South County

Orthopedics Specialist

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Ankle Arthritis

Arthritis of the ankle can be brought on by different factors that include idiopathic, inflammatory, and posttraumatic. Post-traumatic arthritis, which is the most common type of arthritis in the ankle, can occur even if there was proper treatment at the time of the injury. However, it occurs because there was a disruption within the ankle joint causing a degenerative process of the cartilage triggering it to become frayed and rough, decreasing the protective space between the bones. As such, a thorough history of the ankle for any prior injuries both repaired surgically and non-surgically are essential as post-traumatic arthritis is the most common type.

Generally, patients complain of a deep aching pain in the ankle that is worse with weightbearing, swelling may also be present. Decreased motion with pain at the joint and bone spurs over the joint may be palpated or noticed on x-ray

Common x-ray findings include joint space narrowing, osteophytes, subchondral sclerosis, angular deformity, and cysts. Studies have shown, that the severity of the x-ray does not necessarily correlate to the pain the patient will experience. A CT scan can also be done to determine the extent of arthritis and the integrity of the bone which will assist in determining the surgical intervention that will provide the best outcome.

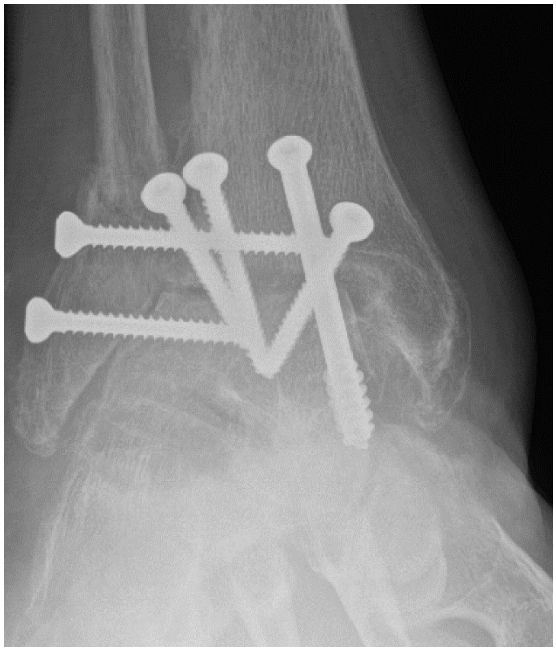
Treatment

Non-Operative treatment:

Nonoperative treatment includes offloading the ankle through the use of shoes that have a rocker-like bottom, ankle brace or immobilization, or a cortisone injection under ultrasound into the ankle joint. Over the counter or prescription strength NSAID's in combination with the above can also be useful.

Operative treatment: Ankle arthrodesis vs. ankle arthroplasty

Ankle arthrodesis, or ankle fusion, was the first operative treatment for end-stage ankle arthritis. This can be performed arthroscopically or with an open incision of there is a lot of ankle deformity or bone loss. Typically plates or screws are used to achieve bone fusion. If there is a significant deformity or peripheral neuropathy a hindfoot nail may also be used.



Ankle arthroplasty, or ankle replacement, is a newer technology that continues to become better and more advanced. An incision is made over the anterior ankle, the arthritic portion of the tibia and the talus will be removed, and the implant will be measured and inserted. Soft tissue ligaments, or additional ankle balancing procedures may also need to be repaired during this surgery to provide the best post-operative outcomes.

The factors that assist in determining which surgical intervention will be most successful include age, primary/secondary arthritis, deformity, the quality of bone stock, neuro-vascular deficiencies, range of motion, ankle stability, physical demand. The indications for an ankle arthroplasty are more specific compared to an ankle arthrodesis.

Post-operative care

You will wake up with a molded splint around your foot and ankle. You will not be putting any weight on this foot for the first 2 weeks. The use of a knee scooter, I-walk, crutches or wheelchair will assist with walking. During these first 2 weeks you are to keep the splint dry and clean. Please do not take the splint off until you are seen in the office for your first post-op appointment. The first appointment we will remove the splint and take out the skin sutures We will take x-rays of the ankle at each follow up appointment with weightbearing progression at each follow up appointment.

Ankle arthroplasty:

At 2 weeks post-op you will be transitioned into a short leg cast with continued non-weight bearing

At 4 weeks post-op you will be transitioned into a CAM boot and will begin weightbearing in the boot. Ankle ROM and calf stretching is initiated.

At 6 weeks post-op you will transition out of the CAM boot and will walk in regular shoes vs a soft ankle brace for comfort. A short course of physical therapy may be initiated at his time to assist with gait and balance control.

At 10 weeks post-op ankle ROM and gait will be assessed with gradual progression to light aerobic exercises.

6 month and 1-year post-op appointments are had with x-ray to check status on implant. After 1-year post-op annual x-rays and gait assessment will occur.

Ankle arthrodesis:

At 2 weeks post-op you will be transitioned into a short leg cast and non-weightbearing

At 6-8 weeks post-op you will be able to begin walking with the protection of the CAM walking boot.

12 weeks post-op you can transition out of the CAM walking boot into supportive athletic shoes. Light aerobic exercises can begin at this time.

Final post-op check will usually occur between 6-9 months from surgery

FAQ

Will I be able to walk even if I get my ankle fused?
Yes, the joints that are in front of the ankle joint will provide the mobility that is necessary for you to walk without a limp even if your ankle is fused.

Will I be able to return to all my activities after my ankle replacement surgery?
We recommend sticking with light aerobic exercises after surgery rather than high impact running jumping activities, however, our goal is to get you back to all your daily activities with improved pain and function.

Additional links

https://sci-hub.tw/https://journals.sagepub.com/doi/10.1177/1071100713481433

https://sci-hub.tw/https://pubmed.ncbi.nlm.nih.gov/22049859/

https://sci-hub.tw/https://pubmed.ncbi.nlm.nih.gov/24352777/

https://www.orthobullets.com/foot-and-ankle/7037/ankle-arthritis

https://footcaremd.org/conditions-treatments/ankle/arthritis-of-the-foot-and-ankle

https://footcaremd.org/conditions-treatments/ankle/ankle-arthrodesis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3705040/