NICE National Institute for Health and Care Excellence

NICE guidance

Midcarpal hemiarthroplasty for wrist arthritis

HealthTech guidance
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www.nice.org.uk/guidance/htg529

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, and specifically any special arrangements relating to the introduction of new interventional procedures. 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.

All problems (adverse events) related to a medicine or medical device used for treatment or in a procedure should be reported to the Medicines and Healthcare products Regulatory Agency using the Yellow Card Scheme.

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. Providers should ensure that governance structures are in place to review, authorise and monitor the introduction of new devices and procedures.

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.

Contents

This guidance replaces IPG663.

1 Recommendations

1.1 Evidence on the safety and efficacy of midcarpal hemiarthroplasty for wrist arthritis is inadequate in quantity and quality. Therefore, this procedure should only be used in the context of research. Find out what only in research means on the NICE guidance page.

1.2 Further research could be in the form of case series. It should report patient selection, type and severity of arthritis, patient-reported outcome measures and the need for revision in the longer term (at least 5 years).

2 The condition, current treatments and procedure

The condition

2.1 Wrist arthritis can be caused by rheumatoid arthritis, osteoarthritis, trauma or sepsis. It can cause pain, stiffness and swelling.

Current treatments

2.2 Treatments include analgesics, non-steroidal anti-inflammatory drugs, disease-modifying antirheumatic drugs and corticosteroid injections. If these do not work well enough, surgical treatments can be used. These include proximal row carpectomy, limited or partial carpal fusion, total wrist arthrodesis or total wrist arthroplasty.

The procedure

2.3 The procedure is done using general or regional anaesthesia, with a tourniquet applied to the upper arm. A radiographic template is created preoperatively to determine the implant size. An incision is made over the wrist, in line with the third metacarpal. The joint is exposed, and the first row of carpal bones and the radial articular cartilage are removed. A trial implant is put into position, the carpus is reduced onto the bearing surface and the implant size, range of motion and stability are assessed. The final implant is then put in place and fully seated on the contoured subchondral plate.

2.4 Strengthening exercises are started 4 to 6 weeks after surgery and full activity can start several weeks after that. The aim is to relieve pain while keeping the midcarpal articulation and the anatomic centre of wrist rotation.

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 2 sources, which was discussed by the committee. The evidence included 2 case series. It is presented in table 2 of the overview. Other relevant literature is in the appendix of the overview.

3.2 The specialist advisers and the committee considered the key efficacy outcomes to be: relief of pain, restoration of wrist function, and patient-reported outcome measures, including quality of life.

3.3 The specialist advisers and the committee considered the key safety outcomes to be: pain, infection, loss of function and loosening of the prosthesis.

3.4 Patient commentary was sought but none was received.

Committee comments

3.5 The committee noted that the evidence it reviewed came from 2 small case series. It was informed that only 1 surgeon at 1 centre is doing the procedure in the UK.

Update information

Minor changes since publication

January 2026: Interventional procedures guidance 663 has been migrated to HealthTech guidance 529. The recommendations and accompanying content remain unchanged.

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Endorsing organisation

This guidance has been endorsed by Healthcare Improvement Scotland.