

S3 INTERSTIM TEST. THE LONGER THE BETTER?

Hypothesis / aims of study

Once has been proved the safety of a prolonged tined lead test in interstim therapy (1) the aim of this study is to confirm that performing a long time tined lead S3 test (media 5,5 weeks, maximun 12 weeks) in candidates to interstim therapy increases the rate of positive responses without an increased rate of adverse events or long term therapy failure

Study design, materials and methods

This is a retrospective study our serie of S3 root neuromodulation test in patients with overactive bladder and underactive detrusor since 2004 to 2011. We consider S3 therapy as a second line tratment so our protocol stablish, after S3 test is performed, a weekly visit in the office, until there is a subjetive and objetive results (patient opinion and urologist data) agreement in a positive response. We set a limit of three months for this test if no adverse events were recorded in the visits during the test time. At any time patient was able to stop the procedure. All patient gave specific informed consent

During the test patients completed a weekly bladder diary and ICIQ questionnaire. External generator was checked in each visit and adverse events were recorded as well as surgical wound inspected. Every visit at the office we marked the test as positive or negative acording to bladder diary data, ICIQ and patient opinion

We considered positive result a decrease of more than 50% in the urge and urge incontinence episodes and postvoid residual urine under 90 cc

We prolonged test time when patient refered partial results. If no results were showed in three weeks test was finished

Considering it is a second line treatment we stablished a period of three months maximun of test and never less than two weeks even with positive respond in the first two weeks

Results

Since 2004 We have performed 19 S3 tests in overactive bladder (OAB) patients and 12 with detrusor ubderactivity (DU) and increased postvoid residual urine. After 4 weeks of follow up we got an overall rate of 48% of positive responses that increased After 12 weeks to 86.2% of posiitive responses

Only two implanted pulse generatos (IPG) should be explanted due to therapy failure in this time and no increased rate of adverse events appeared during the test. Table 1 shows our weekly positive response rate

	Positive
2 weeks	6,89%
3 weeks	17,24%
4 weeks	17,24%
5 weeks	24,14%
6 weeks	3,44%
7 weeks	0,00%
8 weeks	0,00%
9 weeks	0,00%
10 weeks	6,91%
11 weeks	6,88%
12 sweeks	2,46%

table 1 overall rate of positive responds in each visit

Interpretation of results

S3 neuromodulation is an accepted second line therapy for OAB and detrusor underactivity. Trying to get the best possible results must be a goal to achieve in these patients

In our experience the rate of positive responses increases when the time of the test is prolonged (81,4% positive responses in detrusor underactivity and 91.4% in OAB)

After four weeks of test time we 37.8% of patients with DU and 47.1% of patients with OAB presented negative response that (Table 1) was considered positive after 12 weeks of test

NO adeseve events or wound infections higher rate were observed in long term test

A part of patients who reached week 7 of test with partial results, demostrated complete positive response three weeks later, this response is very important for us when we are involved in a second line therapy

Concluding message

Performing a long term S3 test we achive a higher rate of positives responses without increased rate of adverse events or long term therapy failure

Partial results in the first seven weeks should make us continuing the test because a part of patients will show a complete response

References

1. • VAN KERREBROECK. Medium-term experience of sacral neuromodulation by tined lead implantation. Julio 2006. BJU. 99, 107-110

2. Burkhard, Fiona C; Madersbacher, Helmut; Kofler, Alexandra; Poewe, Werner; Kiss, Gustav: Curr Med Res Opin Volume: 24, Issue: 2, Date: 2008 Feb , Pages: 343-7 Safety of prolonged sacral neuromodulation tined lead testing.

Disclosures

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