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Understanding NICE guidance

Information for people who use NHS services

National Institute for Health and Clinical Excellence

Treating tennis elbow using shockwave therapy

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

This leaflet is about when and how shockwave therapy can be used in the NHS to treat people with tennis elbow. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

This HealthTech 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 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 tennis elbow 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 page 7.

What has NICE said?

Although there is evidence to say that this procedure is safe, there are still uncertainties about how well it works. If a doctor wants to use shockwave therapy for tennis elbow, they should make sure that extra steps are taken to explain the uncertainty about how well the procedure works, as well as the potential risks. 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 using shockwave therapy for tennis elbow, and patients' progress should be assessed for up to a minimum of 1 year after the procedure. NICE may review the procedure if more evidence becomes available.

Other comments from NICE

The Committee found interpreting the data difficult because the studies were very different from each other, the results were inconsistent and the placebo treatments had a large beneficial effect.

If the procedure works in selected patients, it could have a big impact because tennis elbow is common and in many patients other treatments don't work. This means that having reliable evidence is particularly important.

Treating tennis elbow using shockwave therapy

This procedure may not be the only possible treatment for tennis elbow. 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 'extracorporeal shockwave therapy for refractory tennis elbow'. 'Extracorporeal' means outside the body and 'refractory' means that the condition does not respond to conventional treatments. The 'shock waves' are inaudible, high-energy sound waves. The procedure is not described in detail here – please talk to your specialist for a full description.

Tennis elbow is pain or inflammation on the outside of the elbow. Other symptoms include weakness or stiffness. It is usually caused by injury or overuse. Conventional treatments include rest, applying ice, pain-relieving and anti-inflammatory medication, support devices, physiotherapy, physical exercises and corticosteroid injection.

In this procedure shock waves are passed through the skin to the affected area using a special device. Ultrasound guidance may be used to make sure the device is in the right place. Shockwave therapy can be given in one or more sessions. It may be carried out under local anaesthesia if high-energy shock waves are used because it can be painful. However, local anaesthesia may influence the outcome.

What does this mean for me?

If your doctor has offered you this procedure, he or she should tell you that NICE has decided that although the procedure is safe there are uncertainties about how well it works. 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 care will I need after the procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

Summary of possible benefits and risks

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

Some of the benefits and risks seen in the studies considered by NICE are briefly described here. NICE looked at 7 studies on this procedure.

How well does the procedure work?

In a study of 272 patients, treatment was reported as being successful (a reduction in pain and no need for further treatment) in 32 out of 124 patients who had the procedure and in 31 out of 122 patients who had a placebo (dummy) treatment. All patients were assessed 3 months after treatment. Another study also reported treatment success (reduction in pain) after 3 months in 29 out of 48 patients who had the procedure, and in 21 out of 25 patients who had a different treatment (steroid injection). In a separate study, in which patients were also assessed after 3 months, daytime pain decreased in 14 out of 40 patients who had the procedure and in 13 out of 35 patients who had the placebo treatment.

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 key measures of success are symptom relief and better use of the arm.

Risks and possible problems

In 2 studies involving a total of 386 patients, 43 out of 190 patients who had the procedure and 19 out of 194 patients who had the placebo reported having pain. In a study of 272 patients, short-lasting skin reddening occurred in 42 out of 134 patients who had the procedure, and in 11 out of 136 patients who had placebo. Short-lasting swelling occurred in 9 and 8 patients, respectively.

In a study of 114 patients, 10 out of 56 patients who had the procedure and none in the placebo group had nausea. In the same study, 6 out of 56 and 5 out of 58 patients, respectively, reported symptoms around the site of treatment. Two patients withdrew from a study of 75 patients because their symptoms got worse after 2 treatment sessions.

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 main problems are bruising, skin reddening and skin damage around the site that was treated. In theory, other problems could include rupture of one of the tendons in the arm.

More information about tennis elbow

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. For details of all NICE guidance on tennis elbow, visit our website at www.nice.org.uk

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. This 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 'extracorporeal shockwave therapy for refractory tennis elbow'. This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/HTG201

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N1976). The NICE website has a screen reader service called Browsealoud, which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.

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

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