

# CORTISONE INJECTIONS

**Matthew Preston**  
Consultant Radiologist  
Whakatane Hospital &  
Eastbay Radiology

Useful things to know about imaging-guided cortisone (steroid) and local anaesthetic injections **before you sign the consent form.**

## 1. Why a cortisone injection?

Your health care professional has referred you to our service for a scan to help determine the cause of your pain. The possibility of having an injection to help treat your pain may have been raised already or it may be raised during today's scan. Here is some information to help you decide whether or not you would like to proceed with the injection.

Pain often comes from a joint, muscle or tendon or from tissues around these. This pain is at least partly caused by inflammation. Injecting cortisone and/or local anaesthetic medication directly into the joint or the soft tissue helps to reduce the inflammation and provide pain relief. Reducing the pain may make movement easier and help other therapy to be more effective.

Ultrasound is used to guide the tip of the needle into the right place. Less commonly CT or x-rays are used.

The aim is to settle your pain and to recover function and movement over a few days (3 days - 3 weeks). Often relief is permanent or lasts at least several months.

This is not the kind of steroid used by athletes trying to build up muscles. It is also not the kind banned in various sports. However, in theory, a very small amount may get absorbed and picked up on drug tests - you may want to check with your sport's controlling body whether this is ok - it usually is.

## 2. How do I prepare for a joint injection?

- In most cases you don't need to do anything special before a joint injection.
- You may eat and drink as normal.
- Please bring any previous reports, X-rays, ultrasound, CT or MRI scans taken as part of your pain history - if they were not done at Whakatane Hospital or Eastbay Radiology.
- Your appointment usually takes 20 - 30 minutes.
- In some cases it may be best to have someone drive you home afterwards.

### Three things the doctor will want to know about:

1. Are you allergic to any medications?
2. Are you taking any medications or do you have an illness that may make you bleed more than normal?
  1. Common medicines are Warfarin, aspirin (Cartia), Pradaxa etc.
  2. If at all possible and safe it is best to stop the medication for a few days to reduce risk of bleeding or bruising. Check with your doctor first to see if it is safe to stop.
3. Do you have diabetes or any other major illness?

## 3. What happens during an injection?

- You will meet the doctor who will discuss your pain and other symptoms with you.
- A preliminary scan will be performed to help make a more specific diagnosis as to the cause of pain and to locate the exact spot to be injected. A mark may be placed on your skin.
- He/she will then wipe your skin with an antiseptic solution to prevent infection.
- He/she will guide a thin needle into the spot using ultrasound (or sometimes CT or x-ray) to see the tip of the needle as it moves into the correct area. The needle is about the same size as that used for a blood test.

## 4. What do I do after an injection - after care?

- DO leave the dressing on for a few hours or overnight
- DON'T strain for the rest of the day whilst local anaesthetic is still masking pain - you could cause damage and tear muscles or tendons.
- You may need to keep taking your pain medications for a few days and then slowly wean yourself off.
- Gradually build up over 2 - 3 weeks to full function - follow the advice of doctor, physio etc.

## 5. What are the possible side-effects with this kind of injection?

This is a very effective and safe procedure with a few potential issues discussed here.

### OCCASIONAL side effects

- In 1 out of 5 people pain may get worse for 1 - 3 days. This is called a *steroid flare* and is not dangerous. You can take your regular pain medication if needed.
- Bruising or a small haematoma at the injection site - especially in people who bruise easily.
- Diabetics might find a slight rise in glucose levels for a few days after.
- Some people - mostly women - get a slightly red flushed face for a few days.

### UNCOMMON side effects

- There is a very small risk of infection - between 1 in 20,000 and 1 in 75,000 injections performed.
- With superficial injections (e.g. elbow) there is a small risk of effects on the fat just beneath the skin at the injection site that can lead to a depression - dimple or skin discolouration.
- Very small risk of tendon damage or of damage to the joint cartilage lining or damage to surrounding nerves and structures.
- Occasionally people are allergic to the injected medication (as with any drug).
- **If the pain becomes much worse or you get severe swelling or fever several days following the injection**, this may indicate either an aggravation of the disease or very rarely an infection. If this occurs you should contact your GP, your referring health professional or the emergency department of a hospital as soon as possible.

## 6. What results might I expect?

There is quite a large range of response - from complete control of pain to no improvement at all - for most people there is medium to major improvement.

- The local anaesthetic may take away pain for several hours. Take note of that - even if the cortisone doesn't work well the response to anaesthetic helps your doctor to decide whether that joint or spot is really the source of your pain.
- The anaesthetic will generally wear off after a few hours and your usual pain may return until the cortisone starts working - usually by Day 3. It can occasionally take as long as 3 weeks.
- Some patients find that the injection gives them good pain relief for a few months, but then the pain comes back and they wonder about having another injection. Although the exact risk of multiple injections is not known, most doctors would advise a maximum of 3-4 times a year at any one site.
- Occasionally the injection may not improve your symptoms at all. Although this may be disappointing to you, it can be helpful information for your doctor as it means that another cause of the joint pain needs to be considered. Sometimes a second injection is worth a try.
- The injection won't heal torn tendons or stop arthritis - but it will probably settle your pain.

### MAKE A NOTE:

When you report back to your doctor or health care professional they might find the following useful:

- How much did pain and stiffness reduce in the first 4 - 6 hours after the injection - the effect of local anaesthetic (Scale of 1 - 10)?
- How much relief did you have at the 3 - 4 week mark?
- How long did the effect last altogether - permanent, weeks, months?

### QUESTIONS OR MORE INFO

- Ask me
- Royal Australia New Zealand College of Radiology - <https://www.insideradiology.com.au/joint-injection/>
- Mayo Clinic - <http://www.mayoclinic.com/health/cortisone-shots/MY00268>