Treatment Options for PN and PNE

- Lifestyle Changes. Avoid activities that aggravate pain, such as exercise, cycling, constipation, bending, squatting, and prolonged sitting. Use a gel or donut cushion when sitting is necessary. Walking on level ground and swimming are exercises that some patients can tolerate.
- <u>Physical Therapy (PT) or Manual Therapy.</u> PT may be beneficial if pelvic floor muscles are tense or if there are associated musculoskeletal disorders. It is wise to seek treatment from a physical therapist who is trained to treat patients with pudendal neuralgia.
- <u>Medications.</u> Classes of drugs that are often helpful for people with PN are anti-seizure medications, antidepressants, benzodiazepines, and opioids.
- <u>Pudendal Nerve Block Injections.</u> Along with a diagnostic nerve block, often a steroid is injected simultaneously in order to reduce inflammation and allow the nerve to glide freely. Ask your doctor about any risks associated with PN blocks.
- <u>Botox.</u> Botulinum toxin injected into problematic pelvic muscles may help to relax the muscles for 3-6 months.
- <u>Surgery</u>. Patients who do not respond to other treatments and who are suspected of having a nerve entrapment may choose to have pudendal nerve decompression surgery. Although there are several different approaches to surgery, including transischiorectal fossa, perineal, and laparoscopic approaches, the transgluteal approach is the most widely used. The success rates in the published literature range from 65% to 85% with a 50% improvement in symptoms generally being considered a success. Pain relief from surgery may take months or years, as the nerve requires a long period of time to heal.
- <u>Neurostimulation</u>, <u>Pulsed Radio Frequency Ablation</u>, <u>Intrathecal Pain Pump</u>, or <u>OnQ Pain Pump</u> may be effective in some cases for intractable pain.
- <u>Ketamine</u>. Patients with chronic regional pain syndrome as a result of PN may experience lower pain levels after IV ketamine infusions.
- <u>Complementary treatments.</u> Acupuncture, yoga (if no entrapment is present), water therapy, cognitive behavior therapy, and meditation may be helpful.

Incomplete Diagnoses

Pudendal neuralgia is a commonly overlooked condition when evaluating chronic pelvic and genital pain disorders. The pain associated with many of the following disorders may be caused by (or in part by) pudendal neuralgia or pudendal nerve entrapment: vulvodynia, vulvar vestibulitis, interstitial cystitis, irritable bowel syndrome, chronic or non-bacterial prostatitis, prostadynia, burning scrotal syndrome, chronic pelvic pain syndrome, proctalgia fugax, hemorrhoids, coccydynia, piriformis syndrome, anorectal neuralgia, pelvic congestion, pelvic floor dysfunction, ischial bursitis, levator ani syndrome, and others. All of these disorders can have the same symptoms as pudendal neuralgia or actually be caused by PN. Sadly, it is common for patients with any of these conditions to be told their problem is psychosomatic and to seek psychiatric help.

Coping with PN or PNE

Chronic pelvic pain can be exhausting and debilitating, requiring radical changes in lifestyle and behavior. Loss of job, income, relationships, and social life are common with this complex illness. Often friends and family do not understand. If you are suffering from chronic pelvic pain and a possible diagnosis of pudendal neuralgia, you are not alone and there is HOPE. You are invited to join a worldwide community forum of patients who understand at www.pudendalhope.org.

Resources:

• Labat JJ, Riant T, Robert R, Amarenco G, Lefaucheur JP, Rigaud J. Diagnostic criteria for Pudendal Neuralgia by Pudendal Nerve Entrapment (Nantes criteria). <u>Neurourol Urodyn.</u> 2008;27(4):306-10.

• Robert R, Prat-Pradal D, Labat JJ, Bensignor M, Raul S, Rebai R, Leborgne J. Anatomic basis of chronic perineal pain: role of the pudendal nerve. <u>Surg Radiol Anat.</u> 1998;20(2):93-8.

• Popeney C, Ansell V, Renney K. Pudendal entrapment as an etiology of chronic perineal pain: diagnosis and treatment. <u>Neurourol Urodynam.</u> 2007;26(6):820-7.

 Hibner M, Desai N, Robertson L, Nour M. Pudendal Neuralgia. <u>The Journal of Minimally Invasive Gynecology</u>. Mar-Apr 2010;17(2):148-53.



Health Organization for Pudendal Education PO Box 93701 Albuquerque, NM 87199 www.pudendalhope.org



Chronic Pelvic Pain, Genital Pain, and Pudendal Neuralgia

If you suffer from chronic pelvic or genital pain you may have a condition known as Pudendal Neuralgia or Pudendal Nerve Entrapment.

