NEEDS PERCUTANEOUS TIBIAL NERVE STIMULATION (PTNM) A PERIODICAL MAINTENANCE SESSION? OUR 6 YEARS EXPERIENCE.

Hypothesis / aims of study
We review our experience in PTNM to evaluate its long term effect on patients with lower urinary tract symptoms and pelvic pain, considering the need of periodical maintenance stimulation sessions to consolidate the positive results in responsive patients.

Study design, materials and methods
From 1999 to 2004, 147 patients with lower urinary tract symptoms and pelvic pain not responsive to conservative therapy underwent PTNM according to Stoller’s technique (ten 30 mins weekly session; self regulation of stimulation amplitude; voiding diary and visual pain analogue evaluation). 104 pts (50 females, 54 males - mean age 55.5 years) with a mean follow up of 39 months (6-72) were evaluated: 53 urgency frequency syndrome, 19 urge incontinence, 11 dysuria, 7 pelvic pain, 6 incomplete urinary retention, 6 urgency, 2 Fowler syndrome.

Periodical stimulation sessions were scheduled in the responders group to consolidate the result. Patients who showed an improvement >50% in their main symptom were considered as partial responders and those with >90% improvement as complete responders.

Results
58 pts (56%) were responders (37 complete, 19 partial) and 46 pts (44%) non responders. 32 pts (55%) in the responders’ group followed periodical stimulation sessions. 18/32 pts have a monthly percutaneous stimulation as outpatients. 14/32 have domiciliar transcutaneous stimulation according to their needs (weekly, bi-weekly, monthly). 24/37 (64.8%) complete responders follow a periodical stimulation session (14 percutaneous, 10 transcutaneous), 8/19 (42%) partial responders follow a periodical stimulation session (4 percutaneous, 4 transcutaneous).

Interpretation of results
In our experience the overall success rate of PTNM is 56%; moreover, 55% of the responders’ need a periodical stimulation to maintain the positive results. The better the result at the stimulation, the higher is the patient's compliance to follow a maintenance programme, namely 65% in complete responders versus 42% in partial responders. A domiciliar transcutaneous stimulation with good results and good patient satisfaction was possible in 14/32 pts (44%).

Concluding message
PTNM remains an interesting and non invasive treatment for the lower urinary tract symptoms, despite the success rate being only 56%. PTNM is not an ultimate treatment; 55% pts need a periodical stimulation session to maintain the results; in 44% of the cases a domiciliar transcutaneous stimulation can be planned with good patient satisfaction.