

# SUBTALAR FUSION

SEARCH

## WHAT IS SUBTALAR FUSION?

The subtalar joint is located just below the ankle joint, between the talus bone and the calcaneus (heel) bone. The main job of the subtalar joint



is to allow for side-to-side movement of the foot and ankle. This movement aids in walking, especially on uneven surfaces.

A fusion surgery locks bones together to heal as one. It is appropriate for diseased joints that can't be replaced. Once a fusion heals together, it acts as one unit and can restore function and provide significant pain relief. A fusion also is very durable.

Subtalar fusion is performed to either correct rigid, painful deformities or instability of the subtalar joint, or most often, to remove painful **arthritis** of this joint. During surgery, the remaining cartilage in the joint between the talus bone above and calcaneus bone below is removed and the joint surfaces are fixed together with screws to hold the bones in place while they heal. The goals of subtalar fusion are to improve function and decrease pain.

## Diagnosis

Those with subtalar problems typically complain of pain along the outer side of the foot just below the ankle. Subtalar pain may be mistaken for ankle pain. Patients with subtalar joint problems frequently limp, favor the painless other foot, and notice swelling in this region. People commonly have pain and difficulty walking on uneven surfaces and complain of stiffness in the foot.

Generally, subtalar fusion is performed for three reasons: to correct deformity, correct instability, or treat painful arthritis. Arthritis in the subtalar joint can occur after a break in the talus or calcaneus, or it can be a result of "wear and tear" to the joint or rheumatoid arthritis.

## Treatment

Your foot and ankle orthopaedic surgeon will discuss your treatment options with you before proceeding with a subtalar fusion. Skin problems in the area of the surgical site, poor overall health, or active infections may cause your surgeon to delay the procedure.

Smoking increases the risk of blood clots, wound healing problems, and the possibility the fusion won't heal. You should completely stop nicotine use at least one month before surgery and abstain until the fusion has healed. Inability or unwillingness to follow the treatment plan may increase the chance of the surgery being unsuccessful.

### Specific Technique

Patients are positioned on their back or side to expose the operative leg. Subtalar fusion is most often performed through an incision on the outer side of the foot. Your surgeon prepares the joint surfaces by removing all cartilage and correcting all deformity, then roughens the bone surfaces to stimulate bleeding. This bleeding allows the two bones to heal together after the joint is fixed with hardware (screws). Your surgeon will use X-rays during the surgery to ensure proper alignment and hardware position. Sometimes bone graft is added to help the healing. Once surgery is finished, the foot and ankle are placed in a well-padded splint.

## Recovery

After surgery, pain medication will be required for an initial period of time. Some people may require medication only for a day or two and others for longer. In the first few weeks after surgery, you must rest and elevate the operative leg to control swelling and allow the skin incisions

to heal. When upright, you may experience throbbing and discoloration in the toes as the blood rushes back to the foot, but typically this resolves with elevation. It is important to **keep weight off the foot**.

Once stitches are removed, there will be fewer restrictions. A boot or cast usually is placed after the initial surgical bandages are removed. The boot or cast will be in place for 8-12 weeks, sometimes longer for certain patients. Depending on your surgeon's assessment, you may not be able to put weight on the foot until the X-rays show healing, or weight may slowly be added throughout the period of recovery. If the surgery is on the right foot, do not plan on driving until fully healed. You will continue to get X-rays until your surgeon sees full healing.

## Risks and Complications

All surgeries come with possible complications, including the risks associated with anesthesia, infection, damage to nerves and blood vessels, and bleeding or blood clots.

A potential complication of any fusion procedure is a failure of the fusion to heal, which is called a nonunion. Healing in a bad position (a malunion) also can occur, but this is rare. Following your surgeon's instructions is very important to avoid complications.

## How will subtalar fusion affect my walking?

Although this surgery stiffens the hindfoot (back of the foot), what patients lose in motion they typically make up for in stability and pain relief. Most people tend to walk better after the surgery. There may be some getting used to walking on uneven surfaces and getting used to their "new foot," but most patients have such improved function they would do the procedure over again. Patients with a subtalar fusion rarely limp and can perform almost all activities.

## When will I be able to walk?

This depends on many factors. Clinical and X-ray evidence of healing are required to determine an appropriate time to start walking. Although you may be able to put some weight on your foot within a few weeks after surgery, it usually takes at least 8-12 weeks before you can put full weight on your foot in shoes.

## What will I use to get around after surgery?

Some form of **walking aid** will be required. Most patients get around with crutches, a walker, or a rolling knee walker/scooter after surgery. A cane is not acceptable, as no weight is allowed on your surgical foot until you discuss it with your surgeon.

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