

# Acupuncture and Cold Laser Therapy for Pudendal Nerve Pain

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### Background

My first exposure to pudendal nerve pain began when I was conducting my standard initial intake with a new patient and he was unable to sit in a chair without squirming in discomfort. His pain was so severe, that simply sitting was barely tolerable, even under the influence of strong pain medications. He revealed that he had *Pudendal Nerve Pain*. By the time patients come to see me for this problem, they have already been to a large variety of Urologists and Neurologists.

### What is it?

Pudendal Neuralgia is characterized by a burning pain in the perineum, genitals, rectum, or low back. It can also be called “bicyclist syndrome” or “pelvic-pain syndrome”. This pain can be constant or triggered during or after sexual activity, prolonged sitting, heavy lifting, hiking, or other exercise such as bicycling. It can also be affected by or can directly influence urination and bowel movements. According to my patients, this pain is so severe it is truly “life-altering” and is often accompanied by emotional distress and depression. While most people are comfortable to discuss things like back pain with their co-workers or friends, they are usually not so free to share their burning genital or pelvic pain. As a result, they may feel frustrated and alone in their suffering.

How many people men and women are struggling with this? It’s difficult to give an accurate number because it is very often misdiagnosed. There are several reasons why someone can experience pain or dysfunction in the urogenital area. Before a patient can confidently claim that they have pudendal neuralgia, it’s important that they rule out some other common reasons for pelvic pain. Listed below are common sources for pelvic or urogenital pain:

Craig Amrine L.Ac. is the owner and operator of Hidden Rhythm Acupuncture located in the heart of Tempe, Arizona. These monthly newsletters are designed to help educate the public on various afflictions that acupuncture as a part of Traditional Chinese Medicine is known to treat. Each month, Craig will address a new health challenge that commonly affects the general public and offer a brief explanation on each disease from both the Western perspective as well as from the Traditional Chinese Medical perspective. He will also offer his own thoughts on treatment based on personal clinical observation and treatment experience.



**Interstitial cystitis (IC):** This condition can be the result of a bladder infection from either e.coli, staphylococcus saprophyticus, or even clamidia <sup>(1)</sup>. More common, however, is non-bacterial IC or Painful Bladder Syndrome. It indicates pain in the bladder and pelvic area that can be made better or worse with urination but there is no sign of infection (urine is sterile, meaning there are no red or white blood cells detected). However, pinpoint bleeding or glomerulations caused by recurrent irritation may be present. The reason for non-bacterial IC is unknown.

**Benign prostatic hyperplasia (BPH):** This involves inflammation of the prostate that manifests with difficulty with urination or increase in frequency of urination. No considerable pain is present. The cause of BPH is unknown, but many suspect it is related to a decrease in testosterone as men age<sup>(2)</sup>.

**Prostatitis (bacterial)** involves inflammation of the prostate with considerable pain in the prostate, perineal, or pelvic region that is affected by urination. In this case, it is caused by a recurrent infection. This is typically confirmed through the presence of bacteria or white blood cells in the urine or prostate secretions. The common treatment is through antibiotics that penetrate into the prostate such as trimethoprim or ciprofloxacin <sup>(1)</sup>.

**Non-bacterial prostatitis** exhibits pelvic pain and inflammation of the prostate, but shows no sign or history of bacterial infection. The cause is unknown.

**Prostatodynia** can be defined as pain in the groin, perineum, or low back, but there is no sign of inflammation of the prostate. The pain may or may not be associated with urination, ejaculation, or sexual function. This condition is also called chronic pelvic pain syndrome (CPPS). The cause is unknown, but one of the theories suggest a connection with imbalance in some of the pro-vs-anti inflammatory factors of cytokines in the prostate area.<sup>(2)</sup>

It's important that these possibilities are examined and ruled out before a pudendal nerve problem should be considered. The process of elimination should include a clinical exam, imaging techniques including MRI and CT scans, pudendal nerve motor latency tests, and possibly a diagnostic block where a local anesthetic is applied to the root of the pudendal nerve near the ischial spine. These techniques can help rule out other, possibly more life-threatening causes of pelvic pain including lesions, infections, or tumors.

