

Peripheral Nerve Injection Information

What is a peripheral Nerve Injection?

A peripheral nerve block is an injection of local anaesthetic & steroid around a nerve that supplies a particular region / muscle. Peripheral nerves supply sensation to a small, defined area of the skin and the underlying tissue. Sometimes these nerve are well formed structures (e.g. Median nerve at the wrist) other times they are less formed and a group of fibres maybe involved (e.g. trans-abdominal plexus block) capture.

How can a Peripheral Nerve “Injection” help?

There are different kinds of nerve blocks used for various purposes. The expected outcome / result will be discussed with each individual but these may include:

- ✔ Therapeutic nerve blocks are used to treat painful conditions. Such nerve blocks contain local anesthetic that can be used to control acute pain.
- ✔ Diagnostic nerve blocks are used to determine sources of pain. These blocks typically contain an anesthetic with a known duration of relief.
- ✔ Prognostic nerve blocks predict the outcomes of given treatments. For example, a nerve block may be performed to determine if more permanent treatments (such as repeating or using pulsed radiofrequency denervation) would be useful and /or successful.
- ✔ Pre-emptive nerve blocks are meant to prevent subsequent pain from a procedure that can cause problems including [phantom limb](#) pain.
- ✔ Nerve blocks can be used, in some cases, to avoid surgery (e.g. Treat Carpel Tunnel Syndrome)

What is a Peripheral Nerve “Injection”?

This is an injection targeting the effected nerve. More than one nerve may need to be injected at the same time. It seeks to diagnosis and treat the issue at the same time. A local anaesthetic block of this nerve is used to treat pain in a specific area following injury. Ultrasound guidance or stimulation of the nerve can be used to assist in preforming this block. Occasionally pulsed radiofrequency denervation of the nerve can be used but this is decided with you and your doctor.

Typically the procedure involves the following steps:

- ✔ **This procedure takes about 10-20 minutes**
- ✔ **Sedation it is not used as you need to confirm the correct and safe position of the device in for your physician in order to maximise the long-term outcome.**
- ✔ **You will be positioned on an examination table and the area examined under x-ray / Ultrasound guidance.**
- ✔ **The area’s to be injected will be cleansed with antiseptic solution then numbed with a local anaesthetic. This will help numb the area**
- ✔ **A needle will be inserted with guidance to ensure proper needle placement after which a mixture of local anaesthetic and steroids are injected.**
- ✔ **Once the needles are positioned you will be asked some simple questions about what you feel (pressure / pins& needles) in the affected area. This will help your consultant ensure the needle is in the best position to treat your pain**
- ✔ **Often the patient will experience immediate relief merely from the local anaesthetic, but this wears off in a few hours.**
- ✔ **After the injection the patient is placed in an observation area for 10-20 minutes to watch for adverse reactions.**
- ✔ **Once you are able to stand and walk you will be able to leave**

Important things to remember about your procedure

- a) You may feel a “heaviness” / dead feeling or paraesthesia in the region injected. This is normal and is from the local anaesthesia. It will wear off gradually
- b) It is normal that the pain may increase in intensity over the first 4-7 days after the injection.
- c) Bruising may be present in the area where the injection was placed
- d) Infection is rare but if it feel hot /swollen please ask your GP to review.
- e) Allergy to injected medication is unusual.
- f) The steroid may result in facial flushing (redness), altered menstrual cycle, raised blood glucose level (if you are a diabetic) and sometimes insomnia.
- g) Generally you can return to light activity within 24 hours. Avoid excessive activity / heavy work for 48 hours after the procedure.
- h) Be sure to use you analgesics during this time to help recovery.
- i) Remember it may take 4 weeks before you feel any improvement

What risks or side effects are there?

- ✓ Peripheral Nerve injections have a few minor side effects, these include increased pain for 2-5 days post the procedure, bruising and swelling in the injection area, light bleeding at the injection site, tissue deterioration from the steroid over a period of time if the same location is injected repeatedly, and there is a small risk of infection if the injection site is not kept clean until it heals.

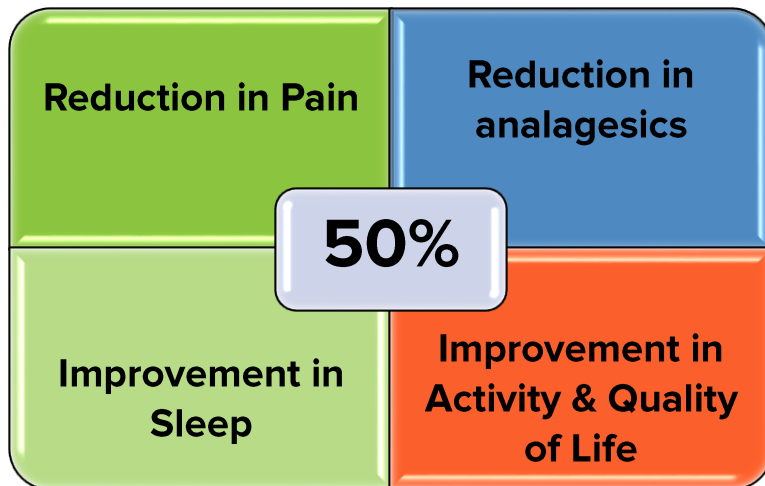
Issue	Incidence	Steps to prevent these issues
Nerve Injury <input checked="" type="checkbox"/> Transient / non-permanent (numbness / muscle weakness (day-weeks)) <input checked="" type="checkbox"/> Permanent Injury	8% <1%	a) Use of Ultrasound / X-Ray / MRI data allow direct vision b) Specific “blunt” needle tips used c) No Sedation so that safety is ensured
Infection <input checked="" type="checkbox"/> Inflammation at the site <input checked="" type="checkbox"/> Infection <input checked="" type="checkbox"/> Abscess formation	1-10% <3% <1%	a) Extensive aseptic cleaning avoids this risk b) Local anaesthesia has a “protective” feature c) Infection is usually only an issue if a catheter is left in place
Vascular Injection <i>(Depends on the location of the injection)</i> <input checked="" type="checkbox"/> Local bruising / bleeding <input checked="" type="checkbox"/> Large Hematoma (risk highest near large vessels)	10% 13%	a) Use of Ultrasound / X-Ray / MRI data allow direct vision b) Specific “blunt” needle tips used c) No Sedation so that safety is ensured d) Anticoagulation therapy is stopped / managed as required e) Monitoring post procedure to ensure no complications (LAST Guidelines)

Ref: Jeng et al. 2010

What are the long-term Goals?

Your consultant will give you guidance on what the expected outcome might be after your procedure.

In general, there can be a number of positive outcomes which might include



What should you do next?

If you feel you suffer this chronic pain please contact us and we can start to make a plan to help you get back in control

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Disclaimer: This information is to assist individuals understand the procedure and it should not replace the opinion of the pain consultant