

Ankle Arthritis / DJD



The ankle joint can be impacted by a number of various forms of arthritis. However, the most common form of arthritis that can impact the ankle joint is degenerative joint disease (DJD), otherwise called degenerative arthritis. DJD results in progressive “wearing out” of the cartilage, with thinning and eventual loss of the smooth gliding cartilage surfaces of the joint over time. In the ankle, the most common cause is prior injury, usually a fracture.

Patients with ankle DJD will often complain of pain with walking, running, or other weight-bearing activities that is felt in the ankle joint. The pain is usually achy and deep. The pain generally grows worse throughout the day, as weight-bearing activities are performed. Less frequently, the ankle can lock up for a moment, preventing movement.

Besides feeling pain in the ankle with weight-bearing activities, you may also note swelling in this area. The ankle may feel stiffer in the morning. In more severe cases, the ankle loses a significant amount of mobility.

The doctor will usually find that the ankle joint line is tender to touch. The doctor may find that the motion of the joint is reduced and sense grinding in the joint. X-rays will usually show a loss of joint space, meaning that the cartilage is very thinned or lost altogether. The x-rays may also show bone “spurring” around the joint – these are called osteophytes and are a sign of DJD.

Ankle DJD can become quite debilitating and even require surgery. Unfortunately, at this time there is no method, surgical or otherwise, to resurface joint surfaces in which cartilage has been lost. Non-surgical treatment is aimed at preventing pain and reducing the wear and tear on the joint. Surgical treatment most frequently involves fusion of the joint (arthrodesis), even though joint replacement options do exist.

Non-surgical Treatment

- q Footwear considerations: A boot or high-top shoe would limit the wear and tear on the arthritic ankle more than a low-top shoe. A rockersole (the bottom of the sole is rounded from back to front) would allow the leg to come forward while walking without having the ankle bend as much – the forward bending occurs due to the sole shape, rather than through ankle movement. Some shoes come with rockersoles. Shoe repair shops can add rockersoles to shoes lacking this rocker effect.
- q Use an over-the-counter ankle support. The support helps to limit the wear and tear on the arthritic ankle. We recommend the Sport Ankle Brace, which can be purchased at The Deport Store next to the Department of Foot and Ankle Surgery.
- q Use an ankle-foot orthotic (AFO). An AFO is custom made for you and designed to effectively limit the wear and tear on the arthritic ankle. AFOs are made by an orthotic and prosthetic lab contracted by Kaiser. Most Kaiser members are covered for AFOs. Your doctor must order the AFO for you.
- q Modify your activities. It is better best to avoid activities that involve an extreme amount of ankle movement or impact. Even walking can be aggravating. It may be possible that activities like swimming, aqua-aerobics, and cycling may be better tolerated than walking or running.
- q Lose weight.
- q Use an oral anti-inflammatory medication. We recommend over-the-counter ibuprofen. Take three 200mg tablets, three times per day with food – breakfast, lunch, and dinner. To obtain the proper anti-inflammatory effect, you must maintain this dosing pattern for at least 10 days. Discontinue the medication if any side effects are noted, including, but not limited to: stomach upset, rash, swelling, or change in stool color. **IF YOU TAKE ANY OF THE FOLLOWING MEDICATIONS, DO NOT TAKE IBUPROFEN: COUMADIN, PLAVIX, OR OTHER PRESCRIPTION OR OVER-THE-COUNTER ORAL ANTI-INFLAMMATORY MEDIATIONS. IF YOU HAVE ANY OF THE FOLLOWING HEALTH CONDITIONS, DO NOT TAKE IBUPROFEN: KIDNEY DISEASE OR IMPAIRMENT, STOMACH OR DUODENAL ULCER, DIABETES MELLITUS, BLEEDING DISORDER.)**
- q Use over-the-counter glucosamine sulfate, chondroitin sulfate, and/or MSM.
- q Use over-the-counter topical arthritis creams.
- q Use heat/ice contrast treatments. Soak the ankle in warm, bath-temperature water for 2 minutes, then soak it in ice water for 1 minute. Alternate between hot and cold for 15 minutes. Do this 1-2 times per day. **CAUTION: AVOID USING ICE WITH CIRCULATION OR SENSATION PROBLEMS.**
- q Your doctor may inject the joint with cortisone. Injection of cortisone is a potent way to reduce inflammation and joint pain. The risks of cortisone injections for ankle joint arthritis include, but are not limited to: increased pain for 24-72 hours following the injection, depigmentation over the top of the joint, weakening of remaining joint cartilage and progression of degeneration, and infection. Systemic side effects of this type of injection are extremely rare.

Surgical Treatment

- q The most common surgical management of degenerative joint disease of the ankle is fusion of the joint (arthrodesis). In milder cases, sometimes an arthroscopic “clean-up” can be performed – this would help reduce the joint pain, but would not prevent further progression of the degenerative joint disease over time. Another alternative to fusion is total ankle joint replacement. Ankle joint replacement is not successful in a wide array of people, and therefore not utilized, except in very limited, specific situations. Your doctor can discuss these surgical alternatives to ankle arthrodesis with you, if indicated.

Ankle fusion (arthrodesis) involves removing any remaining cartilage from the joint surfaces and creating two raw bone surfaces. The bone surfaces are fixed together with bone screws or other hardware and then allowed to heal (fuse) together over time. The anesthesia is usually general or spinal. After the surgery, you would stay in the hospital for 1-3 days before going home. A below-knee cast is used for 3 months after the surgery. The first two months requires absolutely no weight-bearing, while in the 3rd month, weight-bearing is usually allowed. Recovery takes 6-12 months.

When the ankle joint is fused, up and down movement of the ankle is lost, while side to side movement is usually not affected. After an ankle fusion, going down steps may be more difficult. You may need to wear a shoe with a rockersole. However, the painful arthritis should be resolved.

The success rate is about 80%. About 10% are better, but still have some problems. About 10% are no better or worse. Risks include, but are not limited to: delayed or non-healing of the fusion site, infection, nerve injury or entrapment, tendon injury, wound healing or scar problems, prolonged recovery, incomplete relief of pain, no relief of pain, worsened pain, limp, chronic swelling, intolerance or breakage of hardware, malalignment, and transfer of stress or arthritis to other areas of the foot.