



InterStim Therapy for Urinary Control

Medtronic's InterStim Therapy for Urinary Control uses electrical stimulation of the sacral nerve to treat urinary urge incontinence, urine retention, and significant symptoms of urgency-frequency. In InterStim Therapy, the sacral nerves, which control the behavior of the bladder, sphincter, and pelvic floor muscles, are stimulated via a lead that is implanted adjacent to the sacral nerve. An extension connects the lead to a neurostimulator (about the size of a stopwatch), which is typically implanted under the skin of the lower abdomen.

Clinical studies have shown InterStim Therapy to be effective. After 12 months of InterStim Therapy, 82% of urgency-frequency patients voided increased in volumes of urine with the same or reduced degree of urgency, meaning they felt urgency only when their bladders needed to be emptied, rather than continually. After 6 months, 47% of patients with urinary urge incontinence were completely dry, and 77% reported that they no longer experienced unexpected, heavy wetting episodes. In addition, 53% of patients with urine retention no longer needed a catheter. A report in the June issue of the *Journal of Urology* supports the use of InterStim Therapy in the treatment of urgency-frequency.

Treatment with InterStim Therapy involves 3 steps: test stimulation, surgical implant, and postimplant follow-up.

- **Test stimulation.** The physician and patient can assess the effectiveness of InterStim Therapy in controlling symptoms through a diagnostic trial conducted over several days. If symptoms improve during the test stimulation period, the physician and patient determine whether to pursue InterStim Therapy as a long-term treatment.
- **Surgical implant.** If the test stimulation is successful, the neurostimulator is implanted under the skin in the lower abdomen. A small surgical opening is made over the sacrum and a lead is placed near the sacral nerve that influences bladder control. The other end of the lead is passed under the skin and connected to the neurostimulator.
- **Postimplant follow-up.** Following implant, the neurostimulator is activated. The neurostimulator sends mild electrical pulses via the lead to the sacral nerve. Adjustments to stimulation can be made to optimize the therapy.