



**Ankle Arthrodesis (Fusion of the Ankle Joint)  
Postoperative Recovery Protocol  
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Type of Procedure:           outpatient or overnight hospital stay  
Length of Procedure:        2 hours  
Anesthesia:                 general w/ nerve block

**Fusion of the ankle joint: what is it?**

An ankle arthrodesis is a reconstructive surgical procedure where an arthritic ankle joint is converted into an immobile segment of bone. The ankle articulation consists of the distal tibia, talus, and fibula. The motion between these bones is essentially eliminated in an ankle fusion.

The goal of this type of surgery is to fuse or glue together the ankle joint. This type of surgery does affect the up and down movement of the ankle. You will not lose the entire up and down movement, but about 75% of it (since the other joints in the foot help provide some up and down motion). This depends of course on how much movement in the ankle you have already lost. Frequently after an ankle injury or with severe arthritis, there is very little movement in the ankle, so that you will not notice the loss of the up and down movement after a fusion. The side-to-side movement (inversion and eversion) of the back of the foot is mildly affected by an ankle arthrodesis. Most people are unable to identify a patient with an ankle fusion walking down the street at a slower pace, though faster-paced activities will be more affected by the lost up and down movement.

The benefit of an ankle fusion procedure as opposed to ankle replacement is that once the bone has fused and healed, further surgery is rarely required. Fusion of the ankle joint eliminates the pain from the arthritis and provides a dependable solution to maintain activity and a healthy lifestyle. However, due to the lost motion at the ankle joint, the other joints in the foot do take on more work with activity and can develop arthritis sooner than they may have otherwise. Other risks of surgery include infection, nonunion (the fusion doesn't take), malalignment (the ankle isn't optimally positioned), and medical complications such as a blood clot or heart problems due to the magnitude of the surgery. Removal of the plates or screws utilized to fuse the ankle together is rarely required. A failed fusion can ultimately result in amputation and risks for poor outcomes include smoking, noncompliance (walking on it early or removing your brace against your doctor's advice), poorly controlled diabetes, and poor bone density.

An ankle fusion can be performed with an arthroscopic (camera "poke hole" surgery) or open surgical approach. An open surgical approach can be done from the front (anterior) or side (lateral) approach. Bone grafting is often employed, with graft taken from the patient (autograft) or by using banked bone graft (allograft) or newer synthetic grafts. Your individual approach is determined by multiple factors, including the severity of the

arthritis, deformity in the joint, bone and skin quality, as well as other factors that affect the risks for poor outcomes as noted above.

**General recovery factors:**

- You will not be walking on the leg for at least 6-8 weeks.
- You will need crutches, a walker, a wheelchair or a scooter device called a roll-about for the first few months after surgery.
- I may apply a below the knee cast at your first clinic visit to protect the ankle as it is fusing together.
- If the surgery is on your left ankle, you should be able to drive an automatic vehicle at two weeks or whenever off narcotic pain medication. If the surgery is on the right ankle, you may typically start driving around 3 months.
- Physical therapy may be helpful for rehabilitating the leg once you can begin placing weight on it, typically a few months after surgery.
- You should plan to use a physical therapist for about 1-2 months.
- There will be moderate swelling of the ankle and leg for up to a year, though much of the swelling improves within the first 3-4 months.
- You will continue to improve your strength and gait for up to 1 year after the surgery.

**Specific postoperative course (these are general guidelines, your specific individual postoperative treatment may be different):**

Day 1-2

- The foot is wrapped in a bulky bandage and splint.
- Ice, elevate, take pain medication.
- Expect numbness in the foot for 12-24 hours.
- Bloody drainage through the bandage is expected.
- Do not change the bandage.
- Do not get the splint dirty or wet.

2 Weeks

- First follow-up in the office, stitches removed, x-rays taken.
- Typically placed into a boot. Keep the boot on at all times except for showers. You may shower once the incision is completely dry.
- Do not soak the incision(s) in a bathtub or hot tub until the incision(s) remain completely dry for at least 1 week.
- No bearing weight at all in the boot.

4 Weeks

- You may require an additional clinic appointment if placed in a cast to change the cast if your swelling has improved and the cast becomes loose.

6 Weeks

- Scheduled follow-up in the office, x-rays taken.
- Physical therapy will be started around this time.

- You may typically begin putting weight down in the boot as discussed with your surgeon.
  - Weight bearing typically progresses 50 pounds of weight per week over the next 3-4 weeks. Use a bathroom scale to determine how much weight you are putting down in the boot.
  - If you don't have a bathroom scale, then weight bearing may progress with toe-touch (foot down for balance only) for two weeks, then partial weight bearing (about 50% of your weight) for two weeks, then full weight bearing.
  - Until you are fully bearing weight in the boot, you will still require use of crutches, a scooter, or walker to offload the foot!

### 3 Months

- Scheduled follow-up in the office, x-rays taken.
- Transition out of the boot into a regular, supportive shoe if fusion is healing.
- Continue physical therapy.

### 4-6 Months

- If there is concern for delayed or lack of healing at the fusion site, a CT scan may be ordered to better visualize the joint and see if healing is occurring.

You can often find additional information about your procedure or condition on the TCO website at <https://www.tcomn.com/physicians/jeffrey-seybold> or <https://www.tcomn.com/specialties/ankle-care>.

Additional information from reputable orthopaedic foot and ankle surgeons affiliated with the American Orthopaedic Foot and Ankle Society can be found at <http://www.footcaremd.com>.

**Example of an ankle fusion performed with screws. Of note, sometimes a plate is also used to help secure the ankle fusion.**

