



Ultrasound guided high volume Achilles tendon injection Patient information leaflet

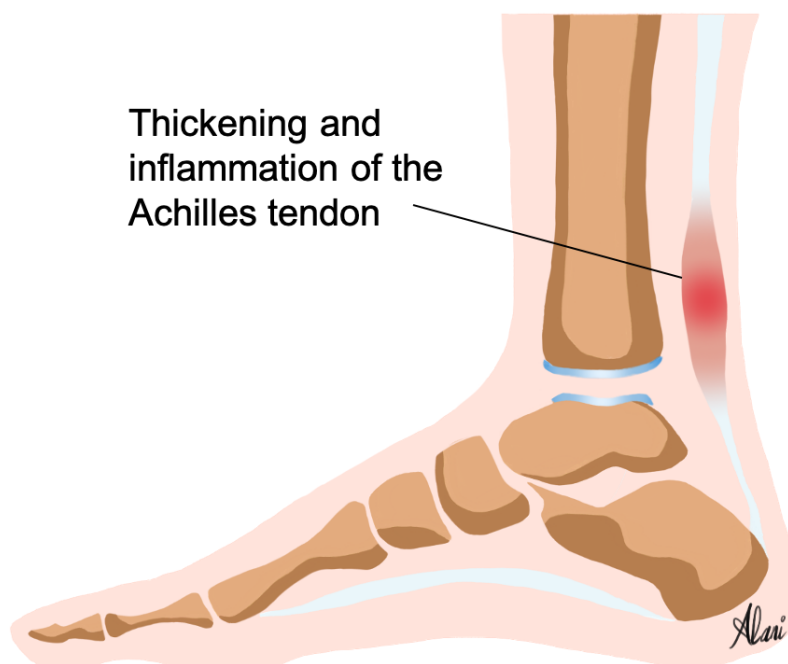
What is Achilles tendinopathy?

Achilles tendinopathy refers to inflammation of the Achilles tendon. Achilles tendon issues can be categorised into insertional (lower down) and non-insertional (mid-portion) problems. It can be very restrictive to movement and activities. Achilles tendinopathy is reported in sport people (particularly runners) but also in people with sedentary lifestyle.

What is ultrasound guided high volume Achilles tendon injection?

Ultrasound guided high volume Achilles tendon injection is a treatment option for mid portion Achilles tendinopathy. In this procedure, the radiologist uses ultrasound guidance to inject a mixture of medicine (usually containing numbing medication, normal saline/sterile water and sometimes low dose steroid). This is injected accurately under ultrasound guidance to separate the Achilles tendon from the deep fat pad. There is evidence that patients with Achilles tendinopathy develop small nerves that run from the fat pad into the Achilles tendon; and these nerves contribute to the pain sensation. This procedure aims to destroy these nerves and thus reduce the pain.

Mid portion Achilles tendinopathy





What is ultrasound?

Ultrasound is high frequency sound waves produced by a special machine. They can penetrate the skin providing very useful images of the deep tissues within the body. It is a harmless way of imaging and it is extremely useful in assessing various musculoskeletal conditions that can involve tendons, muscles, joints and the adjacent soft tissues. Unlike x-rays, ultrasound does not involve exposure to radiation or any harmful side effects.

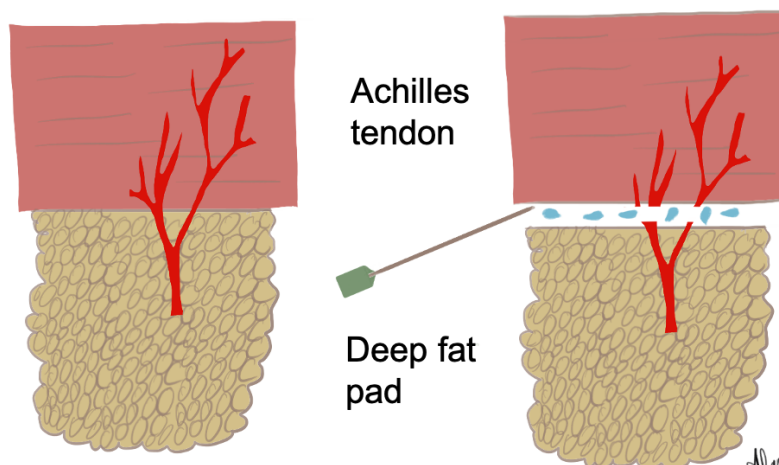
What is steroid/cortisone?

Steroids are anti-inflammatory medicines that can help relieve pain and inflammation. The commonly used types of steroid injections are hydrocortisone, triamcinolone (Kenalog) and methylprednisolone (Depo-medrone).

