The American Academy of Orthopaedic Surgeons (AAOS) recently released its revised clinical practice guideline (CPG) on the treatment of osteoarthritis of the knee, addressing two key changes. Most of the remaining recommendations provided in the 2009 CPG go unchanged. CPGs are not meant to be stand-alone documents, but rather serve as a point of reference and educational tool for both primary care physicians and orthopaedic surgeons.

The original guideline, as well as this revised version, was developed to include only treatments which are less invasive than knee replacement surgery. Osteoarthritis (OA) is a common condition that can affect any joint in the body particularly after years of use. It is also known as "wear and tear" arthritis and most commonly occurs in people who are 65 years of age or older. Some 33 million Americans are affected by osteoarthritis, and it is the leading cause of physical disability.

The two primary changes recommended in the 2013 guidelines that differ from the 2009 CPG include:

- **Acetaminophen**: The recommended dosage was reduced from 4,000 mg to 3,000 mg a day. This is not a change made by AAOS specifically for OA patients, but an overall change made by the FDA since 2009 for individuals who use acetaminophen.
- **Intra-articular Hyaluronic Acid (HA)**: Intra-articular hyaluronic acid is no longer recommended as a method of treatment for patients with symptomatic osteoarthritis of the knee. The 2009 guidelines review was inconclusive regarding this treatment method.

"Fourteen studies assessed intra-articular hyaluronic acid injections," said David S. Jevsevar, MD, MBA, chair of the Committee on Evidence-Based Quality and Value which oversees the development of clinical practice guidelines. "Although a few individual studies found statistically significant treatment effects, when combined together in a meta-analysis the evidence did not meet the minimum clinically important improvement thresholds."

Other important recommendations that remain in the revised guideline include:

- Patients who only display symptoms of osteoarthritis and no other problems, such as loose bodies or meniscus tears, should not be treated with arthroscopic lavage.
- Patients with a Body Mass Index (or BMI) greater than 25 should lose a minimum of five percent of their body weight.
- Patients should begin or increase their participation in low-impact aerobic exercise.

"One of the best ways for a patient to reduce his or her pain and realize better health is to be proactive," said Dr. Jevsevar, who also is an orthopaedic surgeon in St. George, Utah. "For instance, if a patient is overweight, losing weight is probably the best thing he or she can do to slow the progression of osteoarthritis of the knee."

The AAOS work group suggests that 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 3,000 mg per day)
- For short-term pain relief, intra-articular corticosteroids
- Non-steroidal anti inflammatory drugs (NSAIDs)
The AAOS work group cannot recommend the following treatments:

- Custom made lateral wedge insoles
- Glucosamine and/or chondroitin sulfate or hydrochloride
- Needle lavage (aspiration of the joint with injection of saline)

In addition, although acupuncture continues to grow in popularity, the evidence did not support its use in patients with OA of the knee.

Due to a lack of available research, the CPG is unable to recommend for or against the use of bracing, growth factor injections and/or platelet rich plasma.

"There are many treatment options for osteoarthritis of the knee," said Dr. Jevsevar. "However, not all are effective. There needs to be more and better testing, since results are still inconclusive. Therefore, if you are experiencing knee problems, the best advice is to work closely with your physician and orthopaedic surgeon to develop the best course of treatment for you."

**More information:** The full guideline along with all supporting documentation and workgroup disclosures is available on the AAOS website: [http://www.aaos.org/research/g.../GuidelineOAKnee.asp](http://www.aaos.org/research/g.../GuidelineOAKnee.asp)

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