Perineural Injection Treatment (PIT)
(Previously known as Neural Prolotherapy)

Q: What is Perineural Injection Treatment?
A: Perineural Injection Treatment is a safe and effective treatment for chronic neuropathic pain.

Q: How does it work?
A: Perineural Injection Treatment consists of multiple injections of a low concentrated sugar solution, injected subcutaneously (just under the skin surface) over the course of a chronically inflamed nerve. The sugar in the solution acts with the nerves to prevent the release of inflammatory substances from the nerve. When the inflammation is reduced, pain diminishes.

Q: What is in the solution that is injected?
A: The injection consists of a low concentrated solution of dextrose or mannitol, both sugars, mixed with sterile water. Because the injections consist essentially of sterile sugar water, it is very safe, non-toxic, with minimal potential side effects.

Q: Are the injections painful and what are the potential side effects?
A: This will partially depend on the area of the body being injected, as some areas are more sensitive. Depending on the distribution of your pain, you may need many injections or just a few. Keep in mind, the injections are very superficial, given with a thin needle, which minimizes discomfort. Most patients tolerate the procedure well, with minimal pain. You may have redness or mild swelling at the injection sites which should diminish over the following couple days. It is possible, although, not likely, that you may develop a slight rash. If this happens, you should notify your physician, and he/she may change the injection solution for the next treatment. If needed, you may take Tylenol, Motrin or other over the counter pain reliever. Ice may also be applied if needed.

Q: Are there any serious risks to the procedure?
A: The injection technique used is extremely safe. There is a low chance of bleeding or infection, which is true of any injection procedures.

Q: What can I expect the day of the injection?
A: Your physician will examine the area of your body which is painful and palpate along the nerves. Your skin will then be marked along the course of the nerve with a marking
pen and then the skin cleaned with alcohol or betadine. The injections would then be given along the markings, with small doses of the solution injected at each site.

Q: How long will it take to see results and how many injections will I need?
A: You should have relief from the injections immediately or within a couple minutes of the procedure. Many patients have complete or almost complete relief of pain immediately. This initial analgesic (pain relieving) effect will be temporary but may last up to several days. Once this initial effect has diminished, you should notice that your baseline pain is about 10-20% better than it was prior to the procedure. After the second injection, you will notice your pain is about 30-40% better. This amount of improvement will continue after each subsequent injection until pain has resolved. Some patients may need 3-4 injections and others may require up to 8 injections. Injections are generally given every 2-4 weeks. Once your pain has resolved after all treatments, it should not return.

Q: Can Perineural Injection Treatment help everyone?
A: Each patient should be examined thoroughly by a physician. You may need additional testing to rule out other potential sources of your pain. If it has been determined by your doctor that you have chronic neuropathic pain or nerve inflammation causing your pain, you may be a candidate for neural prolotherapy.

Q: What areas of the body can be treated?
A: Neural prolotherapy can be used on any part of the body where neuropathic pain exists. Because the injections are given superficially, with a safe injection solution, there is minimal risk of damage to any tissue or to deeper structures.

Q: What is the success rate of the procedure?
A: Once a patient has been identified as a candidate for the procedure by a physician, approximately 80% of patients will respond to neural prolotherapy.

Q: Where can I find out more about Perineural Injection Treatment?
A: You can go [www.lyftogtmed.com](http://www.lyftogtmed.com)