NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Interventional procedures consultation document

Midcarpal hemiarthroplasty for wrist arthritis

In wrist arthritis the cartilage in the joint wears away, allowing the bones to rub against each other. This can cause pain, stiffness and difficulty gripping objects. In this procedure, an artificial wrist joint is created by replacing parts of the affected bones in the hand with a metal implant. The aim is to relieve pain and maintain movement.

NICE is looking at midcarpal hemiarthroplasty for wrist arthritis.

NICE's interventional procedures advisory committee met to consider the evidence and the opinions of specialist advisers, 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This document contains the draft guidance for consultation.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 The draft guidance may change after this consultation.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- meet again to consider the consultation comments, review the evidence and make appropriate changes to the draft guidance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: 17 July 2019

Target date for publication of guidance: October 2019

1 Draft 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.

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 are inadequate, surgical treatments 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 preserving 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 interventional procedures 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.

Committee comments

3.4 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.

Tom Clutton-Brock

Chair, interventional procedures advisory committee

June 2019

ISBN: