Lateral elbow resurfacing for arthritis

Interventional procedures guidance
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Your responsibility

This guidance represents the view of NICE, arrived at after careful consideration of the evidence available. When exercising their judgement, healthcare professionals are expected to take this guidance fully into account. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.

Commissioners and/or providers have a responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

Commissioners and providers have a responsibility to promote an environmentally sustainable health and care system and should assess and reduce the environmental impact of implementing NICE recommendations wherever possible.

1 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 who do elbow arthroplasty regularly and have training in this specific technique.

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

1.6 Further research, which could include case series with long-term follow up, should report range of motion, patient-reported outcomes and complications.

1.7 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. An incision is made through muscle tendon to access the elbow joint, and the articular surfaces prepared. The capitellum of the humerus is reamed using a surface cutter, and a peg hole is created. A trial component is inserted. A guidewire is inserted into the radial head, then 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 the definitive components are implanted and the joint reduced. The soft tissues are repaired, and the skin is closed with sutures. A cast or splint may be used for 4 to 6 weeks.

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.

3.6 The committee was informed that the procedure does not preclude revision to total elbow replacement if necessary.

3.7 The committee was informed that, in selected patients, this procedure can markedly improve quality of life with respect to elbow function.

3.8 The committee was pleased to receive a consultation comment from a patient who reported a benefit from the procedure.

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