

### What conditions will Perineural Injection Therapy (PIT) treat?

PIT has revolutionized the treatment of nerve or neuropathic pain. At Acuprolo Institute we see many patients who have “tried everything”, including surgery, and still have persistent pain. This is usually due to injured and non-healing sensory nerves that lead to inflammation and delay of healing. These people tend to respond well to PIT. PIT is very effective in treating conditions due to inflamed nerves such as trigeminal neuralgia, migraines, diabetic neuropathy, Morton’s neuroma, post herpetic neuralgia due to zoster infection, post surgical pain, reflex sympathetic dystrophy, fibromyalgia. PIT is also used to treat pain due to musculoskeletal injuries including shoulder, knee, elbow, neck and low back, ankle, temporal mandibular joint (TMJ), and many other conditions.

### Will my insurance cover for PIT?

No

*Take your first step to being pain free.  
Contact us for an appointment!*



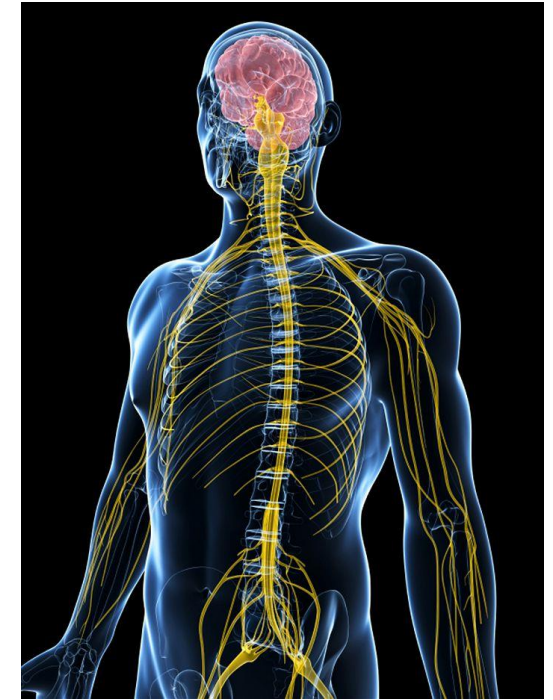
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# Perineural Injection Therapy



## Safe, Effective Nerve Pain Treatment



ACUPROLO INSTITUTE  
RESTORATIVE HEALTH & NONSURGICAL PAIN CENTER

## What other names does Perineural Injection Therapy (PIT) go by?

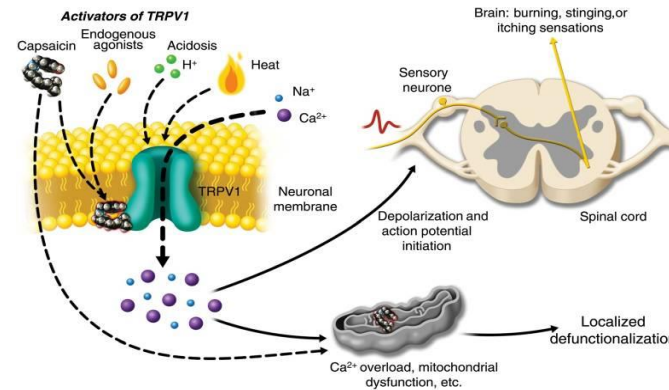
PIT is also known as Neural Prolotherapy (NPT), Neural Regenerative Technique (NRT), Perineural Subcutaneous Injections (PSI), Neurofascial Prolotherapy and The Lyftogt Technique (named after its founder, Dr. John Lyftogt).

## How is PIT different from Prolotherapy?

PIT involves shallow injections of low concentration dextrose or mannitol under the skin to heal injured superficial nerves. Traditional Prolotherapy involves deep injections using higher concentrations of dextrose to target where ligaments and tendons attach to bone to promote regrowth and repair of these structures. Both techniques are very effective to relieve pain and restore function.

## What is the solution that is injected?

PIT solution contains either 5% Dextrose or 5% Mannitol. Dextrose is a natural sugar found in corn. Mannitol is a sugar alcohol derived from the deciduous tree called flowering ash.



## How does PIT work?

Multiple shallow injections are done under the skin using a very short, thin needle to target painful sensitive nerves with natural substances aimed to stop nerve inflammation, promote healing of injured nerves, restore tissue function and eliminate pain. Tissue injury or injury to nerves by stretching, constricting, or cutting them (such as after surgery or due to tight muscle spasms), activate a receptor on nerves called Transient Receptor Potential Cation Channel V1 (TrpV1), also known as the capsaicin or chili pepper receptor. This results in nerve release of substances that cause inflammation, swelling, burning painful sensations (neuropathic pain) and chronic nerve dysfunction. It is postulated that dextrose and mannitol inhibit TrpV1 nerve receptors, preventing this inflammatory cascade and restoring normal nerve function.

## How effective is PIT?

Every treatment aims to reduce pain prior to leaving the office. The pain relief may last hours to days after the first injection. Then pain will recur but usually in a lesser form. With subsequent treatments (usually separated by 1 to 2 weeks) less areas need to be injected and the pain free duration gets progressively longer as the nerves and tissue heal to restore function over a period of 6 to 8 weeks. Success rates vary between 80-100% depending how long the injury has been present and the degree of tissue damage.

## When can I go back to work or playing sports after a treatment?

There is no “recovery time” with PIT because most patients leave the office with reduced pain. However, depending on where in the course of treatment you are, this pain relief may last hours, days, weeks or months until the nerves and tissue completely heal. Patients can immediately return to normal activity as long as the pain level is less than 4 out of 10.