

# Dry Needling and Autologous blood injections

Information and Plan

Dr Julia Newton, Dr Natasha Jones, Dr Hamish Reid

[contactus@oxfordsem.net](mailto:contactus@oxfordsem.net)

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# Dry needling and autologous blood injection

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## **What are dry needling and autologous blood injections?**

Dry needling and autologous blood injections are therapies used commonly to treat conditions such as tendon problems.

Dry needling involves repeatedly introducing a fine needle in to an abnormal tendon. This is carried out using an ultrasound machine to 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 the dry needling we may also recommend an autologous blood injection. This procedure is also carried out under ultrasound guidance and involves taking a small sample of your own blood from your arm (like a normal blood test) and injecting it into the site of injury.

These procedures can be performed twice, and should be done at least 4 weeks apart.

## **How do these procedures work?**

Tendinopathy occurs when a tendon is unable to adapt to the strain being placed upon it. This leads to repeated small amounts of damage within the tendon fibres, and results in the tendon trying to heal itself in response to the strain.

Dry needling stimulates a new healing environment for the damaged tendon and autologous blood injection can further improve this process.

As your tendon regenerates and heals, it is very important that you continue to build strength in the muscle attached to it. This will help to reduce the forces through the tendon which will both help you get better but also prevent recurrence. Your doctor or physiotherapist will help you understand how to do this.

## **How are these procedures carried out?**

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

When the damaged area has been found, we will clean the skin over your tendon with antiseptic. We will then inject local anaesthetic into a small area of 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 – this is dry needling. If you are also having autologous blood injection, a small amount of blood taken from a vein in your arm will 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, some people find that the process can still be uncomfortable; please let us know if this is the case for you as we can help to reduce your discomfort.

### **How successful is the treatment?**

This is a new treatment option being used to treat tendinopathy. This means that large clinical trials are yet to be reported on. However, from auditing our own use of the treatment we have found approximately 50-60% of people with troublesome tendinopathy, that has not responded to exercise programmes, will respond well to this treatment.

### **What are the risks?**

Problems are uncommon. You may have a temporary increase in pain for up to 5 days after the treatment, and a small amount of bruising. This will settle on its' own, but you can take simple painkillers, such as paracetamol, before it fully settles. Please do not use anti-inflammatory drugs like ibuprofen after these procedures.

There is a low (less than 1 in 1000) 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 the risk of this occurring.

You should seek medical advice if:

- you have a sudden increase in pain in your tendon
- the area which has been treated 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 yourself or go home on public transport. You will need to be taken home by car. This will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home.
- You do not need to avoid using your leg all together, but try to walk as little as possible for 48 hours after the injection – only walk when necessary

- 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 plyometrics and impact activities once you have progressed through your rehabilitation programme.

### **How long will it be before I notice any improvements?**

Benefits from the procedure can take up to 6 weeks to take effect and benefits will be most marked if you work hard on building your strength during this period.

### **Will I need a repeat procedure?**

In about 50% of people the procedure needs repeating. Please contact us after 4-6 weeks if you have felt no benefit from this procedure.

### **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 running, skipping or jumping, in the first week after the procedure. You are advised to walk for short distances only.

### **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 inform your employer well in advance.