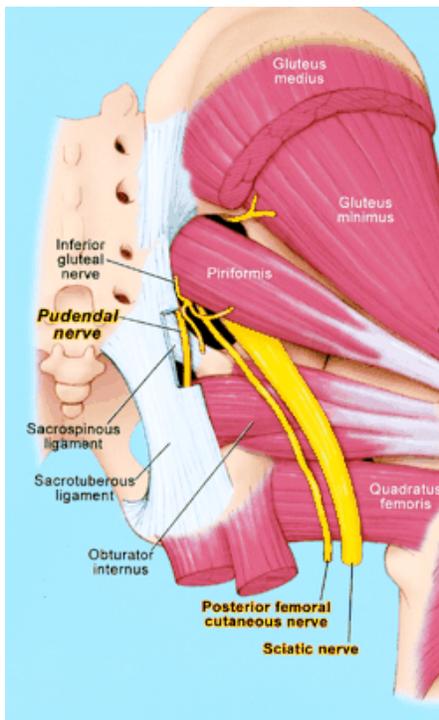
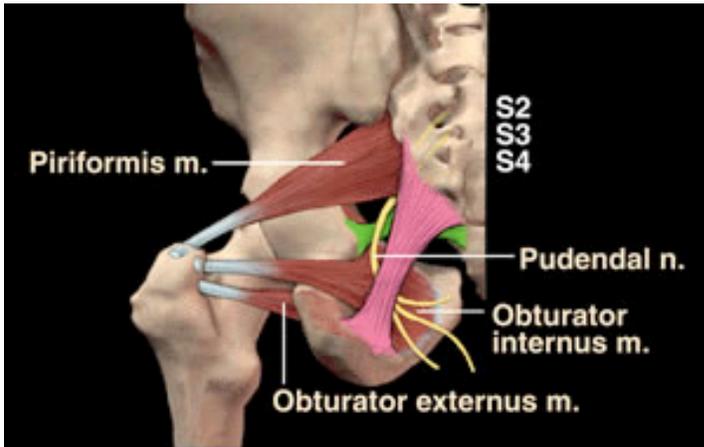
This is not to say that women are immune to this problem. In fact, women are also subject to pelvic pain disorders, including both pudendal and obturator nerve entrapment. In some ways they are more vulnerable, especially after child-birth. Differential diagnosis for women is also extremely important to rule out things like HPV (human papilloma virus), cervical cancer, or endometriosis.

**OK, so finally you're told you have pudendal neuralgia. What the heck is going on down there?**

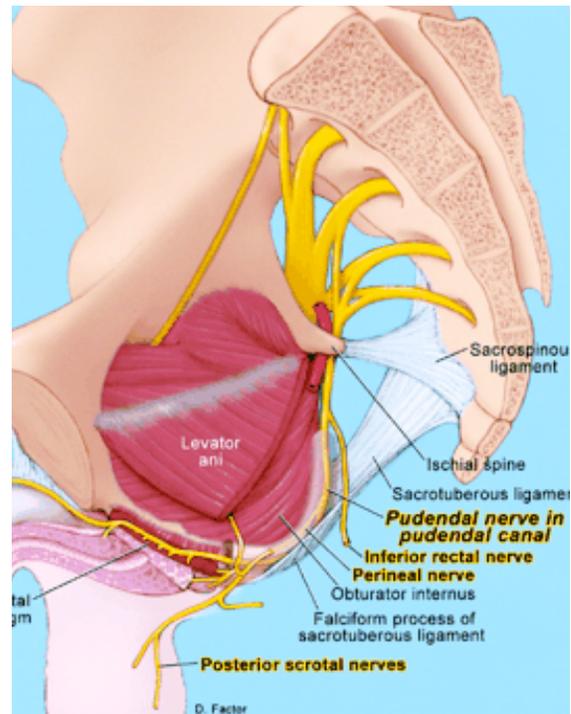
The pudendal nerve travels through the 3 bottom-most openings in the sacral spine. These openings are called the S2, S3, and S4 foramen. The following diagram shows a view of the low back and tail-bone and illustrates where exactly the pudendal nerve is.

It follows a fairly torturous path through the sacral foramen, to the outside of the ischial spine, between the sacrotuberous and sacrospinous ligaments, and then down into the pudendal or Alcock's Canal.