How is ultrasound guided high volume Achilles tendon injection done?

Your doctor will speak to you on the day about the procedure. It involves injecting a high volume of sterile (clean) water with numbing medications and sometimes low dose steroids accurately under ultrasound guidance to separate the Achilles tendon from the deep fat pad. The procedure is done under ultrasound guidance and you will be usually asked to lie on your tummy on the examination table. The doctor will assess the area using ultrasound to determine the best approach. Then the skin will be cleaned and prepared at the site of the injection, and numbing medication can be administered to the skin using a small needle. Then, a needle will be accurately advanced into the interface between the deep surface of the Achilles tendon and the underlying fat pad and the injectate will be used to separate the two.

High volume Achilles tendon injection



A mixture of medicine (usually contains numbing medication, normal saline/sterile water and sometimes low dose steroid) is injected accurately under ultrasound guidance to separate the Achilles tendon from the deep fat pad.



What to expect during/after the procedure?

You may feel a gradual build-up of pressure at the lower calf. This is expected as the procedure involves injecting a reasonable volume of fluid. Your doctor will keep checking on you during the procedure. When the procedure is done, your calf might feel swollen/tight for a few days. A small plaster is usually applied to the site of injection. You can remove this later during the same day. You can eat and drink normally before and after the procedure. You can shower as usual but avoid very hot showers/steam rooms. You can use simple painkillers like paracetamol, if you experience pain at the site of injection. It's advised not to drive immediately after the procedure. It is important to rest the area and avoid extraneous activities after the procedure, as instructed by the orthopaedic surgeon.

How long does ultrasound guided high volume Achilles tendon injection take?

The length of the procedure depends on the difficulty of the case and the experience of the doctor. Usually, 30 minutes is a reasonable time for the whole procedure (including explanation to the patient and preparation).

What are the possible complications of ultrasound guided high volume Achilles tendon injection?

The complications are rare in general. These include:

- Pain, swelling and discomfort for a few days at the site of the procedure. If a steroid medication is injected, then this can also cause pain in the area for a few days after the procedure. This is sometimes referred to as a “steroid flare”. Simple painkillers like paracetamol can help with this.
- Temporary bruising due to small blood collection under the skin at the site of injection.
- “Infection”. This is very rare but important to be aware of. It is reported to happen in less than 1 in 10000 of the cases. The symptoms of infection are pain, swelling and redness at the site of injection. Sometimes patients may also develop a fever. Get medical advice as soon as possible if you have these symptoms.
- The Achilles tendon is tendinopathic and weaker than normal. Although the needle/injection is inserted deep to the Achilles tendon and usually does not involve the Achilles tendon itself, there is a small risk of weakening of the Achilles tendon. Therefore, adequate resting of the ankle according to the orthopaedic surgeon advice is very important following the procedure.
- If you have diabetes, your blood sugar level may temporarily increase (if steroids are injected).
- If you have high blood pressure, your blood pressure may temporarily increase (if steroids are injected).
- Temporary facial flushing. This is a rare side effect from a steroid injection.
- Other side effects like mood changes, increased appetite, difficulty in sleeping and menstrual disturbance are very rare (if steroids are injected).



Steroids injections and COVID 19

Steroid injections may reduce a person's immunity for 2-4 weeks following injection. The reduction in immunity for most people is likely to be small and it is unclear if this has any impact on their risk of contracting COVID-19. The emerging data now suggests that the risks are probably very low.

The British Society of Rheumatology have published their guidelines on 20th November 2020 regarding the treatment of patients using corticosteroid injections to support clinicians and patients in the clinical decision making.

The aim of ultrasound guided intra-articular injections is to deliver a small and effective dose of the medicine accurately and directly into the site of pain, thus minimising the side effects.

However, there remains a theoretical risk that a steroid injection could:

- Increase the likelihood of contracting COVID-19 due to its immunosuppressant effect
- Reduce the body's ability to fight the COVID-19 virus
- Potentially make the patients more contagious to people around them, following a corticosteroid injection.

We screen our patients for any high-risk factors for COVID-19 (patients over the age of 70, BMI>40, BAME, diabetes, ischaemic heart disease, chronic respiratory disease or hypertension).

Because the size of risk is unknown, it is recommended that patients and clinicians should reach a shared decision weighing up the risks and benefits of proceeding with steroid injection treatment.

A specialist musculoskeletal radiologist consultant will see you on the day, discuss the procedure with you and address your questions. You can find more information about your procedure on our website www.mskultrasoundinjections.co.uk