



PERI-NEURAL INJECTION TREATMENT

Peri-neural Injection Treatment (Neural Prolotherapy) is a shallow injection therapy that aims to damp down the irritability of skin nerves. It has been developed in New Zealand since 2000 by Dr John Lyftogt (doctorliftoff.co.nz).

Peri-neural Injection Treatment can be used to treat the pain from a wide range of conditions. It works by injecting small doses of a weak glucose (sugar) solution around tender, painful nerves that run under the skin. These injections are generally made over tender areas along the known course of skin nerves. The injections aim to help reduce the neural inflammation. The period of immediate pain relief, when achieved, typically lasts for between a few hours to a few days. The pain then usually returns but generally at a mildly lower level than it started. The injection process is repeated on a weekly basis until all of the pain is gone. If Peri-neural Injection Treatment is going to work for a presentation, it is critical that a window of immediate pain relief can be demonstrated.

Peri-neural Injection Treatment can be particularly effective for scars that stay red, swollen and tender. A series of glucose injections into the scar helps to mature the scar decreasing redness and tenderness. Recent soft tissue injuries, e.g. calf strains, also seem to respond particularly well to Peri-neural Injection Treatment. They often only require 1-2 treatments to settle. For chronic conditions, a quicker treatment response will often be experienced when an initial “surge” of treatment occurs e.g. three treatments in the first week.

The science that underlies Peri-neural Injection Treatment relates to neurogenic inflammation. This was developed in the 1980's by a Hungarian scientist by the name of Jansco. He used capsaicin extract from chillies to study sensory nerves. Unfortunately, most doctors are still not aware of his important work.

Normal sensory nerves are not just “wires” that transmit electrical signals. They are in fact more like a garden hose where the electrical signal passes along the outside, whilst important molecules are transported along the inside of the “hose”. These nerves have a role in continually releasing “fertilizer” molecules to promote local tissue health and growth. The most important of these neuropeptides is called “Substance P” (P for pain). Neurogenic inflammation occurs when excess amounts of substance P are released, resulting in both pain and local inflammatory changes (eg. redness and swelling). Whenever a patient has pain, they have excess quantities of substance P being released. Peri-neural Injection Treatment aims to damp down this neurogenic inflammation by down-regulating the TRPV-1 receptors on the outside of the nerves that signal for the release of substance P.

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