The following diagrams show different views of the pudendal nerve (Fig. 1 & 2)



**Fig. 1 Posterior View**

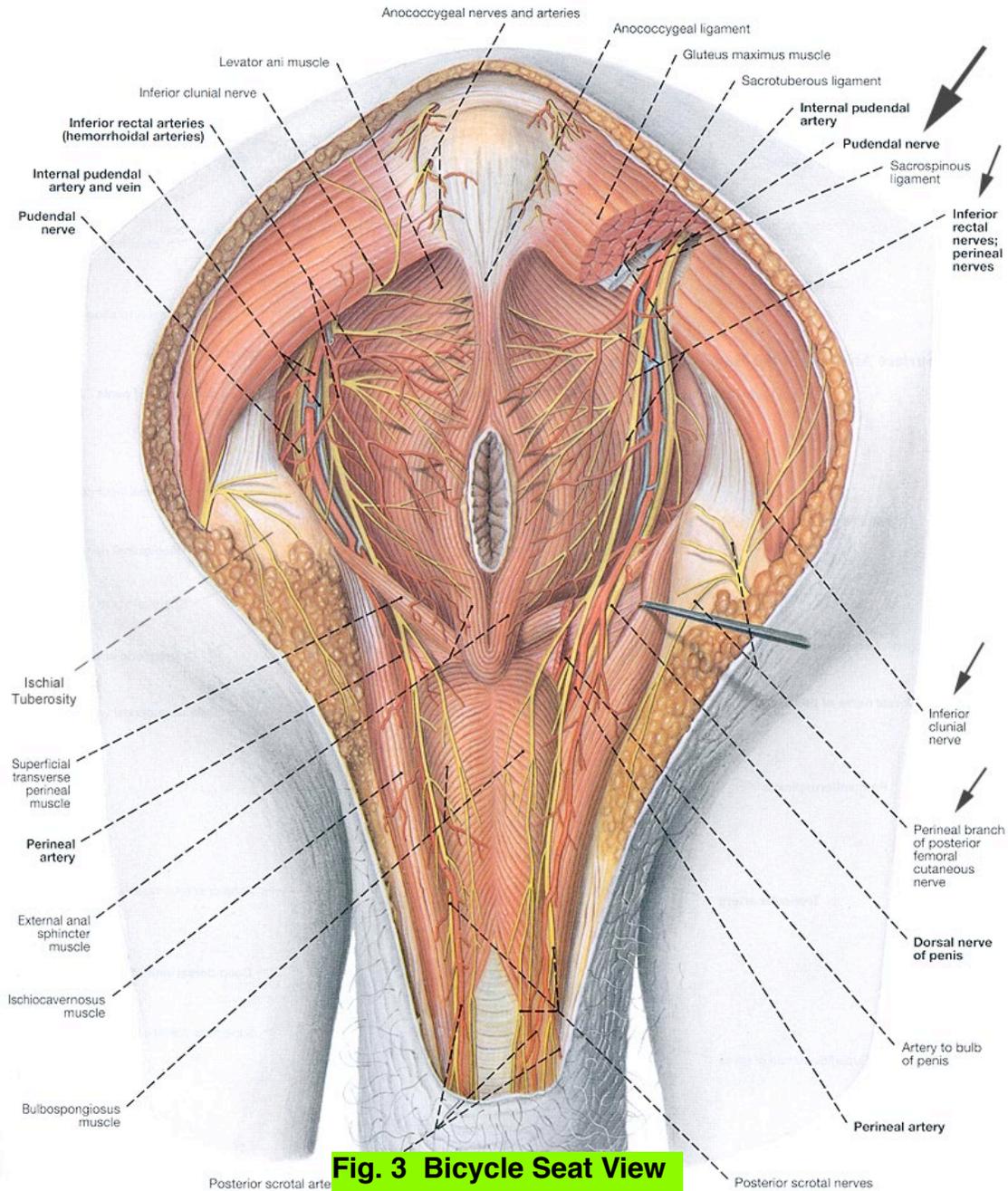


**Fig. 2 Side View**

The final view is of the male anatomy from the perspective of your bicycle seat if you were sitting on it. It clearly shows how the pudendal nerve and the accompanying veins

and arteries lie extremely close to the sit-bones, or the ischial tuberosity. This can explain why prolonged time on a bicycle saddle could aggravate the pudendal nerve.

