Ankle Fusion, Transfibular

Overview
This surgical procedure is performed to treat severe arthritis or injury of the ankle joint. During the procedure, the surgeon removes damaged bone and cartilage and fuses the joint. This stabilizes the ankle and relieves pain.

Preparation
In preparation for the procedure, the patient is positioned and general anesthesia is administered. The surgeon creates an incision along the outer side of the ankle to expose the joint.

Modifying the Fibula
The surgeon removes the end of the fibula (the long bone that rests against the tibia). In some cases the surgeon may also need to remove the bony bump that protrudes from the inner side of the ankle. If so, a second incision will be needed.

Reshaping the Joint
The surgeon removes damaged cartilage and bone from the end of the tibia and the talus. The surgeon reshapes these bones and adjusts their positions so that they are aligned properly. The surgeon may need to place bone grafts in gaps in the ankle to help achieve proper alignment. If grafts are needs, they may be taken from the section of fibula that was removed previously. Grafts may also be taken from the bone of the heel or the pelvis.

Stabilizing the Ankle
Once the bones are aligned properly, the surgeon stabilizes the ankle with a series of screws, plates, or a combination of the two. This hardware joins the tibia and the talus. When the procedure is complete, the surgeon closes the incisions and places the foot in a cast. Over the next several weeks, the tibia and talus will fuse together permanently. The ankle will no longer flex and extend, but it will retain its side-to-side range of motion.

After Care
After the surgery, most patients can go home after a short monitoring period. Crutches will be needed for six to eight weeks. Gradually, as the bones fuse, the patient will be able to bear weight on the leg. Patients can typically resume normal activities within three to six months. Physical therapy will be needed.