year after the surgery. Measures included the cough stress test, the Urogenital Distress Inventory Short Form (UDI-6), and the Incontinence Impact Questionnaire (IIQ-7).

“At 1 year, there was an objective cure rate of 92%, as measured by a negative finding on a standing cough stress test. The patients who failed the stress test at 1 year also had reported stress incontinence at the 2-month visit, but elected to have no further treatment,” Dr. Kaaki said.

At 1-year follow-up, the cure rate was 89%. Compared with baseline scores, scores at 1 year on both the UDI-6 and IIQ-7 were significantly reduced. Changes in these scores were not significantly associated with age, body mass index, parity, or prior surgery.

Also at 1 year, 60% of the group reported the surgery as “very successful,” and 33% reported it as “moderately successful.”

There were three postoperative complications: two cases of urinary retention that required release of the surgical tape and one case of pyelonephritis. There were no erosions, extrusions, or infections, and no hematomas or blood transfusions.

Dr. Kaaki said the procedure has the potential of being performed in the office, but more research is needed for validation.

More Procedures, More Elderly Seen in SUI Surgery Trends

Hollywood, Fla. — Women 65 years and older account for a growing proportion of surgeries for stress urinary incontinence in the United States, based on a study of inpatient trends from 1993 to 2006.

“Providers are not shying away from procedures in the elderly,” Dr. Alison Catherine Weidner said at the annual meeting of the American Urogynecologic Society.

This study of the Nationwide Inpatient Sample (NIS) also reveals a dramatic increase in stress urinary incontinence (SUI) procedures around 2002. This spike in numbers coincides with the 2001 publication supporting the efficacy of midurethral slings, Dr. Weidner said (Int. Urogynecol. J. Pelvic Fertil. Physiol. 2001;12(suppl. 2):S7-8).

The promotion of new tension-free vaginal tape systems for midurethral slings may account for some of the increase, a meeting attendee commented.

“It was increased clinical use in response to marketing, but also to good data,” replied Dr. Weidner, chief of the division of urogynecology in the department of obstetrics and gynecology at Duke University Medical Center, Durham, N.C. The database tracks the number of procedures by ICD-9 coding. Another meeting attendee asked if any coding changes could account for the jump.

“Coding practices were actually quite stable,” Dr. Weidner said. “We compared ICD-9 coding books from year to year, and the wording did not change much.”

The total number of SUI inpatient surgeries increased over time—from about 18,500 in 1993 to 114,600 in 2002; the number fell slightly to about 95,600 in 2006, the last year of the study.

Dr. Weidner, lead author Dr. Jennifer M. Wu, and their associates assessed both urinary incontinence ICD-9 diagnosis code and ICD-9 SUI procedure codes to calculate the total number of such surgeries per year in women aged 20 and older.

The rates of SUI procedures in elderly versus nonelderly patients (defined as those younger than age 65 years) changed over time as well. “In 1993, rates were fairly similar,” Dr. Weidner said. But rates were significantly different in 2006: 124/100,000 elderly vs. 76/100,000 among nonelderly patients that year. Age-adjusted rates were calculated using 2000 U.S. census data.

“Since 1997, the introduction of the midurethral sling [has] changed practice patterns,” Dr. Weidner said. For example, in 1993, “other repair” of SUI accounted for 34% of procedures. “There was a dramatic shift in 2006 to other repair of SUI being most common at 72%,” Dr. Weidner said. In the first year of the study, retropubic suspensions comprised 47% of procedures but only 17% in 2006. At the same time significant decreases in “less effective” procedures such as Kelly plication and needle suspensions were observed, with rates dropping below 2% each in 2006. ■