

Transurethral Radiofrequency Energy Treatment for Stress Urinary Incontinence (SUI)

- *50 year old woman with 22 year history of SUI*

■ Patient Profile

A 50 year old woman presented to her gynecologist complaining of a 22 year history of urinary incontinence. She most frequently leaked with laughing, coughing, sneezing, positional changes, and recreational activities. She had no history of urinary tract infection and no symptoms of urgency, frequency, or nocturia. Her previous incontinence treatment had been pelvic floor exercises and had resulted in no improvement in her leakage.

■ Medical History, Physical Examination, and Urodynamics

The patient had a history of hypothyroidism for which she currently was taking Synthroid. Her childbirth history included two uncomplicated spontaneous vaginal deliveries. Her Incontinence Quality of Life (I-QOL)¹ score was 60 points on the 100-point quality of life scale. Baseline 3-day daily urinary diary demonstrated that she experienced an average of seven incontinence episodes each day and changed her incontinence pad 2-3 times per day.

The patient stood 5'8" tall and weighed 268 pounds (BMI = 40.8). The diagnosis of stress incontinence was made. A pelvic exam revealed minimal pelvic organ prolapse (Stage I POP-Q²). Cystometrogram demonstrated a normal bladder capacity and normal detrusor function.

■ Non-Surgical, Transurethral Radiofrequency Energy Treatment

The patient underwent non-surgical, transurethral radiofrequency energy collagen denaturation of microscopic sites within her bladder neck and proximal urethral submucosa. The patient received intravenous conscious sedation (the treatment can also be performed under local plus oral anesthesia). The treatment was uncomplicated and required approximately 25 minutes (including perineal preparation and draping). After a brief recovery period, the patient was discharged home, at which time she categorized her post-treatment level of pain as "3" on a visual analog scale (the scale ranges from "0 – no pain" to "10 – terrible pain"). She was instructed to avoid strenuous activities and sexual intercourse for one week, and she was allowed to return to her regular home or employment activities.

■ Patient Recovery and Follow-Up

The patient was followed periodically for 12 months, during which time she experienced no adverse events. By month three following treatment, her daily episode frequency was reduced by 71% (to 2 daily episodes) and remained constant through month 12, her pad use had decreased significantly, and her I-QOL score had increased to 91 points on the 100-point quality of life scale.

	Pre-Treatment	12 Months Post-Treatment
Incontinence Episodes	7/day	2/day
Pad Use	2-3/day	1/day
I-QOL Score	60	91

References

- 1 Wagner TH, Patrick DL, Bavendam TG, et al. Quality of life in persons with urinary incontinence: development of a new measure. *Urol* 47:67-72, 1996.
- 2 Bump RC, Mattiasson A, Bo K, et al. The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. *Am J Obstet Gynecol* 175(1):10-17, 1996.