

Understanding NICE guidance

Information for people who use NHS services

Treating tendon problems by injecting patients with their own blood

NICE 'interventional procedures guidance' advises the NHS on when and how new procedures can be used in clinical practice.

This leaflet is about when and how injecting patients with their own blood can be used in the NHS to treat people with tendon problems. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

Interventional procedures guidance makes recommendations on the safety of a procedure and how well it works. An interventional procedure is a test, treatment or surgery that involves a cut or puncture of the skin, or an endoscope to look inside the body, or energy sources such as X-rays, heat or ultrasound. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering how well the procedure works and whether it represents value for money for the NHS.

NICE has produced this guidance because the procedure is quite new. This means that there is not a lot of information yet about how well it works, how safe it is and which patients will benefit most from it.

This leaflet is written to help people who have been offered this procedure to decide whether to agree (consent) to it or not. It does not describe tendon problems or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision. Some sources of further information and support are on the back page.

What has NICE said?

There is not much good evidence about how well this procedure works or how safe it is. If a doctor wants to inject patients with their own blood to treat tendon problems, they should make sure that extra steps are taken to explain the uncertainty about how well it works, as well as the uncertainty surrounding potential risks of the procedure. They should also explain alternative treatments. This should happen before the patient agrees (or doesn't agree) to the procedure. The patient should be given this leaflet and other written information as part of the discussion. There should also be special arrangements for monitoring what happens to the patient after the procedure.

NICE has encouraged further research into this area and may review the procedure if more evidence becomes available.

Other comments from NICE

Most of the evidence NICE looked at was for chronic (long-lasting) rather than acute (short-lasting) tendon problems.

Some of the studies used 'dry needling' (passing a needle through the tendon several times to break up the fibres) before injecting the blood. But it wasn't possible to separate the effects of dry needling and blood injection.

Treating tendon problems by injecting patients with their own blood

This procedure may not be the only possible treatment for tendon problems. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

The medical name for this procedure is 'autologous blood injection for tendinopathy'. The procedure is not described in detail here – please talk to your doctor for a full description.

Tendinopathy is the name for a range of conditions that affect the tendons – the connective tissue that connects muscle to bone. It can cause pain, weakness and stiffness. The most common tendons affected are in the elbow, the heel and the knee.

Treatments include rest, physiotherapy, pain relief, steroids and occasionally surgery.

This procedure can be used where other treatments have failed. Blood is taken from the patient, and injected into the area around the damaged tendon. The blood is thought to help heal the tendons. The patient is usually given a local anaesthetic before the procedure. The surgeon may use ultrasound to make sure the needle is put in the right place. Before the blood injection, 'dry needling' (repeatedly passing a needle through the tendon to disrupt the fibres and cause bleeding) may be performed. Patients should be advised not to put too much strain on the tendon for a few weeks. The affected area may also be put in a splint and patients may be offered physiotherapy. The procedure can be repeated over several treatments.

What does this mean for me?

If your doctor has offered you injection of your own blood to treat tendon problems, he or she should tell you that NICE has decided that the benefits and risks are uncertain. This does not mean that the procedure should not be done, but that your doctor should fully explain what is involved in having the procedure and discuss the possible benefits and risks with you. You should only be asked if you want to agree to this procedure after this discussion has taken place. You should be given written information, including this leaflet, and have the opportunity to discuss it with your doctor before making your decision.

NICE has also decided that more information is needed about this procedure. Your doctor may ask you if details of your procedure can be used to help collect more information about this procedure. Your doctor will give you more information about this.

You may want to ask the questions below

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

Summary of possible benefits and risks

Some of the benefits and risks seen in the studies considered by NICE are briefly described below. NICE looked at five studies on this procedure.

How well does the procedure work?

Pain was assessed in 15 patients who were injected with their own blood and 5 who were just injected with anaesthetic. After 8 weeks the pain had decreased by 60% in the blood injection group and by 16% in the anaesthetic group. At just over 2 years, pain in the group injected with their own blood had decreased by 93%.

Three studies involving a total of 83 patients treated for 'tennis elbow' also looked at pain. On a scale from 1 (mild pain) to 7 (worst pain), pain scores decreased from 6 to 0 or 1 at 6 months and from 6.5 to 2.0 at 9.5 months after patients were injected with their own blood.

Two studies showed that joint function improved after the patients were treated with their own blood. Knee function improved in a study of 44

You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.

patients (47 knees) who had problems with the tendons in the knee, and in another study of 15 patients, elbow function had improved by 72% 6 months after the procedure.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that the success of the procedure can be assessed by pain relief and improved joint function.

Risks and possible problems

Pain was one of the main problems reported. In one study of 35 patients, 25 had pain and stiffness after the procedure, which went away within 2 days, and in another, 2 out of 28 patients needed short-term opiate pain relief. Most patients reported that the pain was similar to the pain they had after steroid injection.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that possible problems include infection, injury to structures near the tendon and bruising at the injection site.

More information about tendon problems

NHS Choices (www.nhs.uk) may be a good place to find out more. Your local patient advice and liaison service (usually known as PALS) may also be able to give you further information and support.

About NICE

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Interventional procedures guidance applies to the whole of the NHS in England, Wales, Scotland and Northern Ireland. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see www.nice.org.uk/aboutguidance

This leaflet is about 'autologous blood injection for tendinopathy'. This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/PG279

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N1768).

We encourage voluntary organisations, NHS organisations and clinicians to use text from this booklet in their own information about this procedure.