

Key priorities for implementation

- Exercise¹ should be a core treatment for people with osteoarthritis, irrespective of age, comorbidity, pain severity or disability. Exercise should include:
 - local muscle strengthening, and
 - general aerobic fitness.
- Referral for arthroscopic lavage and debridement² should not be offered as part of treatment for osteoarthritis, unless the person has knee osteoarthritis with a clear history of mechanical locking (not gelling, 'giving way' or X-ray evidence of loose bodies).
- Healthcare professionals should consider offering paracetamol for pain relief in addition to core treatment; regular dosing may be required. Paracetamol and/or topical non-steroidal anti-inflammatory drugs (NSAIDs) should be considered ahead of oral NSAIDs, cyclo-oxygenase 2 (COX-2) inhibitors or opioids.
- Healthcare professionals should consider offering topical NSAIDs for pain relief in addition to core treatment for people with knee or hand osteoarthritis. Topical NSAIDs and/or paracetamol should be considered ahead of oral NSAIDs, COX-2 inhibitors or opioids.
- When offering treatment with an oral NSAID/COX-2 inhibitor, the first choice should be either a standard NSAID or a COX-2 inhibitor (other than etoricoxib 60 mg). In either case, these should be co-prescribed with a proton pump inhibitor (PPI), choosing the one with the lowest acquisition cost.
- Referral for joint replacement surgery should be considered for people with osteoarthritis who experience joint symptoms (pain, stiffness and reduced function) that have a substantial impact on their quality of life and are refractory to non-surgical treatment. Referral should be made before there is prolonged and established functional limitation and severe pain.

¹ It has not been specified whether exercise should be provided by the NHS or whether the healthcare professional should provide advice and encouragement to the patient to obtain and carry out the intervention themselves. Exercise has been found to be beneficial but the clinician needs to make a judgement in each case on how to effectively ensure patient participation. This will depend upon the patient's individual needs, circumstances, self-motivation and the availability of local facilities.

² This recommendation is a refinement of the indication in 'Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis' (NICE interventional procedure guidance 230). This guideline has reviewed the clinical and cost-effectiveness evidence, which has led to this more specific recommendation on the indication for which arthroscopic lavage and debridement is judged to be clinically and cost effective.

About this booklet

This is a quick reference guide that summarises the recommendations NICE has made to the NHS in Osteoarthritis: the care and management of osteoarthritis in adults (NICE clinical guideline 59).

This guidance is written in the following context

NICE clinical guidelines are recommendations about the treatment and care of people with specific diseases and conditions in the NHS in England and Wales.

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, 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, and informed by the summary of product characteristics of any drugs they are considering.

Implementation tools

NICE has developed tools to help organisations implement this guidance (listed below). These are available on our website (www.nice.org.uk/CG059).

- Slides highlighting key messages for local discussion.

Further information

Ordering information

You can download the following documents from www.nice.org.uk/CG059

- A quick reference guide (this document) – a summary of the recommendations for healthcare professionals.
- The NICE guideline – all the recommendations.
- 'Understanding NICE guidance' – information for patients and carers.
- The full guideline – all the recommendations, details of how they were developed, and reviews of the evidence they were based on.

- Audit support for monitoring local practice.
- Costing tools:
 - costing report to estimate the national savings and costs associated with implementation
 - costing template to estimate the local costs and savings involved.

For printed copies of the quick reference guide or 'Understanding NICE guidance', phone NICE publications on 0845 003 7783 or email publications@nice.org.uk and quote:

- N1459 (quick reference guide)
- N1460 ('Understanding NICE guidance').

Related NICE guidance

For information about NICE guidance that has been issued or is in development, see the website (www.nice.org.uk).

Published

NICE has issued clinical guidelines on obesity (CG43) and depression (CG23); technology appraisal guidance on 'Guidance on the use of cyclo-oxygenase (Cox) II selective inhibitors, celecoxib, rofecoxib, meloxicam and etodolac for osteoarthritis and rheumatoid arthritis' (TA27); and interventional procedure guidance on 'Arthroscopic knee washout, with or without debridement, for the treatment of osteoarthritis' (IPG230), 'Single mini-incision hip replacement' (IPG152), 'Mini-incision surgery for total knee replacement' (IPG117), 'Minimally invasive two-incision surgery for total hip replacement' (IPG112), and 'Artificial trapeziometacarpal joint replacement for end-stage osteoarthritis' (IPG111).

Updating the guideline

This guideline will be updated as needed, and information about the progress of any update will be posted on the NICE website (www.nice.org.uk/CG059).

Quick reference guide

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Osteoarthritis

The care and management of osteoarthritis in adults

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Assessment, management and treatment of osteoarthritis in adults

Holistic assessment

Assess the effect of osteoarthritis on the person's function, quality of life, occupation, mood, relationships and leisure activities. Use the following as an aid to assessment¹.

The patient's existing thoughts

- What concerns do they have?
- What are their expectations?
- What do they know about osteoarthritis?

The patient's support network

- Is the patient isolated or do they have a carer?
- How is the main support giver coping? What are their ideas, concerns and expectations?

The patient's mood

- Screen for depression
- Are there any other stresses in their life?

The patient's attitude to exercise

The effect of osteoarthritis on:

- activities of daily living
- family duties
- hobbies
- lifestyle expectations
- quality of sleep
- their occupation, including short- and long-term ability to perform their job (are any adjustments to home or workplace required?).

Pain assessment

- Assess:
 - self-help strategies the patient is using
 - current drugs being used, including their doses, frequency, timing and any possible side effects.

Other musculoskeletal pain

- Is there evidence of a chronic pain syndrome?
- Are there other treatable sources of pain (for example, periarticular pain, trigger finger, ganglion or bursitis)?

