

Transurethral Radiofrequency Energy Treatment for Stress Urinary Incontinence (SUI)

■ *61 year old nulliparous woman with SUI*

■ Patient Profile

A 61 year old woman was referred to a urologist with a three year history of urinary incontinence associated with coughing, sneezing, laughing, walking, and recreational activities. She denied symptoms of urgency and had no history of urinary tract infections.

■ Medical History, Physical Examination, and Urodynamics

The patient had never given birth. She had previously undergone total abdominal hysterectomy. She suffered from hypertension and hyperthyroidism. Her medications included Metoprolol, Synthroid, and Premarin. The patient’s Incontinence Quality of Life (I-QOL)¹ score was 53 points on the 100-point quality of life scale. Baseline 3-day daily urinary diary demonstrated that she experienced an average of eight incontinence episodes daily.

The patient stood 5'7" tall and weighed 200 pounds (BMI = 31.4). The diagnosis of stress urinary incontinence was made. A pelvic exam was normal. Cystometrogram demonstrated a normal bladder capacity and normal detrusor function, and her leak point pressure was 62 cmH₂O.

■ 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 32 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 “0” 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. At three months following treatment, she leaked once per week (a 98% reduction). At 12 months following treatment, she was completely continent, her I-QOL score had increased to 78 points on the 100-point quality of life scale, and she was unable to demonstrate a leak on leak point pressure testing.

	Pre-Treatment	12 Months Post-Treatment
Incontinence Episodes	8/day	0/day
I-QOL Score	53	78
Leak Point Pressure	62 cmH ₂ O	no leak

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.