# Carpal Tunnel Steroid Injection LAND MARK GUIDED

# PATIENT INFORMATION and CONSENT SECTION

#### What is carpal tunnel syndrome?

Carpal tunnel syndrome is a condition that involves the median nerve being compressed within the carpal tunnel of the wrist. This nerve compression causes pins and needles and/or pain in the fingers of the affected hand. The thumb, index, middle fingers are usually involved. Symptoms are often worse at night, and there may be some pain radiating up the forearm as well.

Carpal tunnel syndrome usually comes on gradually. It is more common in pregnancy and some medical conditions such as underactive thyroid (hypothyroidism). Carpal tunnel syndrome, in severe cases, can cause irreversible damage to the median nerve, potentially leaving patients with permanent hand weakness and numbness.

Treatment options for carpal tunnel syndrome broadly fall into the following categories:

- Splinting: For mild carpal tunnel syndrome, a wrist splint can be obtained from pharmacies or a hand therapist. The hand therapist may also prescribe tendon glide exercise.
- · Carpal tunnel injection.
- Carpal tunnel surgery: This is the definitive treatment for carpal tunnel syndrome. It's recommended for patient with more severe symptoms and patients who have not responded to the above treatments. Any patient with carpal tunnel syndrome with muscle wasting or weakness of the hand or significant numbness of the hand, should proceed directly to carpal tunnel surgery, in order to avoid irreversible median nerve compromise.

#### What is a carpal tunnel injection?

A steroid injection may be beneficial for patients with mild to moderate carpal tunnel syndrome.

Steroid is injected into the carpal tunnel. The steroid acts as an antiinflammatory, reducing swelling of structures within the carpal tunnel and hence reducing the pressure on the median nerve.

#### Ultrasound guided versus landmark guided injection

The injection can be performed with ultrasound guidance or using anatomical landmarks to guide the injection. To date research has not demonstrated that one technique is significantly more effective than the other. At the Pioneer Health Musculoskeletal Injection Clinic we prefer to guide the injection by using anatomical land marks. If you wish for an ultrasound guided injection, please ask your GP to refer you to the local specialist radiology provider.

## What can I expect from a carpal tunnel steroid injection?

The proposed injection is a minor, practice based procedure performed by an experienced clinician. After completing the informed consent process, your doctor will examine your wrist carefully locating several anatomical land marks. The doctor will then use a sterile technique, which involves cleaning the skin over the injection site with antiseptic solution. The injection is slightly painful. A small amount of steroid is injected and then a sterile dressing is applied over injection site.

Following the injection, pain relief from the steroid may lag by 1 to 2 days. It is important to understand this injection does not come with a guarantee of symptom relief. Most patient have significant relief, but this not apply to all patients. Also, the length of pain relief varies from patient. Some patients obtain long term pain relief (months and even years), for others it's more short term (days to weeks.)

### What are the risks of a carpal tunnel steroid injection?

Like any procedure, this injection does have potential complications. These are:

- FAILURE A number of patients may gain no pain relief, or only short term pain relief. This may be because the injection was not correctly sited, or the severity carpal tunnel syndrome, or because there is something else causing your hand symptons.
- BRUISING AND BLEEDING A small bruise may form around the injection. More severe bleeding complications, such as a haematoma, may occur if you are on blood thinners or have a bleeding disorder. If you are taking blood thinners, please discuss this with your doctor before the injection. You may be advised to stop your blood thinner some days before the injection, and then restart the blood thinner immediately after the injection. However, such advice will be individualized to your specific circumstances.
- INFECTION This is probably the most severe potential complication.
  The incidence of the injection introducing infection is very low. We give the injection using a sterile technique to avoid this complication.
- INJURY TO NERVES, ARTERIES AND TENDONS These are relatively uncommon complications, and the injection technique is specifically designed to avoid these injuries.
- DISRUPTION OF BLOOD SUGARS This is generally only an issue for diabetic patients. If you have diabetes, please be aware that your blood sugars may run higher some days after the injection.

#### How much will the carpal tunnel injection cost?

Fee	Medicare Rebate	Out-of-pocket cost
\$200	\$42.85	\$157.15

Medicare has removed all item numbers for MSK injections some years ago, and will now only rebate the time based consult item number towards this procedure. The fee is to cover the cost of the consumables (excluding steroid ampoule), nursing support and doctor's fee.

#### What should I do after my carpal tunnel injection?

- You should be able to return to normal activities after your injection.
- Please keep the sterile dressing in place for one day.
- If you have stopped a blood thinner ahead of your injection, please restart this blood thinner promptly following the injection.
- If after your injection you experience increasing pain or swelling of the wrist or hand, or develop fevers, please promptly contact the Musculoskeletal Injection Clinic at Pioneer Health Albany.
- If you have ongoing symptoms of carpal tunnel syndrome, following your injection, we suggest that you consider a referral for carpal tunnel release surgery.
- Finally, we would like to hear if your injection has helped with your symptoms. We will be contacting you via a phone call in one week to see how you are progressing. Please let our reception know if you do not wish to be contacted.

If you have any questions about the above, please discuss these with your GP or with the doctor on the day of the injection.

I have read and understood the above and hereby consent to proceed with the procedure of carpal tunnel injection.

Patient Name:	Patient Signature:	Date:
Doctor Name:	Doctor Signature:	Date: