

IMPLANTATION OF TWO INTERSTIM II NEUROSTIMULATORS WITH ABDOMINAL OR BUTTOCK POSITIONING

Hypothesis / aims of study

The implantation of neuromodulators is an accepted treatment option of urgency syndrome with urge incontinence, hypocontractile detrusor with urinary retention, stool incontinence, interstitial cystitis, and pelvic pain syndrome. The size of the new Interstim II was reduced by 50% (compared to the Interstim) and the electrodes were modified to shorten the implantation time in order to increase treatment options.

Study design, materials and methods

Patients were recruited and scanned using a peripheral nerve evaluation (PNE) or the first of the two-step implant technique. After the successful testing phase, the chronic implantation is performed. The video illustrates the entire implantation step-by-step. The implantation can be performed with local or general anesthesia. In a prone position needles are placed bilaterally with x-ray control after identification of the foramen of the S3. The optimal position of the electrode tip is verified by the electrical provocation causing the invagination of the anal sphincter without any movement of the ipsilateral plantar flexure. Using the inducer kit, the chronic electrodes are positioned under x-ray control and external stimulation. The stimulator can be either placed subcutaneously in the lower abdomen or the buttock. The tunneled electrodes are connected by Interstim II's single screw prior to the incision closure. The programming of the Interstim II can be performed on the implantation day or later.

Results

The Interstim II improves surgical performance with an excellent cosmetic result. The lower abdominal implantation, which involves the turning of the patient, has been recently replaced by the buttock implantation. The benefits of utilizing the buttock location include reduction of the operating time as the new implant has no intermediate piece and requires only one screw to directly connect the electrode to the stimulator. No hematoma, local infection or any other problems have been noted in the postoperative follow-up period.

Interpretation of results & Concluding message

The Interstim II simplifies the surgical approach of neuromodulation. Four possible preset program options increase the effectiveness and the spectrum of indications for this treatment option.

<i>Specify source of funding or grant</i>	no funding or grant
<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	FDA approved surgical technique. Informed consent was obtained.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes