GUIDELINES

Care and management of osteoarthritis in adults: summary of NICE guidance

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This is one of a series of *BMJ* summaries of new guidelines, which are based on the best available evidence; they will highlight important recommendations for clinical practice, especially where uncertainty or controversy exists. Further information about the guidance, a list of members of the guideline development group, and the supporting evidence statements are in the version on bmj.com.

Why read this summary?

Osteoarthritis refers to a syndrome of joint pain accompanied by functional limitation and reduced quality of life. It is the most common form of arthritis and one of the leading causes of pain and disability in the United Kingdom. The published evidence for osteoarthritis treatment has many limitations—typically, short duration studies using single drug treatments. However, people with osteoarthritis need to be aware of the treatments that represent core management and of the range of additional treatments available. This article summarises the most recent recommendations from the National Institute for Health and Clinical Excellence (NICE) on the care and management of osteoarthritis in adults.[1]

Recommendations

NICE recommendations are based on systematic reviews of best available evidence. When minimal evidence is available, recommendations are based on the guideline development group's opinion of what constitutes good practice. Evidence levels for the recommendations are in the longer version of this article on bmj.com.

Holistic assessment and management of symptomatic osteoarthritis

- Assess the effect of osteoarthritis on the individual's function, quality of life, occupation, mood, relationships, and leisure activities.
- Provide periodic review tailored to an individual's needs.
- Formulate a management plan in partnership with the person with osteoarthritis, taking into consideration comorbidities that compound the effect of osteoarthritis.
- Communicate the risks and benefits of treatment options in ways that can be understood.

Core treatments

Provide advice on the following to all people with symptomatic osteoarthritis:

- Access to appropriate information, oral and written, to enhance understanding of the condition and to counter misconceptions (such as osteoarthritis is inevitably progressive and cannot be treated). Good sources of patient information exist online at www.arc.org.uk (Arthritis Research Campaign), www.move.uk.net (Move), and www.arthritiscare.org.uk (Arthritis Care).
- Activity and exercise, including local muscle strengthening and general aerobic fitness.
- Interventions to achieve weight loss if person is overweight or obese.

Other treatments can be used as adjuncts to these core treatments (see figure), and a person with osteoarthritis may use several of these treatments. Some treatments will be useful only for certain joints.

Adjunct non-pharmacological treatments

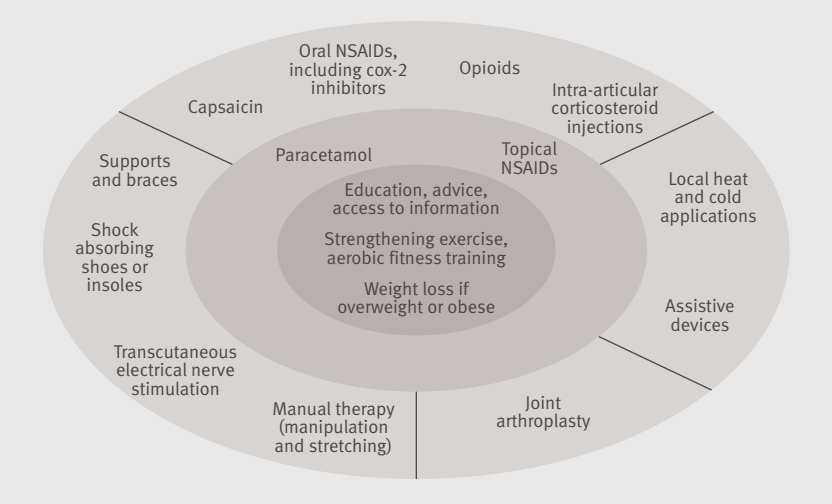
- Agree on self management strategies with the person with osteoarthritis, emphasising the recommended core treatments, especially exercise.
- Target positive behavioural changes as appropriate—such as exercise, weight loss, use of suitable footwear (that is, with shock absorbing properties) and pacing (avoiding "peaks" and "troughs" of activities).
- Consider other therapies, such as:
  - Local heat or cold applications
  - Manipulation and stretching, particularly for osteoarthritis of the hip
  - Transcutaneous electrical nerve stimulation (TENS)
  - Assessment for bracing, joint supports, or insoles in those with biomechanical joint pain or instability
  - Assistive devices (for example, walking sticks and tap turners) for those who have specific problems with activities of daily living. Expert advice may be sought, for example, from occupational therapists or disability equipment assessment centres.

