

# LOCAL CORTICOSTEROID INJECTIONS

## Patient Advice Sheet

### Introduction

Your doctor has recommended you have a local steroid injection to help treat your painful joint, muscle or tendon problem. This simple guide answers some of the common questions asked about these injections. If you have any further questions you should ask your doctor.

### What are steroids?

Steroids are a large group of drugs, with many different properties. There are three main types:

- 1 Corticosteroids; powerful anti-inflammatory drugs used to treat asthma, arthritis and other conditions.
- 2 Male sex hormones; androgenic anabolic steroids. These are used to treat androgen deficiency and male infertility. Some people use them for "bulking up". They are BANNED DRUGS and have no place in injury treatment.
- 3 Female sex hormones; eg, estrogens, progestagens. These are used "in the Pill" for contraception and also as Hormone Replacement therapy (HRT) after menopause.

### What do corticosteroid injections do?

They cause a powerful anti-inflammatory action. This should lead to:

- 1 Removal of debris from the injury site.
- 2 Reduction of pain and swelling.
- 3 Greater range of motion.
- 4 Proper alignment of scar tissue as injury repair takes place.
- 5 A return to sport and other important life activities.

### What injuries are they used for?

- 1 Inflamed joint with excess fluid (effusion).
- 2 Inflamed bursa (fluid sac around a joint).
- 3 Inflamed tendons and tendon sheaths.
- 4 Soft tissues that are being pinched (impingement).
- 5 Frozen shoulder.

They have been used for these injuries for over forty years, with very good results in most cases.

BENEFITS	RISKS (SIDE EFFECTS)
Relieves pain.	<b>Common (up to 10%).</b> Dimpling and loss of skin pigment around the injection site. This can be permanent. It is mainly a problem with tennis elbow injections.
Reduces swelling.	<b>Uncommon (up to 5%)</b> 1 Post-injection flare. A few hours after the injection you may get a worsening of pain and swelling. This usually settles in a day or two with ice packs and tablets. Take 3 x 300 mg Dispirin dissolved in half a glass of water every 3-4 hours. Alternatively use Paracetamol 2 x 500 mg every 4-6 hours. 2 Skin flushing, especially of the face, may occur for up to a few days. This needs no specific treatment, and will settle with time.
Improves healing.	<b>Rare (less than 1%)</b> Tendon rupture – avoid heavy exercise of the injected part for at least a week.
Allows return to full activity.	<b>Very Rare (much less than 1%)</b> Infection can very rarely complicate any injection. If the area around the injection site becomes hot and red, contact the doctor who performed the injection for further advice.
	<i>In women only;</i> your next period after the injection may be heavier than normal. This is probably due to temporary hormonal changes related to the injection and does not usually require further investigation. It usually occurs in women over the age of 30.
	<i>In people with diabetes;</i> you may notice a rise in your blood sugar level for a few days after the injection. Some people may need to use extra insulin.

### After your Injection

- Especially if you have had an injection that includes local anaesthetic, be very careful not to stress the area.
- People doing light or office work can continue at work. If you are doing heavy work you should check with your doctor.
- Do NOT attempt any heavy lifting, eg, moving a heavy table or doing heavy weights.
- After several days you may return to light training that avoids stressing the injected area.
- At about the one week stage you can plan an ongoing recovery programme in conjunction with your doctor and physiotherapist.
- About one month after the injection you should see your doctor for a follow-up check.
- REMEMBER, the injection is not a cure. It works best as part of a total treatment plan with progressively increasing training over several weeks.
- For athletes subject to drug testing, you must get the doctor to fill out a TUE Form. For a local injection this will be an "abbreviated" form. This should be signed by you, and faxed to NZSDA, 09-521-5726, or, if you are an international athlete, to your International Federation, the same day the injection is given. (If you are unsure of your status contact the NZSDA on 0800 Drugfree.)

## HOW TO MANAGE A POST-INJECTION STEROID FLARE

### Background

Cortisone injections are used widely in the management of musculoskeletal problems, e.g. rotator cuff injuries, tennis elbow and lateral hip pain. Mostly the injection proceeds without problems, but a few people (about 5%) get problems. One of the most distressing is a post-injection steroid flare.

### When does it come on?

When the local anaesthetic wears off, usually 1-4 hours after the injection has been given.

### What does the patient notice?

Severe pain at the site of the injection. It is generally worse than the pain arising from the original condition, and usually starts 1-4 hours after the injection.

### How long does it last?

Usually the condition 'burns out' overnight, but it may last up to a week in some cases.

### What causes it?

This is not entirely clear, but it is thought by many experts to be due to the cortisone material precipitating (coming out of solution) amongst the injured tissue.

### What can be done about it?

The usual recommended treatments include the following:

1. Anti-inflammatory tablets (NSAIDs) e.g. Nurofen, Voltaren. These should be taken regularly, every 2-4 hours, until the pain subsides. For those people who have a sensitive gut and cannot tolerate standard NSAIDs, the following options are available:
  - a. Use of Losec 20mg daily for a few days whilst the patient is taking NSAIDs.
  - b. Use of a cox-2 blocking drug, e.g. Celebrex or Arcoxia, that is milder on the stomach.
2. Cortisone (prednisone) tablets may need to be used in a few severe cases. Most authorities recommend prednisone 40mg daily for about three days to stop the flare.

### Can it be prevented in future?

Yes. A person with a past history of a post injection flare will usually have a good recall of this. They can be offered prednisone tablets 40mg on the morning of the injection (i.e. with breakfast on the day the injection is to be given). The dosage of 40mg should be continued on the next two days with breakfast, i.e. three doses in total. This won't prevent all attacks, but is pretty effective.

### Is any other monitoring needed?

Not usually, but if the condition is not improving in the next 48 hours after the above treatment then you need a doctor's review. There is always the slight possibility that there may be a joint or soft tissue infection, and this needs checking out by a professional.

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