



VA/DoD CLINICAL PRACTICE GUIDELINE FOR THE NON-SURGICAL MANAGEMENT OF HIP & KNEE OSTEOARTHRITIS

Department of Veterans Affairs
Department of Defense

Patient Summary

QUALIFYING STATEMENTS

The Department of Veterans Affairs and the Department of Defense guidelines are based upon the best information available at the time of publication. They are designed to provide information and assist decision making. They are not intended to define a standard of care and should not be construed as one. Neither should they be interpreted as prescribing an exclusive course of management.

This Clinical Practice Guideline is based on a systematic review of both clinical and epidemiological evidence. Developed by a panel of multidisciplinary experts, it provides a clear explanation of the logical relationships between various care options and health outcomes while rating both the quality of the evidence and the strength of the recommendation.

Variations in practice will inevitably and appropriately occur when clinicians take into account the needs of individual patients, available resources, and limitations unique to an institution or type of practice. Every healthcare professional making use of these guidelines is responsible for evaluating the appropriateness of applying them in the setting of any particular clinical situation.

These guidelines are not intended to represent Department of Veterans Affairs or TRICARE policy. Further, inclusion of recommendations for specific testing and/or therapeutic interventions within these guidelines does not guarantee coverage of civilian sector care. Additional information on current TRICARE benefits may be found at www.tricare.mil or by contacting your regional TRICARE Managed Care Support Contractor.

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I. Osteoarthritis

Osteoarthritis (OA), sometimes simply called arthritis, is one of the most common chronic conditions in the United States. Osteoarthritis affects more than 30 million Americans [1] and is estimated to occur in about 14% of adults age 25 years and older and 34% of adults age 65 years and older.[2]

Usually, patients with knee and hip OA experience morning joint stiffness which typically resolves within 30 minutes. However, severe cases of OA can cause debilitating pain. This pain may lead to problems with walking, work, or recreational activities. It could also lead to disability.

Did You Know?

- The economic burden of OA and related conditions is significant, likely exceeding an estimated \$340 billion annually in healthcare costs.[3]
- Osteoarthritis can cause substantial disability. In 2020, it is expected to be the fourth leading cause of years of life lived with disability.[4]
- Occupational activities that result in joint injury or overuse increase the risk of OA.[5]
- Osteoarthritis is more common in military Service Members and Veterans than the general population.[6]

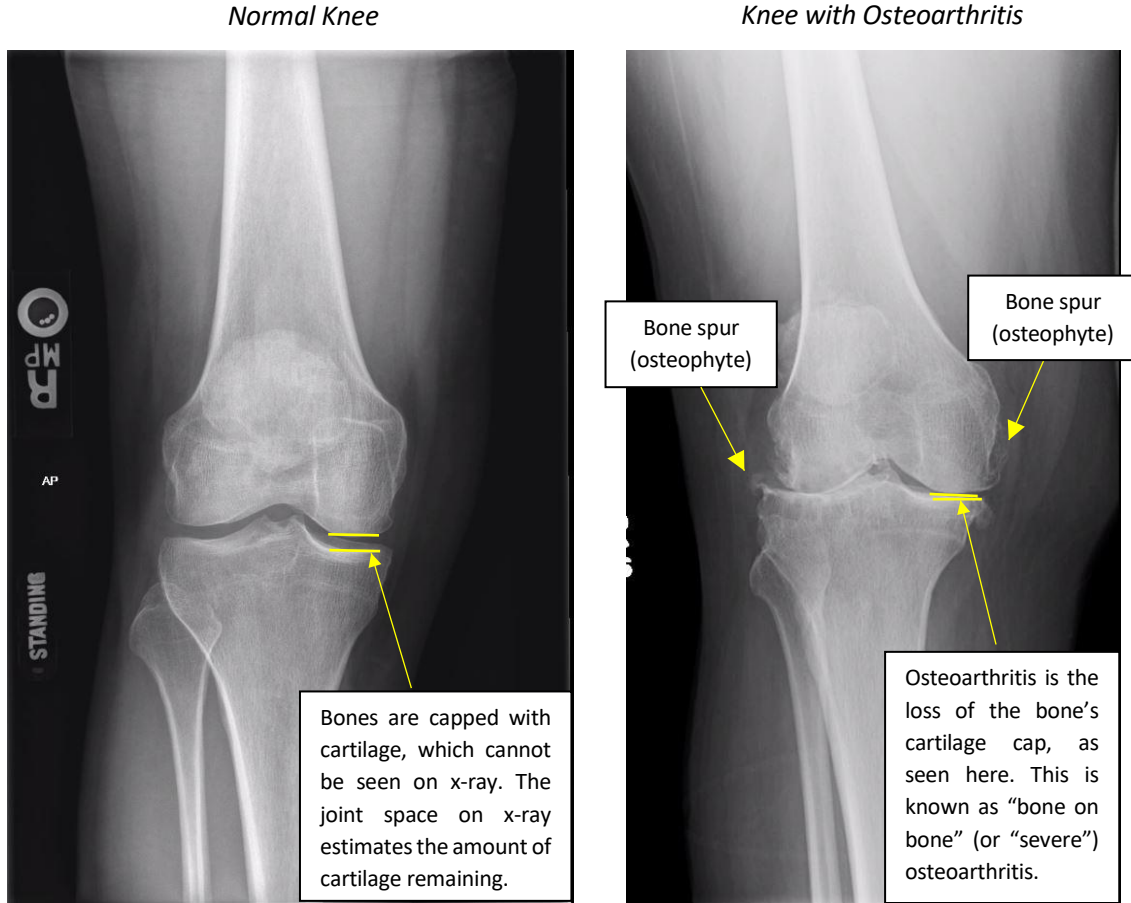
II. What causes osteoarthritis?

