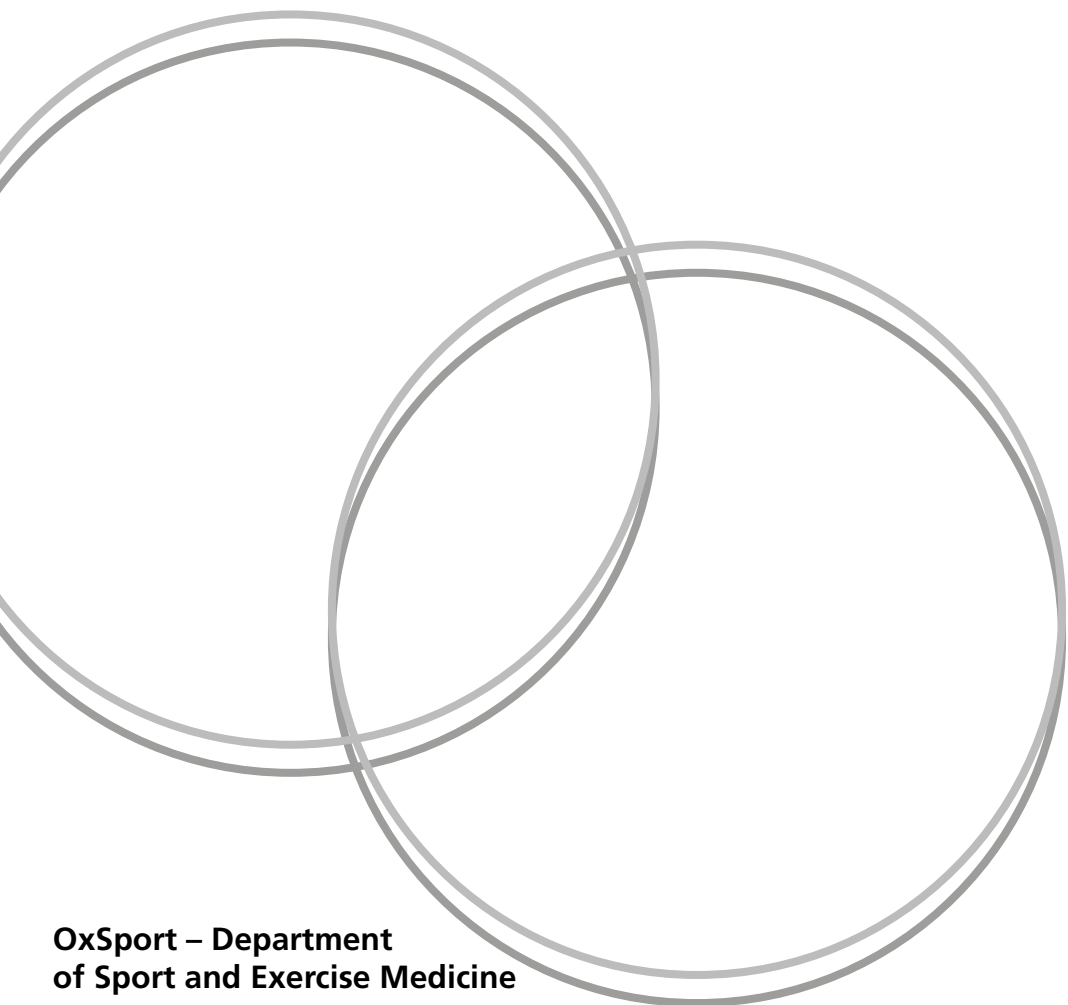




Oxford University Hospitals
NHS Foundation Trust

Dry needling and autologous blood injection

Information for patients



**OxSport – Department
of Sport and Exercise Medicine**

What is dry needling and an autologous blood injection?

Dry needling and an autologous blood injection are therapies commonly used to treat conditions such as tendinopathy and plantar fasciitis.

Dry needling involves repeatedly passing a fine needle into an area of abnormal tendon. This is carried out using an ultrasound machine, to help guide the needle to the correct place. Ultrasound scans are a quick, safe and effective way of us being able to see your tendon.

At the same time as dry needling, we may also recommend an autologous blood injection. This procedure involves taking a small sample of your blood from your arm (like a normal blood test) and injecting it into the site of your injury.

How do these procedures work?