Electroacupuncture should not be used. Insufficient evidence exists (despite RCTs and cost effectiveness analysis) to make a firm recommendation on acupuncture. The use of glucosamine and chondroitin products is not recommended.

Adjunct pharmacological treatments

Consider risks and benefits of pharmacological treatments, particularly in elderly people and those with comorbidities.

- Offer paracetamol for pain relief—regular dosing may be needed.
- For knee and hand osteoarthritis, consider paracetamol and/or topical non-steroidal anti-inflammatory drugs (NSAIDs) before oral NSAIDs, cyclo-oxygenase-2 (COX 2) inhibitors, and opioids.
- Consider topical capsaicin.
- If paracetamol or topical NSAIDs are insufficient for pain relief, then consider adding opioid analgesics or substituting with (or in addition to paracetamol) an oral NSAID or COX 2 inhibitor.
- Use oral NSAIDs or COX 2 inhibitors at the lowest effective dose for the shortest possible period of time. The first choice should be either a COX 2 inhibitor (other than etoricoxib 60 mg) or a standard NSAID. In either case, prescribe these alongside a proton pump inhibitor, choosing the one with the lowest acquisition cost.
- All oral NSAIDs and COX-2 inhibitors have analgesic effects of a similar magnitude but vary in their potential gastrointestinal, liver, and cardiorenal toxicity; therefore, when choosing the agent and dose, take into account an individual's risk factors (including age) and consider appropriate assessment and/or ongoing monitoring of these risk factors.
- If a person with osteoarthritis needs to take low dose aspirin, consider other analgesics before substituting with or adding an NSAID or COX 2 inhibitor (plus a proton pump inhibitor) if pain relief is ineffective or insufficient.
- Consider intra-articular corticosteroid injections for the relief of moderate to severe pain.



Treatments for osteoarthritis in adults. Starting at the centre and working outwards, the treatments are arranged in the order in which they should be considered, taking into account individuals' different needs, risk factors, and preferences. The core treatments (centre) should be considered first for every person with osteoarthritis. If further treatment is required, consider the drugs in the second circle before the drugs in the outer circle. The outer circle also shows adjunctive treatments (both non-pharmacological and surgical), which have less well proved efficacy, provide less symptom relief, or increased risk to the patient compared with those in the second circle

Rubefacients and intra-articular hyaluronan injections are not recommended for the treatment of osteoarthritis.

Referral for surgical interventions

- Referral for arthroscopic lavage and debridement should not be routinely offered as part of treatment for osteoarthritis, unless the person has knee osteoarthritis with a clear history of mechanical locking (therefore not for reasons such as gelling (stiffness and pain associated with prolonged immobility) "giving way," or x ray evidence of loose bodies—currently common inappropriate reasons for referral).
- Before referring a patient for consideration of joint surgery, ensure that he or she has been offered at least the core treatment options.
- Consider referral for joint replacement surgery for people with osteoarthritis who have joint symptoms (pain, stiffness, and reduced function) that substantially affect 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.
- Patient specific factors (including age, sex, smoking, obesity, and comorbidities) should not be barriers to referral for joint replacement surgery.
- Base decisions about referral thresholds on discussions between patient representatives, referring clinicians, and surgeons, rather than on current scoring tools for prioritisation.

Overcoming barriers

Improved understanding, among healthcare professionals and people with osteoarthritis, of the range of treatments available will reduce misconceptions and negativity about osteoarthritis and its treatment. Emphasising the recommended core treatments, other simple, non-pharmacological treatments, and relatively safe agents such as paracetamol and topical NSAIDs will help to reduce drug toxicity and the focus on pharmacological treatments.

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1 National Institute for Health and Clinical Excellence. *Osteoarthritis: national clinical guideline for care and management in adults* . London: NICE, 2008. www.nice.org.uk/CG059.