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Korni R[1], McConnville J[1], Buchsbuam G [1]
1. University of Rochester Medical Center

OUTCOME OF TRANS-VAGINAL RADIO FREQUENCY FOR TREATMENT OF WOMEN WITH STRESS URINARY INCONTINENCE

Hypothesis / aims of study

To assess treatment outcome and patient acceptance of the SURx procedure (transvaginal application of radio frequency to the endopelvic fascia) for genuine stress urinary incontinence.

Hypothesis based on clinical observation: Our cure and improvement rates with the SURx procedure are lower than those reported in initial studies.

Study design, materials and methods

A retrospective chart review of 18 women, who were treated with the SURx procedure between January 2003 and April 2004 for genuine stress urinary incontinence, was conducted. Data on demographic variables, urodynamic findings, number of daily leakage episodes pre- and post-operatively, perioperative complications, patient satisfaction, and need for subsequent interventions were extracted from the medical records. Outcome data were tabulated.

Results

The mean (range) patient age was 57.8 (40-78) years. The mean parity was 2.6 (0-6). BMI was 28.75 (22-45). Pre-operatively all women had stress urinary incontinence with a mean VLPP of 150 cm H2O (120-222). Concomitant urge was present in seven (41%) of the women. The mean number of leaks per day pre operatively was 5.7 (1-18). All the patients were treated as outpatients. Total application time of radio frequency to both sides was 188 seconds (160-265). There were no intra-operative or device related complications.

Subjectively, one patient (5.9%) was continent, 4 (23.5%) patients were $\geq$ 50% improved, and 10 (58.8%) were unimproved following the SURx procedure. Based on 24-hour voiding diaries available on 17 of the patients, the average number of leaks per day was reduced to 2.7 (0-5). Post operatively, eight out of seventeen (47.1%) patients had a positive cough stress test.

Five (29.4%) patients reported they were extremely satisfied with the SURx procedure. One (5.9%) patient was satisfied, and nine (52.9%) patients were not satisfied. Seven (41.2%) patients sought additional treatments for their incontinence within one year. Four of these women underwent placement of a TVT, and one patient had a Burch colposuspension. Two more patients were fitted with a continence ring. Eight out of seventeen (47.1%) patients stated they would not recommend this procedure to others, two (11.8%) would recommend, and five (29.4%) would highly recommend this procedure.

Interpretation of results

SURx has been introduced as a minimally invasive procedure for the treatment of mild to moderate stress urinary incontinence with very low surgical risks and short recovery time. Initial reports on short-term outcomes of the SURx procedure were encouraging. At 3 and 6 months, 57-63% of patients had one or fewer incontinence episodes per day. At 12 months, 76% of patients did not leak with Valsalva. (1, 2) We were able to replicate the SURx procedure as outpatient treatment without perioperative complications. However, we were not able to replicate previously reported treatment outcomes. Low treatment success rate, low patient satisfaction, and low acceptance, as well as a high rate of additional treatment requirement led us to discontinue SURx as a treatment option.

Concluding message

For a surgical procedure to prevail as a treatment option, it is important that results can be replicated by a majority of adequately trained physicians. By reporting our individual outcomes, good or bad, we add to our collective experience. Hence, it is important, that both

the short-term experience of more individuals is gathered, and that the long-term outcome data of the initial studies be made public.

References:

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