Tendinopathy and plantar fasciitis are overuse injuries. They occur when a tendon or plantar fascia is unable to adapt to the level of strain placed upon it. This leads to repeated microscopic damage within the fibres of the tendon/plantar fascia.

As the fibres try to heal, they can become painful and thickened. When this condition is related to a tendon it is sometimes called tendinitis or tendinosis, but these are the same as tendinopathy.

Dry needling and an autologous blood injection are used to try to stimulate new healing of the damaged tendon.

How are these procedures carried out?

We will use an ultrasound machine, which uses sound waves to create an image on a screen, to find the exact area of damage in your tendon.

Dry needling

When the damaged area has been found, we will clean the skin over your tendon with antiseptic. We will then inject local anaesthetic into your skin and the tissues over the tendon. This will sting a little at first, but will soon make the area go numb.

When the area has gone numb, we will pass a fine needle through your skin and move it in and out of the tendon a number of times, before removing it completely.

Autologous blood injection

If you are also having an autologous blood injection, a small amount of blood will be taken from a vein in your arm. This will then be injected into the same area of the tendon where the dry needling took place.

Even though the skin and tissues around your tendon will be numb, you may find that both the procedures are slightly uncomfortable. However, the whole process should only take a few minutes.

How successful is the treatment?

This is a new treatment option being used to treat tendinopathy, so large clinical trials are yet to be reported on. However, we have found approximately 50-60 people in 100 with troublesome tendinopathy that has not responded to exercise programmes, will respond well to this treatment. It may take up to 6 weeks for the full effects of the treatment to be seen.

It is vital that you continue your physiotherapy and exercise programme in the weeks to months following the procedure, to maximise the benefits of the procedure. If you do not work on your rehabilitation, your tendinopathy is likely to return.

What are the risks?

Serious problems are very uncommon. You may notice an increase in pain levels for up to two weeks after the treatment, and a small amount of bruising. This will settle on its own, but you can take simple painkillers, such as paracetamol, until it fully settles. We do not recommend using anti-inflammatory medications (such as ibuprofen) during this period, as they can reduce the effects of the procedure.

There is a low (less than 1 in 1,000) risk of developing an infection after the treatment. There is also a very low risk of your tendon rupturing following these procedures. This is very rare, but it is important that you follow the post-treatment advice (see below) to reduce this risk.

You should seek medical advice if:

- you have a sudden increase in pain in your tendon
- the treated area becomes red or inflamed
- you develop a fever or high temperature (above 37.5°C).

What can and what can't I do after the procedure?

- You should not drive until your pain has subsided and you can safely perform an emergency stop (you may not be covered by your insurance).
- You do not need to completely rest your leg, but try to limit your walking for 48 hours after the injection.
- Restart your exercise programme at the basic level after 7 days, then progress gradually, according to the advice you have had from us.
- If you have had treatment for a lower limb injury, only introduce plyometric and impact activities once you have progressed through your rehabilitation programme.
- If you have any problems or questions at any stage throughout your rehabilitation, please contact your physiotherapist or doctor for advice.

Will I need a repeat procedure?

About half of people who have one or both of these procedures will need to have them repeated. Please contact your clinician after 4-6 weeks if you have felt no benefit.

How can I minimise the risk of tendon rupture?

To minimise the risk of your tendon rupturing you will need to avoid explosive activity, such as skipping or jumping, in the first week after the procedure.

When can I return to work?

This depends on the type of work you do. If you do a desk job you should be able to work the next day. However, if you have a physically active job, you may not be able to work as you normally would for the first week. Please discuss this with the doctor or physiotherapist who referred you for the procedure. Please tell your employer well in advance.

Are there alternative treatments?

Dry needling, either with or without autologous blood injection, is a treatment normally used alongside physiotherapy, activity modification and muscle strengthening exercises, but there are a variety of other treatments also used for tendinopathy. These include orthotic shoe inserts, other injection therapies, extracorporeal shockwave therapy and even surgery. Your treatment will be recommended by your clinician, based on your individual circumstances.

Further information about tendinopathies can be found on the OxSport website, in the patient information leaflets zone:
www.ouh.nhs.uk/oxsport

How to contact us

Appointments:

01865 737 871

Physiotherapy:

01865 738 074

Radiology:

01865 738 189

Pathway Administrator:

01865 738 285

Useful websites

OxSport:

www.ouh.nhs.uk/oxsport

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.

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