What is the subtalar joint?
The subtalar joint is located just below the ankle joint between the talus bone and the calcaneus bone (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 walking, especially on uneven surfaces.

What are the goals of a subtalar fusion?
A fusion surgery causes two bones that normally move against each other through a joint to heal together. Fusion is appropriate for diseased joints when replacement of the joint is not an option. Once the area heals together, it acts as one unit but can restore function and provide significant pain relief. Generally speaking, fusion is also very durable.

Subtalar fusion is performed to either correct rigid deformity or instability of the subtalar joint or to remove painful arthritis of this joint. During surgery, this joint between the talus bone above and calcaneus bone below is removed as the joint surfaces are fixed together. The goal of subtalar fusion is to decrease symptoms and allow improved function with less pain.

What signs indicate surgery may be needed?
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 painful foot and notice swelling in this region. People commonly have difficulty and pain while walking on uneven surfaces and complain of stiffness in the foot.

Subtalar fusion is generally performed for three reasons: to correct deformity, correct instability or treat painful arthritis. Causes of arthritis include trauma, degeneration, rheumatologic conditions and infections.

When should I avoid surgery?
Skin problems in the area of the surgical site (wounds, ulcers, blisters or rash) may cause your surgeon to delay the procedure until the skin is healed. If your overall health is poor, surgery will be delayed until you are able handle the surgery and the recovery. Active infection in the foot will also delay surgery until it can be resolved with appropriate management.

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 mean surgery is not for you.

General Details of Procedure
Patients are positioned on their back or side to allow exposure of the operative leg. Subtalar fusion is most often performed through an incision on the outer side of the foot. The joint surfaces are prepared by removing all cartilage and correcting all deformity. The bone surfaces are roughened to stimulate bleeding. This bleeding allows the two bones to heal together after the joint is fixed with hardware. X-ray will be used 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.

What happens after surgery?
After surgery, pain medication will be required for a 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 is usually placed after the initial surgical bandages are removed. The boot or cast will be in place for eight to 12 weeks, sometimes longer for certain patients. Depending on your surgeon’s assessment, weightbearing may be restricted 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. X-rays will be necessary until full healing is seen.

Potential Complications
There are complications that relate to surgery in general. These include the risk 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 can also occur, but this is not common. Following your surgeon’s instructions is very important to avoid complications.

Frequently Asked Questions
How will this surgery affect my walking?
Although subtalar fusion “stiffens” the hindfoot, 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.

**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 partial weightbearing is often allowed within a few weeks after surgery, full weightbearing in shoes usually takes at least eight to 12 weeks.

**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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- Achilles Tendon Rupture Surgery
- Ankle Arthrodesis
- Ankle Arthroscopy
- Ankle Cheilectomy
- Ankle Fracture Surgery
- Bulk Allograft Transplantation for Osteochondral Lesions of the Talus
- Insertional Achilles Tendinosis Surgery
- Lateral Ankle Ligament Reconstruction
- Lateral Ankle Stabilization
- Mosaicplasty for Osteochondral Lesions of the Talus
- Percutaneous Achilles Tendon Lengthening
- Peroneus Longus to Achilles Tendon Transfer
- Pilon Fracture Surgery
- Posterior Ankle Endoscopy or Arthroscopy
- Subtalar Arthroscopy
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