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American Academy of Orthopaedic Surgeons Clinical Practice Guideline on The Treatment of Osteoarthritis (OA) of the Knee

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AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS CLINICAL PRACTICE GUIDELINE ON

The Treatment of Osteoarthritis (OA) of the Knee

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Summary of Recommendations

The following is a summary of the recommendations in the AAOS' clinical practice guideline, The Treatment of Osteoarthritis (OA) of the Knee. This guideline was explicitly developed to include only treatments less invasive than knee replacement (arthroplasty). This summary does not contain rationales that explain how and why these recommendations were developed nor does it contain the evidence supporting these recommendations. All readers of this summary are strongly urged to consult the full guideline and evidence report for this information. We are confident that those who read the full guideline and evidence report will also see that the recommendations were developed using systematic evidence-based processes designed to combat bias, enhance transparency, and promote reproducibility. This summary of recommendations is not intended to stand alone. Treatment decisions should be made in light of all circumstances presented by the patient. Treatments and procedures applicable to the individual patient rely on mutual communication between patient, physician and other healthcare practitioners.

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Disclaimer: This clinical guideline was developed by an AAOS physician volunteer Work Group and is provided as an educational tool based on an assessment of the current scientific and clinical information and accepted approaches to treatment. It is not intended to be a fixed protocol as some patients may require more or less treatment. Patient care and treatment should always be based on a clinician's independent medical judgment given the individual clinical circumstances.

The complete AAOS guideline can be found at <http://www.aaos.org/research/guidelines/OAKguideline.pdf>

Patient Education and Lifestyle Modification

- ▶ **Recommendation 1** We suggest patients with symptomatic OA of the knee be encouraged to participate in self-management educational programs such as those conducted by the Arthritis Foundation, and incorporate activity modifications (e.g., walking instead of running; alternative activities) into their lifestyle.
Level of Evidence: **II**
Grade of Recommendation: **B**
- ▶ **Recommendation 2** Regular contact to promote self-care is an option for patients with symptomatic OA of the knee.
Level of Evidence: **IV**
Grade of Recommendation: **C**
- ▶ **Recommendation 3** We recommend patients with symptomatic OA of the knee, who are overweight (as defined by a BMI>25), should be encouraged to lose weight (a minimum of five percent (5%) of body weight) and maintain their weight at a lower level with an appropriate program of dietary modification and exercise.
Level of Evidence: **I**
Grade of Recommendation: **A**

Rehabilitation

- ▶ **Recommendation 4** We recommend patients with symptomatic OA of the knee be encouraged to participate in low-impact aerobic fitness exercises.
Level of Evidence: **I**
Grade of Recommendation: **A**
- ▶ **Recommendation 5** Range of motion/flexibility exercises are an option for patients with symptomatic OA of the knee.
Level of Evidence: **V**
Grade of Recommendation: **C**
- ▶ **Recommendation 6** We suggest quadriceps strengthening for patients with symptomatic OA of the knee.
Level of Evidence: **II**
Grade of Recommendation: **B**

Mechanical Interventions

- ▶ **Recommendation 7** We suggest patients with symptomatic OA of the knee use patellar taping for short term relief of pain and improvement in function.
Level of Evidence: **II**
Grade of Recommendation: **B**
- ▶ **Recommendation 8** We suggest lateral heel wedges not be prescribed for patients with symptomatic medial compartmental OA of the knee.
Level of Evidence: **II**
Grade of Recommendation: **B**
- ▶ **Recommendation 9** We are unable to recommend for or against the use of a brace with a valgus directing force for patients with medial uni-compartmental OA of the knee.
Level of Evidence: **II**
Grade of Recommendation: **Inconclusive**

- **Recommendation 10** We are unable to recommend for or against the use of a brace with a varus directing force for patients with lateral uni-compartmental OA of the knee.

Level of Evidence: **V**

Grade of Recommendation: **Inconclusive**

Complementary and Alternative Therapy

- **Recommendation 11** We are unable to recommend for or against the use of acupuncture as an adjunctive therapy for pain relief in patients with symptomatic OA of the knee.

Level of Evidence: **I**

Grade of Recommendation: **Inconclusive**

- **Recommendation 12** We recommend glucosamine and/or chondroitin sulfate or hydrochloride not be prescribed for patients with symptomatic OA of the knee.

Level of Evidence: **I**

Grade of Recommendation: **A**

Pain Relievers

- **Recommendation 13** We suggest patients with symptomatic OA of the knee receive one of the following analgesics for pain unless there are contraindications to this treatment:

- Acetaminophen [not to exceed 4 grams per day]
- Non-steroidal anti inflammatory drugs (NSAIDs)

Level of Evidence: **II**

Grade of Recommendation: **B**

- **Recommendation 14** We suggest patients with symptomatic OA of the knee and increased GI risk (Age \geq 60 years, comorbid medical conditions, history of peptic ulcer disease, history of GI bleeding, concurrent corticosteroids and/or concomitant use of anticoagulants) receive one of the following analgesics for pain:

- Acetaminophen [not to exceed 4 grams per day]
- Topical NSAIDs
- Nonselective oral NSAIDs plus gastro-protective agent
- Cyclooxygenase-2 inhibitors

Level of Evidence: **II**

Grade of Recommendation: **B**

Intra-Articular Injections

- **Recommendation 15** We suggest intra-articular corticosteroids for short-term pain relief for patients with symptomatic OA of the knee.

Level of Evidence: **II**

Grade of Recommendation: **B**

- **Recommendation 16** We cannot recommend for or against the use of intra-articular hyaluronic acid for patients with mild to moderate symptomatic OA of the knee.

Level of Evidence: **I and II**

Grade of Recommendation: **Inconclusive**

Needle Lavage

- **Recommendation 17** We suggest that needle lavage not be used for patients with symptomatic OA of the knee.

Level of Evidence: **I and II**

Grade of Recommendation: **B**

Surgical Intervention

- **Recommendation 18** We recommend against performing arthroscopy with débridement or lavage in patients with a primary diagnosis of symptomatic OA of the knee.

Level of Evidence: **I and II**

Grade of Recommendation: **A**

- **Recommendation 19** Arthroscopic partial meniscectomy or loose body removal is an option in patients with symptomatic OA of the knee who also have primary signs and symptoms of a torn meniscus and/or a loose body.

Level of Evidence: **V**

Grade of Recommendation: **C**

- **Recommendation 20** We cannot recommend for or against an osteotomy of the tibial tubercle for patients with isolated symptomatic patello-femoral osteoarthritis.

Level of Evidence: **V**

Grade of Recommendation: **Inconclusive**

- **Recommendation 21** Realignment osteotomy is an option in active patients with symptomatic unicompartmental OA of the knee with malalignment.

Level of Evidence: **IV and V**

Grade of Recommendation: **C**

- **Recommendation 22** We suggest against using a free-floating interpositional device for patients with symptomatic unicompartmental OA of the knee.

Level of Evidence: **IV**

Grade of Recommendation: **B**