

Cortisone Injections - Frequently Asked Questions

By Dr George Pitsis

1. What is Cortisone?

“Cortisone” is the term used for the group of drugs called corticosteroids. The cortisone used in our clinic at Sports Medicine Institute is called Celestone Chronodose, generically known as Betamethasone.

2. Is Cortisone a steroid?

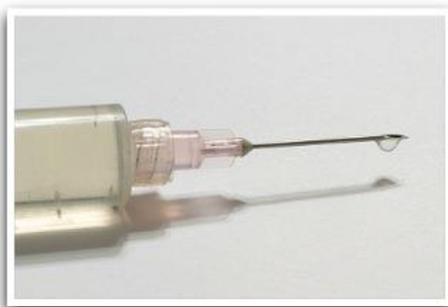
Cortisone is a type of ‘steroid’, however it is not anabolic, but rather functions as an anti-inflammatory. Other hormones in the ‘steroid’ family include the sex hormones Oestrogen, Progesterone and Testosterone, as well as Mineralocorticoid which regulates salt and water balance through the kidneys.

3. What is Cortisone used for?

Cortisone is commonly used to reduce inflammation which is associated with pain, tissue swelling, and loss of function in musculoskeletal problems. These include problems such as arthritis and tendonitis. The Cortisone injection is generally used as an adjunct to a multi-disciplinary treatment plan.

4. How is the treatment administered?

The skin is prepared with alcohol antiseptic and the injection is performed under ultrasound guidance using a disposable sterile needle to maximise accuracy. Ultrasound has no radiation. The Cortisone is mixed with a local anaesthetic to minimise pain and to provide diagnostic value. The pain experienced during the injection is minimal in most cases.



5. What are the Benefits of Cortisone?

The injection can have both diagnostic and therapeutic benefits. If symptoms are reduced by the effect of the local anaesthetic, this provides clinical evidence the pathological structure injected is the cause (or partly) of the pain, hence being 'diagnostic'.

Depending on the balance between mechanical and inflammatory components of the presenting problem, the injection may then provide a 'therapeutic' effect by settling down inflammation. The rate and length of success of this depends on many factors including the chronicity and severity of the problem, associated mechanical components, and biomechanical predisposing causes being addressed. For a small number of patients there may be no benefit at all.

Appropriately administered, Cortisone can greatly assist in definitively treating many conditions, as well as assisting with progressing rehabilitation with your allied health professional.

6. How long do they last for?

Cortisone is in crystalline form, which allows it to stay at the site of the injection and continue to work for 3 – 4 weeks. It is its crystalline form that can result in the side effect of 'post-steroid flare' (see below). However, once cortisone has its anti-inflammatory effect, quiescence can be maintained beyond this period with appropriate management.

7. What are the risks and side effects?

As with any drug treatment there are some risks and side effects, however it is rare that there are any major complications with cortisone injections.

The most common side effect is an increase in pain in the area before the Cortisone starts to work, known as a 'post-steroid flare'. This occurs in a minority of patients (up to 5%) and generally lasts for 24-48 hours after the injection. Paracetamol and cold packs can help ease this pain if it occurs. If it remains for more than 48 hours, please contact Sports Medicine Institute.

There is a theoretical risk of weakening soft tissues, and it is recommended an injection around a tendon is rested for a week before a graded return to activity is commenced. It is extremely important you follow the advice of your Sports Physician to avoid harm and further injury.

There is a 1:10,000 chance of infection, and all the necessary universal sterile techniques are adhered to, including use of gloves, antiseptic, and a 'no touch' technique.



Cortisone can temporarily elevate blood sugar for a week or two, significant for patients who have diabetes requiring more careful monitoring and management. Rarely, Cortisone can discolour the skin slightly or cause a small amount of fatty necrosis.

Cortisone injections DO NOT cause osteoporosis or avascular necrosis (AVN), which are side effects if corticosteroid is taken orally for a prolonged period of time.

8. How many injections can I have?

Generally speaking, three injections into any one site is the maximum recommended number, usually spaced by at least one month. Injections into other sites can be safely administered without any deleterious consequences.

9. Can I drive after the injection?

Generally speaking, yes you can drive. Occasionally an injection may causing aching an hour after the local anaesthetic wears off ('post-steroid flare', above).

10. Are there alternatives?

There may be other appropriate alternatives to your condition including Platelet Rich Plasma (PRP) injections, Hyaluronic Acid Viscosupplementation (e.g. Synvisc One, Durolane), and Orthokine injections. These can be discussed further with your Sports Physician.

If you have any further questions, please contact SMI on 9525 3444.

