

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional procedures consultation document

Lateral elbow resurfacing for arthritis

Arthritis can cause pain, swelling and stiffness in the elbow. The outer (lateral) part of the elbow is a joint between the upper arm bone and 1 of the bones in the lower arm. In this procedure, under general anaesthetic, a cut is made in the back of the elbow and the muscle is split to access the bones. The ends of the 2 bones are cut and drilled to remove damaged tissue. An implant is then inserted into the end of each bone, to create smooth surfaces, as seen in a healthy joint (resurfacing). The muscle is then stitched back together.

NICE is looking at lateral elbow resurfacing for arthritis.

NICE's interventional procedures advisory committee met to consider the evidence and the opinions of professional experts, who are consultants with knowledge of the procedure.

This document contains the [draft guidance for consultation](#). Your views are welcome, particularly:

- comments on the draft recommendations
- information about factual inaccuracies
- additional relevant evidence, with references if possible.

NICE is committed to promoting equality of opportunity, eliminating unlawful discrimination and fostering good relations between people with particular protected characteristics and others.

This is not NICE's final guidance on this procedure. The draft guidance may change after this consultation.

After consultation ends, the committee will:

- meet again to consider the consultation comments, review the evidence and make appropriate changes to the draft guidance
- prepare a second draft, which will go through a [resolution process](#) before the final guidance is agreed.

Please note that we reserve the right to summarise and edit comments received during consultation or not to publish them at all if, in the reasonable opinion of NICE, there are a lot of comments or if publishing the comments would be unlawful or otherwise inappropriate.

Closing date for comments: 24 May 2021

Target date for publication of guidance: September 2021

1 Draft recommendations

- 1.1 Evidence on the safety and efficacy of lateral elbow resurfacing for arthritis is limited in quantity and quality. Therefore, this procedure should only be used with special arrangements for clinical governance, consent, and audit or research. Find out [what special arrangements mean on the NICE interventional procedures guidance page](#).
- 1.2 Clinicians wishing to do lateral elbow resurfacing for arthritis should:
- Inform the clinical governance leads in their healthcare organisation.

- Give patients (and their families and carers as appropriate) clear written information to support [shared decision making](#), including [NICE's information for the public](#).
- Ensure that patients (and their families and carers as appropriate) understand the procedure's safety and efficacy, and any uncertainties about these.
- Enter details about all patients having the procedure onto the [National Joint Registry](#). Clinicians should also audit and review their outcomes locally.
- Discuss the outcomes of the procedure during their annual appraisal to reflect, learn and improve.

1.3 Healthcare organisations should:

- Ensure systems are in place that support clinicians to collect and report data on outcomes and safety for every patient having this procedure.
- Regularly review data on outcomes and safety for this procedure.

1.4 The procedure should only be done in specialist centres by surgeons with extensive experience of elbow arthroplasty.

1.5 Report any problems with a medical device using the [Medicines and Healthcare products Regulatory Agency's Yellow Card Scheme](#).

1.6 NICE may update the guidance on publication of further evidence.

2 The condition, current treatments and procedure

The condition

2.1 Rheumatoid arthritis is the most common form of arthritis in the elbow. Osteoarthritis that needs surgery is less common in the

elbow than in weight-bearing joints, such as the knee and hip. Symptoms include pain, swelling and stiffness in the elbow.

Current treatments

- 2.2 Treatment for elbow arthritis depends on the severity of the disease. Conservative treatments include analgesics and corticosteroid injections to relieve pain and inflammation, and physiotherapy and prescribed exercise to improve function and mobility. When symptoms are severe, surgery may be indicated. Options include arthroscopic debridement, interposition arthroplasty, replacement or excision of the radial head, or total elbow replacement.

The procedure

- 2.3 Lateral resurfacing of the elbow for arthritis is usually done under general anaesthesia. The patient is typically placed on their side with the elbow uppermost. An incision is made in the back of the elbow and the triceps muscle is split to access the elbow joint. The joint is dislocated, and the articular surfaces prepared. The capitellum of the humerus is sized, and then after inserting a guidewire the capitellum is reamed using a surface cutter, and a peg hole is then created. A trial component is inserted. A guidewire is then inserted into the radial head and the surface is shaped with a cutter to produce a concave face. A peg hole is then created in the radial head and a trial component inserted. Once the trial components have been tested for stability and range of movement and there is a satisfactory result, the definitive components are implanted and the joint reduced. The triceps and other soft tissues are repaired, and the skin is closed with sutures. A cast or splint is used for 4 to 6 weeks after which function is gradually resumed.
- 2.4 A potential advantage of this procedure over a total elbow replacement is that it preserves the natural inner compartment of

the elbow. Movements are therefore likely to be more like a natural elbow joint.

3 Committee considerations

The evidence

- 3.1 NICE did a rapid review of the published literature on the efficacy and safety of this procedure. This comprised a comprehensive literature search and detailed review of the evidence from 6 sources, which was discussed by the committee. The evidence included 6 case series. It is presented in [the summary of key evidence section in the interventional procedures overview](#). Other relevant literature is in the appendix of the overview.
- 3.2 The professional experts and the committee considered the key efficacy outcomes to be: pain reduction, improved mobility and activities of daily living, and improved quality of life.
- 3.3 The professional experts and the committee considered the key safety outcomes to be: reoperation rates, device failure, and infection.
- 3.4 Patient commentary was sought but none was received.

Committee comments

- 3.5 The evidence considered by the committee included studies using different devices.

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Chair, interventional procedures advisory committee

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