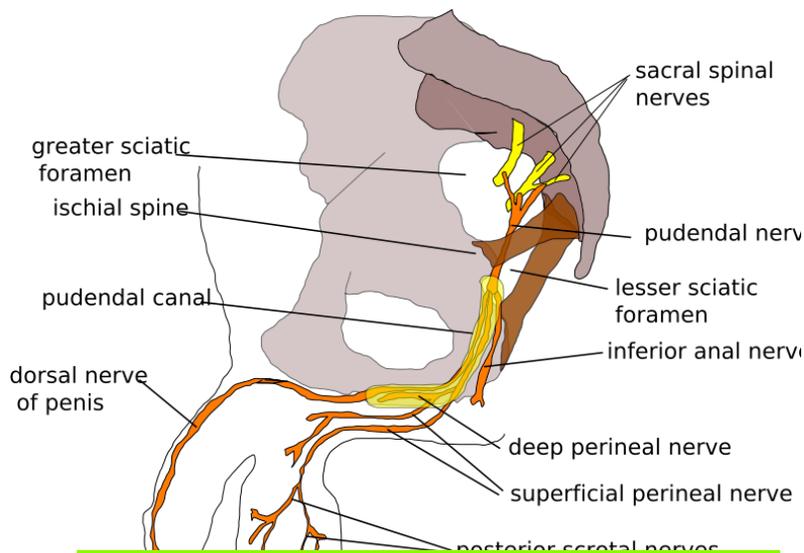
## Male Pudendal Nerve



**Fig. 3 Bicycle Seat View**

## Why do I hurt?

Pudendal pain is often attributed to compression, adhesion, or entrapment of the pudendal nerve in one of two places. It can be trapped between the sacrospinous and sacrotuberous ligaments (See Fig. 1). Or it can be trapped in the Alcock's Canal (also known as the Pudendal Canal) as shown in Fig. 4. Under normal conditions, the nerve is free to slide between these ligaments or through this canal unhindered by excess



**Fig. 4 View of the Pudendal / Alcock's Canal**

pressure, adhesions or inflammation. Under certain conditions, however, it can get stuck or inflamed and lead to pelvic pain. Interestingly, direct pressure or damage to the pudendal nerve is not the only way that this can happen. Patients can also experience *referred* pain to the pudendal nerve and pelvic region as the result of hernia surgeries or laparoscopic surgeries for treatment of endometriosis.

## Treatment options: How do I make it go away?

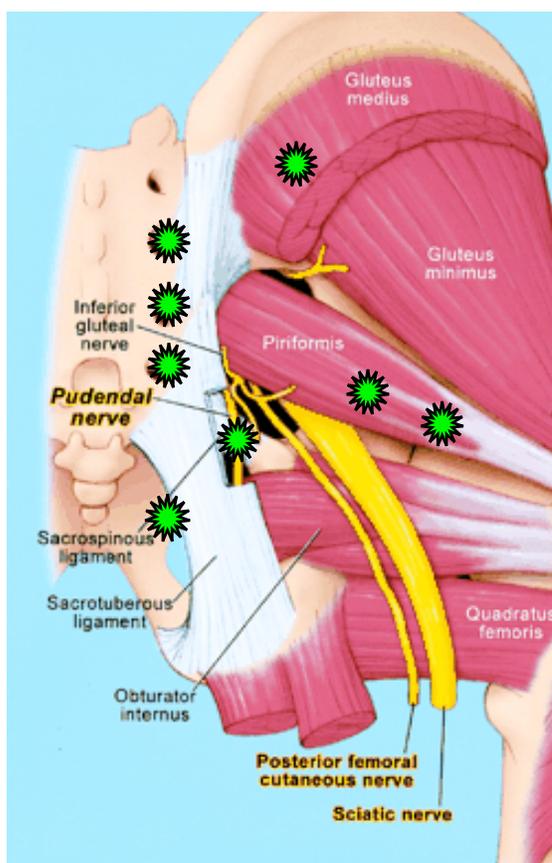
The conventional treatment options include physical therapy where the therapist directly manipulates the area of the suspected adhesions. They will attempt to stretch and loosen the nerve from the surrounding fascia (connective tissue). A second option is to inject nerve-blocking agents to the suspected area. A third option is surgery where the surgeon will decompress the nerve and attempt to “free” it from any local adhesions or fibrosis. Additional detail of one of the surgical procedures can be found here<sup>(3)</sup>.

These options are wonderful tools that have helped many men and women with pelvic pain due to pudendal neuralgia. Are these guaranteed success, however? Based on the on-line discussion groups and testimony from my patients, the answer is a definite no.

## The use of acupuncture and cold-laser therapy for pudendal neuralgia

When first encountered with this problem, I consulted with several of my acupuncture colleagues, and strangely, none of them have been asked to treat this.

