

## **In-Office Needle Arthroscopy for Treatment of Anterior Ankle Impingement**

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### **Background**

Anterior ankle impingement is a common cause of chronic ankle pain characterized by altered joint mechanics with considerable deficits in range of motion. Patients tend to present with restricted dorsiflexion because of tibiotalar osteophytes and/or soft-tissue impingement. Such injuries are particularly common in athletes who participate in sports that require repetitive dorsiflexion movements but also are common in patients with considerable cicatrization tissue after ankle surgery. The preferred treatment option is ankle arthroscopy to remove osseous and soft-tissue impingement; however, advances with in-office nano-arthroscopy have allowed for wide-awake arthroscopic procedures for the management of anterior ankle impingement without the need for an operating room or anesthesiologists.

### **Purpose**

This video provides an overview and case presentation on the use of in-office nano-arthroscopy for the management of anterior ankle impingement.

### **Methods**

The anatomy of, physical examination of, diagnosis of, and treatment options for anterior ankle impingement are reviewed. Surgical indications and considerations for needle endoscopy for the management of anterior ankle impingement are discussed. The patient is seated comfortably on an examination table in the supine position with the foot at the edge of the bed. After careful portal establishment, relevant anatomy and surgical considerations are reviewed before endoscopic exploration of the anterior tibiotalar joint.

### **Results**

Using nano-arthroscopy for the management of anterior ankle impingement allows for a minimally invasive surgical approach in a wide-awake office setting. Quicker recovery, improved cosmetic outcomes, decreased complications, and decreased blood loss are possible.

### **Conclusion**

Nano-arthroscopy offers a potentially improved minimally invasive approach for the management of anterior ankle impingement. The smaller size arthroscope offers several advantages over traditional arthroscopes, particularly the ability to perform the procedure in a wide-awake office setting. Appropriate portal placement and surgical competence are crucial to a good functional outcome.