Osteoarthritis can affect any joint in your body, including the hip, knee, hand/wrist, or foot/ankle. The hip and knee are very commonly affected.

Osteoarthritis occurs when the cartilage that protects the end of bones wears down. Cartilage provides a cushion between two bones in a joint. When this cartilage breaks down, there is more friction and stress between bones in a joint. This leads to pain, swelling, and stiffness.

Typically, OA progresses slowly with time. Once the cartilage covering is lost, it is nearly impossible to replace. The images below show the differences between a normal knee and a knee affected by OA.

Figure 1. X-rays of a Normal Knee and a Knee with Osteoarthritis



Although the risk of OA increases with age, younger people can also develop it. Younger people usually develop OA as a result of joint injury or a genetic susceptibility. Some factors that increase the likelihood of getting OA are:

- Age
- Gender
- Genetics
- Obesity
- Joint injury or overuse
- Joint deformity

Did You Know?

- The rate of OA is about 20% higher in women Service Members compared to men.[\[7\]](#)
- Obesity increases the lifetime risk of OA significantly. Two out of three people with obesity will develop OA.[\[8\]](#)

III. How is osteoarthritis diagnosed?

Osteoarthritis is typically diagnosed based on medical history and a physical examination. There is no blood test for the diagnosis of OA. During an office visit, your medical provider may ask you questions about your pain level and lifestyle. For example, they could ask:

1. When did your pain begin? When did your stiffness begin?
2. Does your pain come and go, or is it continuous?
3. What time of day is your pain worse?
4. How often do you exercise or engage in vigorous physical activity?
5. Have you ever injured the joint where you feel pain?
6. How does your joint pain affect you?

Although x-rays and other imaging technologies are not required, your medical provider may use them to confirm the diagnosis, rule out bone fractures or other conditions, or to guide your overall treatment plan.

IV. How can I manage my osteoarthritis?

The goal of OA treatment is to reduce pain and improve joint function. While there is no cure for OA, many symptoms can be managed through weight loss, exercise, and over-the-counter or nonprescription pain relief medications. Your medical provider will develop an individualized treatment plan that is tailored to your lifestyle.

Your treatment may include:

- A self-management program, including exercise and weight loss for OA of the hip and knee, and bracing for OA of the knee (with a prescription and direction from your provider)
- Physical therapy
- Over-the-counter or nonprescription pain relievers, both topical (such as creams, gels, etc.) and oral (such as Tylenol® also known as acetaminophen, ibuprofen, Advil®)
- Non-opioid prescription medications

Stay Active!
Although it may cause joint pain to walk or exercise, it is important to stay active because not using the joint may result in more pain or stiffness in the long-term.

If severe pain and disability persist, your provider may recommend the following treatments:

- Joint injections
- Referral to specialists and surgeons for consideration of total joint replacement

There is not enough evidence that dietary supplements help treat OA effectively.

There is no cure for OA. However, effective treatments and support can reduce pain and improve function. Your provider can recommend an individualized care and management plan for you to achieve maximum function, allow you to continue activities you enjoy, and improve your quality of life.

For patients who have severe, disabling pain and loss of function and mobility after trying non-surgical treatment options, total joint replacement may be recommended.

V. Questions to ask your care team

Do not be afraid to ask your medical provider about anything that seems unclear to you. Some questions you may want to ask include:

- What can I do to help improve my OA symptoms?
- Are there ways to treat my OA without medication?
- Are there medications that can treat my joint pain and function?
- Are there dietary supplements that may help manage my OA?
- Can I get help with losing weight or changing my diet?
- How can I maintain physical activity with my OA?
- What types of physical activity should I avoid to prevent my OA from worsening?
- What side effects might I experience from my medication?
- Should I avoid taking my OA pain medication with other medications?
- When should I consider a joint injection for my OA? What should I expect following the injection?
- When should I consider surgery for joint replacement? What are the risks versus benefits of joint replacement surgery?

VI. References

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