

MEETING ABSTRACT

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Sacral neuromodulation in sphincteric disorders

A Lavano

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Background

Various neurological pathologies can interest the inferior urinary tract determining bladder dysfunctions of two types: a) dysfunctions of the phase of filling: detrusorial hyperactivity and urethral hypoactivity that cause urinary urge-incontinence, b) dysfunctions of the phase of emptying: detrusorial hypoactivity and urethral hyperactivity that cause urinary retention or difficulty of emptying.

Neurogenic low urinary tract dysfunctions unresponsive to medical and conservative therapy are difficult to manage. Nowadays they can be treated with Sacral Nerve Stimulation (SNS), even if clinical experiences reported in literature are still limited.

Materials and methods

SNS is performed by means of a stimulation system of the sacral nerves (S3). A quadripolar electrode is implanted bilaterally in S3 foramen and a peripheral nerve evaluation test is performed; if a positive response is obtained (improvement < 50%) the electrode is connected to a subcutaneously-placed pulse generator. We performed SNS in 6 patients with neurogenic bladder: 3 patients had incontinence-urgency and 3 patients had urinary retention.

Results

Among cases with incontinence-urgency we achieved complete control of the bladder in 2 patients while in 1 number of the urinary losses was reduced by 80%. In 2 patients with urinary retention we obtained complete recovery of the bladder function, while in 1 number of the catheterisms/die was reduced by 50%, the urinary volume for micturition was increased and residual urinary volume was decreased. Results stay unchanged during the follow-up (maximum 26 months), except for one patient in which a partial loss of effectiveness occurred.

Conclusions

Chronic electric stimulation of S3 sacral roots via an implanted neuroprosthesis is therefore an effective, safe and promising therapeutic option in the treatment of neurogenic bladder dysfunctions.

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Reference

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