Diagnostic Ankle Arthroscopy

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Introduction
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Doctor’s Personal Note: A Message From Your Doctor
Thank you for visiting our website and viewing our 3D Animation Library. These animations should assist you in better understanding your condition or procedure. We look forward to answering any additional questions you may have at our next appointment.

Anatomy
The ankle joint is made up of the two bones of the lower leg, called the fibula and tibia, and the talus bone at the top of the foot. These bones are connected by ligaments and tendons, which provide stability and enable the foot to move up and down. Another component of the ankle is called the subtalar joint and includes the connection between the talus bone and the calcaneus, or heel bone, which allows the ankle to move inward and outward. Articular cartilage covers the ends of the bones, helps with shock absorption, and allows the bones to slide smoothly against one another. Tendons connect muscles to bones and control the actions of the calf, toes and ankle. The nerves in the foot, which control muscle movements and provide sensation, travel through the ankle along with large blood vessels that supply blood to the foot.
Why Arthroscopy

Identifying the cause of ankle pain may be difficult because of the complexity of the joint. Often imagery methods, such as x-ray, CT scans, or MRI are not able to detect injury or damage to cartilage, ligaments, or tendons. Ankle arthroscopy is typically used to assess the cause of ankle pain such as bone fractures, torn ligaments, and degenerative changes to cartilage from arthritis. Ligaments and tendons can be stretched, pinched, or torn by injury. Internal visualization with arthroscopy often provides both the opportunity to assess the problem and treat certain conditions when they are discovered.

Preparation and Positioning

Ankle arthroscopy is typically performed under general anesthesia, in which you are asleep during the procedure. Occasionally, the procedure may be performed under regional anesthesia, with sedation. In this case, a numbing agent is injected to numb your leg and foot, and you may be relaxed but not entirely asleep.

Your leg will likely be positioned in a traction device, which holds it in place during the procedure and allows the ankle joint to be expanded for better visualization.
**Incisions, Visualization and Diagnosis**

Small incisions, called portals, are typically made on the front of your ankle and the arthroscope is inserted into one of the portals. To expand the joint and to improve visualization, a salt water, or saline, solution flows through a tube and into the ankle. The image from the arthroscope is projected onto a video monitor where the surgeon can watch while maneuvering inside the joint. Once your surgeon has determined the cause of your pain or problem, surgical repairs may be completed through the small portals or you may be scheduled to return at a later date. After the procedure, the incisions are closed with sutures and covered with a bandage. If a surgical repair was done, a splint may be used to stabilize your ankle while it heals.

**Recovery**

Immediately following the procedure, you can expect to have some minor pain, swelling, and possibly stiffness around your ankle. You will likely be advised to keep your foot elevated for a few days after the procedure to reduce swelling. Sutures will be removed in one to two weeks and you may be required to continue to wear a splint as instructed if a surgical repair was done. Recovery time is considerably shorter with small arthroscopic incisions, compared to open procedures with large incisions. Arthroscopy enables your surgeon to inspect the complex anatomy of your ankle and allows for both diagnosing and treating a variety of ankle problems.