Other than this one well written paper (*Journal of Chinese Medicine • Number 91 • October 2009 1 The Treatment of Pelvic Pain with Acupuncture: Part 1*), there are no classic diagnostic or acupuncture needle protocols for this affliction. So, my first goal was to gain a thorough understanding of the anatomy of the pudendal nerve and the surrounding tissue. Since every patient has been different, I customized their treatment based on tongue and pulse description as well as their description of pain from a Traditional Chinese Medical (TCM) perspective. For example, the resulting scarring from surgery is considered occluded damp. Spasmodic pain that comes and goes could be due to an internal wind and as such, would be needled accordingly. Pain that was accompanied with a deep weakness in the low back could involve Qi deficiency. If surgical scarring crosses the meridians, I would both “surround the dragon” (needle around the scar directly) as well as needle the distal aspects of the meridian to help with residual Qi and blood stagnation. Regardless of the nature of the pain, first needling the master/couple points for both the Conception (Ren) and the Governor (Du) was standard protocol.



**Fig. 5 Specific acupuncture points for pudendal nerve pain**

### Recommended Acupuncture Points

The acupuncture treatments also involve the needling the lower three sacral foramen (UB32, UB33, UB34) as well as the intersection of the sacrotuberous and sacrospinous ligaments. The specific points can be shown here in Fig. 5. Any additional local ashi (tender) points and UB23, UB24, UB25, and UB26 should also be considered.

### What about treating the pudendal canal?

There is an additional acupuncture point called Conception Vessel 1 (CV1 or Ren 1) located between the anus and the genitals; coincidentally very close to the the pudendal canal. Many patients experience spasmodic pain in this area.

Should this be needed? It largely depends on the comfort level of both

the practitioner and the patient. In my clinical experience, I’ve managed to treat the pudendal canal region by threading point UB35 as an alternative. This point lies just lateral to the tip of the coccyx.

Using acupuncture points on these tender areas should be approached with extreme sensitivity. Considering the patient is already experiencing intense pain, care should be taken to minimize any additional discomfort that is caused by the needles.

### **Cold-laser therapy and it's role in pudendal neuralgia**

In addition to the acupuncture, I strongly believe that cold-laser therapy has played a large role in the success of my treatments. Both personal experience and clinical evidence have shown that cold-laser therapy can help accelerate wound healing, reduce pain, reduce inflammation<sup>(4)</sup>, and reduce scarring. It has also been shown to accelerate nerve cell regeneration<sup>(5)</sup>. In my treatments, I typically follow the acupuncture with cold-laser treatments over the same points I applied with acupuncture as shown in Fig. 5. In addition, the cold laser therapy is applied to the perineum. To minimize stress to the patient, I teach them how to self-administer laser treatments to the perineal area or wherever they experience the greatest amount of discomfort. For hygienic concerns, the laser probe is protected and thoroughly cleaned before and after treatments. Keep in mind that the probe is instructed to be held above the area by 1-2 inches and is not in direct contact with the skin. Proper eye protection is also supplied to patients during their self-treatment. To ensure enough energy reaches the target area, I use a probe from Apollo Laser which offers (4) 500 milliwatt lasers in a cluster formation at a wavelength of 810 nm. There are many different laser therapy systems available at various wavelengths. Some practitioners use systems with very low power lasers (5 to 10 milliwatts), which I believe is too low to elicit the bio-stimulatory effect for this application. When seeking a practitioner who uses cold-laser therapy, I encourage patients to do the research, and make sure that the laser has sufficient power and is of the proper wavelength.

Like any procedure, there is no guarantee that this treatment will be 100 % effective. In my experience, however, most of my patients have noticed marked improvement in their pain level. The rate of progress can vary but patients will usually see some progress in as little as 2 treatments. Full resolution of the problem will likely take several weeks however, so I encourage them to be patient. The common scenario is that patients will feel some improvement and will either decrease their pain medication and/or go out and “push” their activity level harder than they are used to. As a result, they may have a flare-up and be temporarily discouraged. This scenario of “two-steps-forward, one-step-back” is common, but as patients recall their condition at the beginning of the treatments, this frustration melts away.

### **Acupuncture and cold-laser therapy - A possible alternative for the treatment of pudendal pain**

Both acupuncture and cold-laser therapy as distinct modalities have been proven to help with a broad range of problems ranging from pain, asthma, nerve regeneration, and depression. As a combined treatment protocol, we open up the possibilities to treat even more health problems including pudendal neuralgia. I encourage anyone suffering from pudendal nerve pain to explore this treatment as an option. The procedure is

relatively painless and non-invasive with no significant health risks. There are no real side-effects to the treatment unless, of course, you include a deep feeling of relaxation and reduced stress.

#### **End Notes:**

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