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## LONG TERM OUTCOME OF SACRAL ROOTS NEUROMODULATION FOR THE MANAGEMENT OF BLADDER PAIN SYNDROME: SINGLE CENTER EXPERIENCE

### Hypothesis / aims of study

Since its introduction on 80's by Thanago and Schmidt, and latter approval in 90's for the treatment of refractory overactive bladder, urge urinary incontinence and chronic nonobstructive urinary retention, sacral roots neuromodulation (SNM) has extended its indications to chronic constipation, female sexual dysfunction and bladder pain syndrome (BPS). We performed a retrospective evaluation of the results of SNM in our patients with refractory BPS who were managed with SNM.

### Study design, materials and methods

Since 1999 we have tested 19 patients with BPS refractory to third-line treatments following the algorithm of the International Consultation on Incontinence (behavioural modifications, oral medication and bladder hydrodistension under general anaesthesia). After the failure of conservative therapy, they were tested with SNM following the Tinedlead procedure (2 stages with fully percutaneous lead implant) a variable period of time and then, if symptomatic improvement was higher than 50%, they were permanent implanted.

### Results

Of 19 tested patients, 18 were female, with a mean age of 50.12 years (22-72). Mean time since symptoms starts and SNM treatment was 5.5 years (2-14). Mean following time of patients was 75 months (16-126). Of the 19 patients who underwent test stimulation, 15 achieved satisfactory response and elected permanent sacral nerve stimulator placement.

For the evaluation of our results, we reviewed medical histories and performed a telephone interview with each patient (performed by non-medical staff), asking for treatment satisfaction, current quality of life (QoL), if she/he would repeat the procedure/recommend to family or friends, and for changes in bowel or sexual function.

In the group of implanted patients, 10 (of 15) were satisfied or very satisfied with SNM, and the same of them reported an improvement in QoL. These patients also would repeat the procedure, and 2 more (12 of 15) would recommend to family or friends. Bowel and sexual function didn't change in most of patients.

5 of the initial 15 responders to SNM, developed late loss of effectiveness between 2-6 years after implant.

We had no cases of infection, hematoma or lead migration, but we had to explant the neuromodulator in 3 patients due to pain at local site of implantation and loose of effectiveness.

### Interpretation of results / Concluding message

In our experience, SNM plays a role in the management of patients with BPS because:

- It's a minimally invasive technique, which we perform under local anaesthesia and outpatient basis.
- Allows high degrees of satisfaction (66% of implanted patients satisfied or very satisfied in the long term)
- Improves QoL
- Could provide symptomatic long-term improvement in 1 in every 2 patients with refractory BPS, avoiding more aggressive/mutilating therapies.

### References

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### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It's an retrospective observational study with habitual information of clinical history **Helsinki not Req'd:** It's an retrospective observational study with anonymous information of clinical history **Informed Consent:** No