

Author(s):	D.-H. Zermann, H. Wunderlich, O. Reichelt, J. Schubert, R.A. Schmidt												
Institution, city, country	Department of Urology, University Hospital, Friedrich-Schiller-University Jena, Germany; University of Colorado, Denver, CO, USA												
Title (type in CAPITAL LETTERS, leave one blank line before the text)													
SACRAL NERVE STIMULATION – WHO BENEFITS FROM A BILATERAL APPROACH ?													
<p><u>Aims of the Study:</u> Unilateral sacral nerve stimulation is an accepted therapeutic option in the treatment of chronic urinary retention, urge incontinence and chronic pelvic pain. Published success rates vary between 64 and 75%. The neurophysiological background of the clinical success is still an unknown. Further clinical developments should focus on the improvement of success rates, i.e., by introducing bilateral sacral nerve stimulation.</p> <p><u>Methods:</u> A standard neurourological work-up, a percutaneous nerve evaluation and a temporary uni- and bilateral sacral nerve stimulation were carried out in 81 patients. Mean duration of temporary stimulation was 8.4 days. The therapeutic success was evaluated using history, micturition/ pain diary, cystometry, uroflowmetry and post void residual volume.</p> <p><u>Results:</u> 65 patients (80.2 %) were tested successfully. 71.6 % of all patients benefits from a unilateral stimulation only. However, 8.6 % needed a bilateral stimulation for therapy success. Looking in detail we found the following improvement rates comparing uni- and bilateral temporary sacral nerve stimulation:</p> <table style="margin-left: 40px;"> <tr> <td>1. chronic urinary retention</td> <td>80.6 %</td> <td>→</td> <td>86.2 %</td> </tr> <tr> <td>2. urge incontinence</td> <td>42.1 %</td> <td>→</td> <td>63.2 %</td> </tr> <tr> <td>3. chronic pelvic pain</td> <td>80.8 %</td> <td>→</td> <td>84.6 %</td> </tr> </table> <p>19.2 % of all patients did not respond on sacral nerve stimulation.</p> <p><u>Conclusions:</u> Patients with urge incontinence benefit most from a bilateral approach. 21.1 % of all patients suffering from urge were significantly improved during bilateral sacral nerve stimulation. For patients suffering on urinary retention and chronic pelvic pain a bilateral sacral nerve stimulation does not reveal a significant advantage. Because of the immense cost factor all patients should be screened primarily for the effect of unilateral sacral nerve stimulation. In case of failure a bilateral approach should be considered.</p>		1. chronic urinary retention	80.6 %	→	86.2 %	2. urge incontinence	42.1 %	→	63.2 %	3. chronic pelvic pain	80.8 %	→	84.6 %
1. chronic urinary retention	80.6 %	→	86.2 %										
2. urge incontinence	42.1 %	→	63.2 %										
3. chronic pelvic pain	80.8 %	→	84.6 %										