**ABSTRACT:**
Purpose: We investigated the effectiveness and durability of transurethral microwave thermotherapy in the treatment of chronic nonbacterial prostatitis using 2 new prostatitis specific assessments in a randomized, double-blind, sham controlled trial.

**MATERIALS AND METHODS:**
Patients with nonbacterial prostatitis were randomly assigned to receive either transurethral microwave thermotherapy or sham therapy. Patients were assessed using a symptom severity index and symptom frequency questionnaire. These 2 new prostatitis symptom assessment tools were validated by applying them to 30 similar patients without prostatitis. All nonresponders received transurethral microwave thermotherapy at 3 months and were reassessed at 6 months. Long-term followup of the responder group averaged 21 months.

**RESULTS:**
The symptom severity index and symptom frequency questionnaire were confirmed to be valid for symptom assessment in prostatitis patients. The transurethral microwave thermotherapy group benefited from therapy compared to the sham group. Of the sham group 50 percent had a favorable response after subsequent transurethral microwave thermotherapy. The 7 responders in the treatment group continued to improve during the subsequent 21 months.

**CONCLUSIONS:**
Transurethral microwave thermotherapy appears to be an effective, safe and durable treatment for some patients with nonbacterial prostatitis unresponsive to traditional therapy.