

Shoulder resurfacing

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 shoulder resurfacing can be used in the NHS to treat people with arthritis of the shoulder or other conditions requiring a shoulder replacement. 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 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 arthritis of the shoulder 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?

This procedure can be offered routinely as a treatment option for people with arthritis of the shoulder provided that doctors are sure that:

- the patient understands what is involved and agrees to the treatment, and
- the results of the procedure are monitored.

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

Shoulder resurfacing

The medical name for this procedure is 'shoulder resurfacing arthroplasty'. Arthroplasty means surgical repair of a joint.

The procedure is not described in detail here – please talk to your specialist for a full description.

People with arthritis of the shoulder often have pain, accompanied by reduced movement of the joint and reduced quality of life. Depending on the cause, treatments include physical therapy, drugs (painkillers and anti-inflammatory tablets, gels or creams) and steroid injections. If the symptoms are severe then surgical options include replacing the damaged parts of the shoulder joint with an artificial joint (shoulder replacement), or shoulder fusion, a procedure to stabilise the joint.



The aim of shoulder resurfacing is to replace only the damaged joint surfaces instead of the whole shoulder joint. With the patient under general anaesthesia, the damaged joint surfaces at the head of the humerus (the bone of the upper arm that forms part of the shoulder joint) are shaved away to restore their original shape. The joint is capped using an artificial joint surface, which is firmly attached onto the end of the bone and secured with a peg in the back of the artificial surface, which is inserted into a hole drilled into the bone. Spare fragments of bone are often used to help with the attachment.



What does this mean for me?

NICE has said that this procedure is safe enough and works well enough for use in the NHS. If your doctor thinks shoulder resurfacing is a suitable treatment option for you, he or she should still make sure you understand the benefits and risks before asking you to agree to it.

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 operation?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

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

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 7 studies on this procedure.

How well does the procedure work?

Several studies looked at shoulder function and pain. In a study of 69 patients, shoulder function improved from 40% before the procedure to 91% after 4.4 years, and in another study of 94 patients, shoulder function improved from 24% to 75% after 6.8 years.

A study of 44 patients comparing shoulder resurfacing with shoulder replacement surgery showed that after 12 months the improvements were the same in both groups. In a study of 70 patients, the percentage with severe pain reduced from 93% before surgery to 6% 4 years after, and a study of 62 patients reported that 96% of shoulders were either 'much better' or 'better' up to 6.5 years after the procedure.

The comparison study of 44 patients showed that 2 patients out of 22 who had shoulder resurfacing subsequently needed a total shoulder replacement. Two other studies also said that some patients needed further resurfacing surgery. This happened to 6 patients in the study of 94 (because of problems with the new artificial section) and 1 patient in the study of 62 (because of persistent pain). However, studies of 70 and 69 patients said that no patients had needed further surgery as long as 4 years 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 success factors are pain relief, range of motion, quality of life and whether further surgery is needed.

Risks and possible problems

The new joint surface had to be removed in 2 patients in the study of 94 (1 because of infection and 1 because the joint became loose). Also in this study, 1 patient developed myositis ossificans, an unusual condition in which bone forms within muscle.

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 loosening and other problems with the new joint surface. In theory, other problems could include infection, nerve injury, deep vein thrombosis, fracture, failure requiring repeat surgery, and joint stiffness.



More information about shoulder arthritis

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 arthritis, 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 'Shoulder resurfacing arthroplasty'. This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/guidance/HTG227

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N2235). 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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ISBN 978-1-4731-8195-3

N2235 1P Jul 10

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