

Introduction and aim of Study

*Posterior Tibial Neuromodulation was described more than 20 years ago as a minimally invasive treatment for patients with Over active bladder syndrome.¹⁻² Posterior Tibial Neuromodulation has been tested at various centers and has been proven as effective as the usually prescribed anticholinergic medications. More recently, it has been successfully used to treat other voiding dysfunction problems like Non-Obstructive urinary retention and / or chronic Pelvic pain syndrome.¹⁻³

*Herein, our aim is to assess the efficacy of Posterior Tibial Nerve Stimulation (PTNS) in treatment of patients with voiding dysfunction (over active bladder, idiopathic non obstructed urinary retention, or chronic pelvic pain syndrome) who are unresponsive to medical therapy.

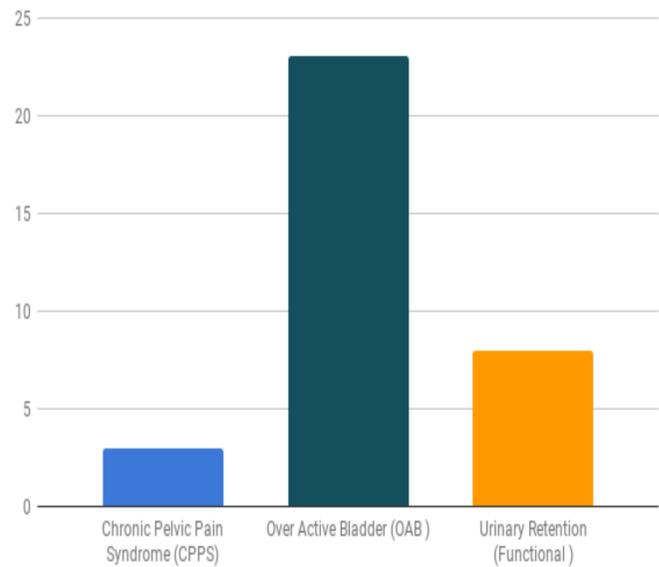


Fig.2 Success rate results

Methods and Materials

•Single center, retrospective study, reviewed the medical charts of all adult patients with OAB with or without detrusor Overactivity (DO) who underwent Posterior Tibial Nerve Stimulation (PTNS) in our center between January 2012 until December 2018.

•Hospital Institutional review board was obtained before starting the study. Patients' demographic data, diagnosis, voiding diary pre and post Posterior Tibial Nerve Stimulation (PTNS) treatment, and outcome collected. All patients had baseline investigations (urine analysis, serum Creatinine, Urodynamic study, Renal Ultrasound).

•Each Patient had to fill a voiding diary and quality of life questionnaire at the beginning of therapy (Week 0) and after completion of the initial weekly therapy (week 12).⁴

•The success of treatment was defined as 50% or more improvement of voiding dysfunction symptoms in voiding diary.⁵

•PTNS was continued for 24 sessions in patients who showed 50% improvement or more of symptoms after 12 sessions. Patients who were considered as success completed another twice/month sessions for three months then once/month sessions for another 6 months (total of 12 Months therapy).⁵

Discussion

- Although PTNS is a well-known alternative second line treatment therapy for patients with OAB symptoms, our results showed that this therapy is even more effective in patients with chronic non-obstructive urinary retention. In addition, it showed less efficacy in patients with chronic pelvic pain syndrome.
- In addition, all patients have completed the first 12 session with no complications or significant side effects. Missing data was a major concern due to lack of some information in the file because this is a retrospective study

Results

•108 medical charts were reviewed. 70 patients (41 female, 29 male) were included in our study. 38 patients were excluded due to missing data or incomplete file.

•Age ranged between 18-77 years (mean 42).

•Patients' diagnoses were overactive bladder in 51 (73%), idiopathic non obstructed urinary retention in 14 (20%), and chronic pelvic pain syndrome in 5 patients (7%).

•61.2 % of overall I patients had 50% or more improvement of symptoms.

•Success rate was 62.2 %, 76.9% and 40% in patients with Overactive bladder, idiopathic non obstructed urinary retention, and with chronic pelvic syndrome, respectively.

Conclusions

- PTNS is a safe and an effective treatment modality in treating patients with voiding dysfunction disorders who failed conservative treatment. PTNS treatment showed a higher success rate in patients with Idiopathic non-obstructive urinary retention compared with other disorders.

Disclosure

- Nothing to disclose.

Contact

- Dr.Riyad Al Mousa
riyad100@Hotmail.com

Improvement

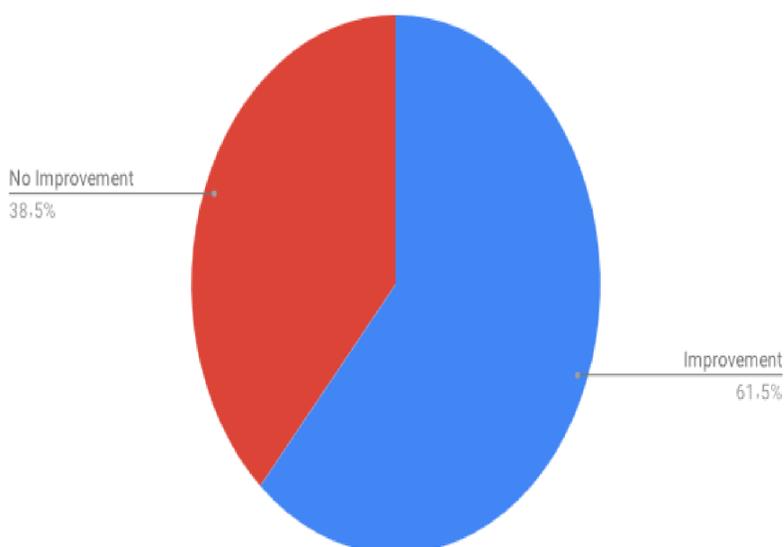


Fig.1: PTNS overall success.

References

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