Comorbidities

- If two or more morbidities, consider any interaction.
- Is the patient fit for surgery?
- Assess the most appropriate drug therapy.
- Is the patient prone to falls?

Core symptom-relieving therapies

Offer all people with clinically symptomatic osteoarthritis advice on the following core treatments.

Access to appropriate information

- Offer accurate verbal and written information to enhance understanding of osteoarthritis and management of the condition.
- Offer advice on appropriate footwear (including shock-absorbing properties) for people with lower limb osteoarthritis.

Activity and exercise

- Exercise should include:
 - local muscle strengthening
 - general aerobic fitness.
- Exercise should be a core treatment irrespective of:
 - age
 - pain severity
 - comorbidity
 - disability.

Interventions to help weight loss²

- Offer to people with osteoarthritis who are overweight or obese.

Management plan

- Formulate and agree a management plan (including individualised self-management strategies) in partnership with the person with osteoarthritis. This should:
 - target positive behavioural changes, such as exercise, weight loss, use of suitable footwear and pacing
 - emphasise the **core treatments**
 - take into account comorbidities that compound the effect of osteoarthritis symptoms.
- Explain clearly to the patient treatment options that are available to them and any risks and benefits associated with them.
- Offer information about osteoarthritis to the patient regularly.
- Review regularly.

Patient self-management strategies*

- Exercise.
- Weight loss if the person is overweight or obese.
- Use of suitable footwear.
- Application of heat or cold packs to the site of pain.
- Transcutaneous electrical nerve stimulation (TENS) for pain relief.

* Please refer to each individual recommendation within the pathway of care for more information.

Box 1 Treatment with oral NSAIDs/COX-2 inhibitors³

- Offer a standard NSAID or a COX-2 inhibitor (but not etoricoxib 60 mg) as a first choice. Co-prescribe with a proton pump inhibitor (choose the agent with the lowest acquisition cost).
- Prescribe at the lowest effective dose for the shortest possible period of time.
- Owing to potential gastrointestinal, liver and cardio-renal toxicity:
 - take into account individual patient risk factors, including age, when choosing the NSAID/COX-2 inhibitor and dose to be prescribed
 - assess and/or monitor patient risk factors
 - consider prescribing an alternative analgesic if the patient is already taking low-dose aspirin for another condition.

Treatments not recommended

- When a person presents with osteoarthritis, **do not** prescribe:
- rubefacients
 - intra-articular hyaluronan injections
 - electro-acupuncture⁵
 - chondroitin or glucosamine products.

Referral for surgery

Consider a person with osteoarthritis for referral for joint surgery if they:

- have already been offered all of the core treatments, and
- are experiencing joint symptoms (such as pain, stiffness and reduced function) that have a substantial impact on their quality of life and are refractory to non-surgical treatment.

If a clear history of mechanical locking in the knee is present, offer referral for arthroscopic lavage and debridement. **Do not** offer this procedure for the treatment of any other symptom of osteoarthritis.

When making the decision to refer:

- discussions should involve the referring healthcare professional, patient representatives and the surgeon
- do not:
 - use current scoring tools for prioritisation
 - allow patient-specific factors (including age, gender, smoking, obesity and comorbidities) to be barriers for referral.

Adjuncts to core therapies

Consider offering the following as adjuncts to core treatment.

Pharmacological

- Paracetamol (regular dosing may be required).
- Topical non-steroidal anti-inflammatory drugs (NSAIDs) for people with knee or hand osteoarthritis.
- Offer paracetamol and/or topical NSAIDs before considering oral NSAIDs, cyclo-oxygenase 2 (COX-2) inhibitors or opioids.
- If paracetamol or topical NSAIDs are insufficient at relieving pain, consider adding:
 - opioid analgesics (consider the risks and benefits of prescribing opioids, particularly in elderly people)
 - an oral NSAID/COX-2 inhibitor (see box 1) to the paracetamol³.
- If paracetamol or topical NSAIDs are ineffective at relieving pain, then consider substitution with an oral NSAID/COX-2 inhibitor (see box 1)³.
- Topical capsaicin for knee or hand osteoarthritis.
- Intra-articular corticosteroid injections when pain is moderate to severe.

Non-pharmacological

- Application of heat or cold to the site of pain.
- Transcutaneous electrical nerve stimulation (TENS)⁴.
- Manipulation and stretching, particularly for hip osteoarthritis.
- Assessment for bracing/joint supports/insoles for people with biomechanical joint pain or instability.
- Assistive devices (for example, walking sticks and tap turners) for people with specific problems with daily activities. Expert advice may be required from occupational therapists or disability equipment assessment centres.

Patient-centred care

Treatment and care should take into account patients' individual needs and preferences. Good communication is essential, supported by evidence-based information, to allow patients to reach informed decisions about their care. Follow Department of Health advice on seeking consent if needed. If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

¹ This is a summary of key topics that should be addressed when assessing a person with osteoarthritis. Within each topic are a few suggested specific points. This list is not exhaustive, and not every topic listed will be relevant for all people with osteoarthritis.

² See 'Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children' (NICE clinical guideline 43).

³ These recommendations replace the osteoarthritis aspects only of 'Guidance on the use of cyclo-oxygenase (Cox) II selective inhibitors, celecoxib, rofecoxib, meloxicam and etodolac for osteoarthritis and rheumatoid arthritis' (NICE technology appraisal 27).

⁴ If treatment is effective, advise people where they can purchase their own TENS machine.

⁵ There is not enough consistent evidence of clinical or cost effectiveness to allow a firm recommendation on the use of acupuncture for the treatment of osteoarthritis.