

Management of Osteoarthritis of the Hip (2023)

About the Guideline

- This guideline is based on peer-reviewed articles using a systematic review that was conducted from August 2022 to August 2023.
- The guideline was developed by a multidisciplinary development group of expert clinicians and methodologists.
- The purpose of this guideline is to improve the management of adult patients with osteoarthritis (OA) of the hip. An adult is defined in this guideline as someone who is 18 years of age or older.

Key Clinical Considerations

Become familiar with the recommendations and best practice statements provided in this guideline, especially if you work in an acute care setting.

Osteoarthritis of the Hip

- OA among adults is the foremost cause of disability in the United States, and is the chief indication for joint replacements of the hip and knee.
- OA develops over time, with an increased risk for patients with prior hip trauma.
- Within the synovial joint, an imbalance of repair and breakdown of tissue occurs.
- The etiology varies for OA and includes trauma, overuse, genetic factors, infection, and femoral and acetabular morphology.
- Joint degeneration develops because of large body mass, hereditary vulnerability, certain occupations, past trauma, and femoral and acetabular bone structure.
- Physical and emotional impacts include changes to quality of life, reduced level of ambulation and mobility, the need for supervision and for a change in the level of care needed, and an inability to continue with prior living arrangements.
- Surgery benefits include improved function and reduction of pain.
- Complications in the early postoperative period include pain, dislocation, periprosthetic infection, fracture, and venous blood clots.
- Complications in the late postoperative period include pain, infection, and aseptic component loosening.
- Contraindications related to the patient's risk factors should be discussed with the physician.

Recommendations and Evidence

- Total hip arthroplasty (THA)
 - Evaluation should include consideration of preoperative quality of life, age, sex, body mass index greater than 30, and baseline pain.
 - For patients with symptomatic osteoarthritis of the hip, tranexamic acid should be considered to reduce blood loss and the need for blood transfusion.
- Patients who are obese or who have diabetes mellitus may not have the same level of improvement in function and pain after THA.
- Reduced quality of life and functional status are associated with advanced age prior to surgery.
- Mortality can increase with the aging patient who requires surgery because of OA.
- Patients with anxiety, depression, and/or psychosis experience reduced pain relief, function, and quality of life after THA.

- Complications may be increased if tobacco products are used after THA.
- Nonsteroidal anti-inflammatory drugs (e.g., naproxen, celecoxib, and valdecoxib) help improve function and relieve short-term pain in patients with symptomatic OA of the hip.
- Oral opioids are not recommended for the nonoperative treatment of symptomatic OA of the hip.
- Oral acetaminophen may be considered to improve pain and increase function.
- The use of glucosamine sulfate is not recommended to reduce stiffness and pain; its efficacy is similar to a placebo.
- The use of intra-articular corticosteroids for short-term use may be considered to reduce pain and improve function. Risks of injection include allergic reactions, bleeding, infection, transient pain, and hyperglycemia.
- For symptomatic osteoarthritis, intra-articular hyaluronic acid is not recommended.
- Physical therapy is a conservative treatment option that helps reduce pain and improve function for patients with mild-to-moderate symptoms.
- For patients who develop symptomatic OA after THA, there is little evidence to support the improvement of symptoms with preoperative physical therapy; however, postoperative physical therapy for these patients has been shown to improve early function.
- Patients with THA may benefit from topical or intravenous tranexamic acid to help reduce blood loss.
- Compared with general anesthesia, neuraxial anesthesia may be considered to reduce complications from anesthesia in patients with symptomatic OA of the hip having THA.
- There are no noted clinical differences in surgical approaches for THA.
- Formal postoperative physical therapy or unsupervised exercise at home is recommended to improve function.

Reference

Nandi, S., Hannon, C. P., & Fillingham, Y. (2024). 2023 American Academy of Orthopaedic Surgeons Management of Osteoarthritis of the Hip Evidence-Based Clinical Practice Guideline: Case Studies. *The Journal of the American Academy of Orthopaedic Surgeons*, 10.5435/JAAOS-D-24-00427. Advance online publication. <https://doi.org/10.5435/JAAOS-D-24-00427> Retrieved September 2024 from <https://www.aaos.org/globalassets/quality-and-practice-resources/osteoarthritis-of-the-hip/oah-cpg.pdf> (Level VII)