Pudendal Neuromodulation Utilizing Dry Needling: A Possible Treatment Approach for Pudendal Neuralgia

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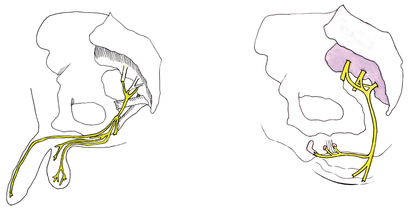
PURPOSE:

Pudendal neuralgia (PN) is a diagnosis which describes neuropathy along the distribution of the pudendal nerve. PN can be hard to diagnose in the medical community and, no doubt, severely affects the quality of life of those affected. While the clinical presentation of PN does include pain along the distribution of the nerve, it is also typically accompanied by sexual dysfunction, bowel dysfunction, and/or bladder dysfunction. There is currently no standard approach to treatment of pudendal neuralgia. The purpose of this case study is to investigate the efficacy of the use of dry needling therapy and neuromodulation in the treatment of pudendal neuralgia.



Male and female pudendal nerve anatomy

MATERIALS AND METHODS:

Outcome measures utilized are as follows: Pelvic Floor Impact Questionnaire - short form 7 (PFIQ-7), Numeric Pain Rating Scale (NPRS) and subjective report of sitting tolerance.

Five subjects received the following interventions: 1. Education on anatomy of the pelvic floor musculature and pudendal nerve. 2. Perineural dry needling of the pudendal nerve and obturator internus muscle with application of electrical stimulation for a duration of 15 minutes between 2-20Hz at an intensity that was deemed tolerable by each subject. 3. Education in home program to include diaphragmatic breathing and pelvic floor relaxation/lengthening.

iDryNeedle®

Pudendal Neuralgia (PN) can be treated effectively and efficiently utilizing **pudendal neuromodulation** via **dry needling** to reduce overall disability and pain.

RESULTS:

All five subjects reported improved objective scores collected by the PFIQ-7 and NPRS as well as subjective improvements in sitting tolerance between evaluation and discharge. Mean reduction in disability reported on PFIQ-7 (n=5) 39.96% +/- 4.84%. Mean reduction in pain rating (n=5) 8.4 +/- 1.8. Sitting tolerance measured in the following ranges (in minutes): 1m, 3m, 5m, 10m, 15m, 20m, 25m, > 30m. See table for pre and post test results.

	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
PFIQ-7	95.1/300 (eval) 0/300 (DC)	161.7/300 (eval) 0/300 (DC)	80.9/300 (eval) 14.3/300 (DC)	214.1/300 (eval) 0/300 (DC)	71.4/300 (eval) 9.5/300 (DC)
NPRS	7/10 (eval) 0/10 (DC)	10/10 (eval) 0/10 (DC)	10/10 (eval) 1/10 (DC)	9/10 (eval) 0/10 (DC)	8/10 (eval) 1/10 (DC)
sitting tolerance	5m (eval) >30m (DC)	3m (eval) >30m (DC)	1m (eval) >30m (DC)	10m (eval) >30m (DC)	15m (eval) >30m (DC)
number of visits	3	5	8	6	3

DISCUSSION:

When treating pudendal neuralgia, the underlying goal for clinicians is to reset dysfunction and restore the tissues to a homeostatic baseline in the most efficient and effective way possible. When the tissue dysfunction is one that involves the peripheral nerves, which is the case with pudendal neuralgia, it is advantageous to choose a treatment modality that directly influences the nerve itself to achieve the tissue reset. I have found that utilizing neuromodulation via dry needling is the most effective and efficient treatment approach in this realm, yielding unparalleled results in reduction of disability and pain.

CLINICAL RELEVANCE:

Pudendal neuralgia is a difficult condition to diagnose and treat effectively by a majority of healthcare disciplines, inclusive of physical therapists. This case study appears to be the first report of pudendal neuralgia successfully treated with neuromodulation of the pudendal nerve using dry needling. Larger scale studies should be undertaken to corroborate the effectiveness of this approach.

EIM EVIDENCE IN MOTION