HOPE is HERE

Health Organization for Pudendal Education is a nonprofit tax exempt charitable organization whose purpose is to offer support, HOPE, and information to patients with Pudendal Neuralgia and to the health care providers who treat them.

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Pudendal Neuralgia/Neuropathy (PN)

Chronic pelvic pain or genital pain can be caused by an injury or abnormality of the pudendal nerve, an important nerve that innervates the rectum, anus, urethra, perineum, and genital area. The medical term for this painful condition is pudendal neuralgia.

Pudendal Nerve Anatomy Piriformis Muscle **S**2 Sacrospinous **S**3 Obturator (SS) Internus Ligament Muscle Ischial Levator Ani Spine Muscle (partially Pudendal cut away) Nerve Sacrotuberous Deep Perineal (ST) Ligament 🔏 Branch of Inferior Rectal Pudendal Nerve Nerve Dorsal Nerve Alcock's Canal of Penis/Clitoris Falciform Process Superficial Perineal Branch of ST Ligament of Pudendal Nerve

(women – clitoris, mons pubis, vulva, lower 1/3 of the vagina, and labia) (men – penis and scrotum)

The pudendal nerve is a sensory, autonomic, and motor nerve. Typically there are three branches of the nerve on each side of the body: a rectal branch, a perineal branch, and a clitoral/ penile branch. The pain and symptoms vary depending on which branches and which nerve fibers are affected.

Pudendal Nerve Entrapment (PNE)

Pudendal nerve entrapment is a more specific term referring to the nerve being tethered by fascia or compressed by ligaments, enlarged muscles, or other structures, so that it cannot glide easily (similar to carpal tunnel syndrome).

Possible Causes of Pudendal Neuralgia

- Inflammatory illness, autoimmune disease, or infections
- Tension on the nerve from muscles, ligaments, other structures, or from pelvic misalignment
- A nerve entrapment from fascia, scar tissue, or other structures--such as a small space between ligaments
- Trauma to the nerve from an accident/fall, exercise, childbirth, prolonged sitting/cycling, or surgery in the abdominal/pelvic region
- Pathology originating in the spine or sacral area rather than the peripheral pudendal nerve
- Stress that provokes or increases the pain of PN
- A combination of causes or no apparent explanation

Symptoms of Pudendal Neuralgia (Symptoms may vary for each person.)

- Pain in the area innervated by the pudendal nerve; pain or tenderness along the course of the nerve when an examiner presses on the nerve during a pelvic or rectal exam; pain that is intermittent or constant, and on one or both sides
- Burning, tingling, numbness, electric shock, stabbing, knifelike or aching pain, hot poker sensation or feeling of a lump or foreign body in the vagina or rectum, twisting or pinching, abnormal temperature sensations, or hypersensitivity to touch or pressure
- Painful bowel movements--muscle spasms, straining, constipation, or burning
- Feeling the need to urinate when the bladder is empty, urethral burning with/after urination, frequency, retention, need to push to urinate, or difficulty feeling urine passing through the urethra
- Pain during or after intercourse/orgasm, loss of sensation and difficulty achieving orgasm, or persistent feeling of uncomfortable arousal in the absence of sexual desire

- Intolerance to tight pants or elastic bands around the legs
- Pain that is worse with sitting or is constant in all positions and may be relieved by sitting on a toilet seat
- Pain that is often not immediate but delayed and stays long after activity is discontinued
- Pain that is lower in the morning and increases throughout the day
- Pain affecting other pelvic nerves and muscles causing buttock sciatica and everything that goes with it: numbness, coldness, and sizzling sensation in legs, feet, or buttocks

Pudendal neuralgia may be more severely symptomatic when associated with other systemic pain processing disorders such as fibromyalgia, chronic migraine, chronic regional pain syndrome, and other peripheral neuropathies.

Diagnosis of PN and PNE

The diagnosis is usually made based on the patient's symptoms, history, exam, and exclusion of other illnesses. Pressing on the nerve may elicit pain. While no test is 100% accurate, some of the more commonly used tests are the pudendal nerve motor latency test (PNMLT), electromyography (EMG), diagnostic nerve blocks, 3T MRI using special software and settings, and magnetic resonance neurography (MRN).

PNMLT and EMG tests measure the conduction velocity of the nerve, and abnormal results may indicate a damaged or compressed nerve.

Pudendal nerve block injections are typically given through the buttocks to the ischial spine or Alcock's canal area using image guidance such as CT scan, fluoroscopy (x-ray), or ultrasound. An anesthetic is injected near the nerve and causes temporary loss of sensation in the nerve distribution area. Some physicians perform transperineal pudendal nerve blocks without image guidance. In women a transvaginal approach localizing the Alcock's canal by vaginal exam and guiding the injection manually may also be used. If several hours of pain relief is achieved, this is an indication that the pudendal nerve may be the source of the pain.

