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## Ankle Arthroscopy

Arthroscopy is a procedure that uses small cameras and instruments to perform surgery in a joint. The ankle joint can be treated with this technique for multiple conditions, sometimes in isolation, in other conditions, in combination with an open incision depending on the pathology. Loose bodies, scarring of the ankle, impingement (pain with up motion) are conditions that can be treated with arthroscopy. In conditions of ankle instability (looseness), fractures, cartilage injury – osteochondral defects to list a few examples, may be treated by a combination of arthroscopy and an open procedure to provide the best outcome we can achieve.

**Ankle Impingement** - Ankle impingement occurs when bone or soft tissue at the front of the ankle joint becomes inflamed. Symptoms include ankle pain and swelling. This can limit the ability to bend the ankle up. Walking uphill is often painful. Osteophytes (bone spurs) can be seen on X-ray. Arthroscopy can be used to shave away inflamed tissues and bone spurs.

**Arthrofibrosis**: Scar tissue can form within the ankle. This condition can occur from prior trauma or surgery. This can lead to a painful and stiff joint, known as arthrofibrosis. Ankle arthroscopy can be used to identify the scar tissue and remove it.

**Loose bodies**: Cartilage, bone, and scar tissue can become free floating in the joint and form what is referred to as loose bodies. Loose bodies can be painful and can cause problems such as clicking and catching. Locking of the ankle joint may occur. Ankle arthroscopy can be used to find and remove the loose bodies.

**Synovitis**: The soft tissue lining of the ankle joint (synovial tissue) can become inflamed. This causes pain and swelling. It can be caused by injury and overuse. Inflammatory arthritis (rheumatoid arthritis) and osteoarthritis also can cause synovitis. Ankle arthroscopy can be used to surgically remove inflamed tissue that does not respond to nonsurgical treatment.

**Unexplained ankle symptoms**: Occasionally patients develop symptoms that cannot be explained by other diagnostic techniques. Arthroscopy provides the opportunity to look directly into the joint. The surgeon can then identify problems that may be treated with surgery.

The procedure requires the use of a formal operating room. The surgeon will sometimes use a device to stretch the ankle joint and make it easier to see inside.

At least two small incisions are made in the front of the ankle. These portals become the entry sites into the ankle for the arthroscopic camera and instruments. Sterile fluid flows into the joint to expand it and allow for better visualization. The camera and instruments can be exchanged between portals to perform

the surgery. Both motorized shavers and hand operated instruments are used. After the surgery is complete, sutures are placed to close the portals. A sterile dressing is placed over the sutures. A splint applied to minimize pain and improve the rate of wound healing.

Potential complications specific to ankle arthroscopy include injury to nerves and blood vessels around the ankle. Numbness or tingling at the top of the foot can occur approximately 10 percent of the time. This typically resolves over time.

- Outcomes after Ankle Arthroscopy:
  - Nerve injury - 1.04% ([Reference](#)), 1.9% ([Reference](#)), 5.4% ([Reference](#))
  - Complex regional pain syndrome (CRPS) - 1% ([Reference](#))
  - Deep venous thrombosis (DVT) - 0.3% ([Reference](#))
  - Superficial infection - 0.7% ([Reference](#))