Clinical Practice Guideline: **Ankle Arthroscopy**

Date of Implementation: **June 18, 2015**

Product: **Specialty**

GUIDELINES

American Specialty Health – Specialty (ASH) considers services consisting of CPT Codes 29891, 29894, 29895, 29897, and 29898 to be medically necessary, for arthroscopy of the ankle **upon meeting 1 or more of the following criteria**:

1. Evaluation and treatment of chronic pain indicated by **ALL** of the following:
    - Clinically significant functional impairment
    - Failure of **at least 1** of the following non-operative treatments:
        - Non-steroidal anti-inflammatory drugs
        - Rest
        - Reduced weight-bearing
        - Orthosis
        - Heel lift
        - Physical therapy
        - Injection of steroid or long-acting anesthetic
    - Imaging or clinical finding indicates procedure is needed for **1 or more** of the following:
        - Soft or bony tissue impingement
        - Loose bodies
        - Synovectomy (e.g., for rheumatoid arthritis or hemophilia joint disease)
        - Debridement (e.g., posttraumatic arthritis, osteophyte, bone deformity)
        - Arthroscopic arthrodesis or arthroscopically assisted arthrodesis
        - Osteochondral lesions
        - Bursectomy
        - Evaluation of chronic unexplained pain and negative findings on imaging (e.g., CT scan, MRI)
2. Drainage and debridement for septic arthritis
3. Ankle instability
4. Fracture amenable to arthroscopic approach

CPT Codes and Descriptions

CPT Code	CPT Code Description
29891	Arthroscopy, ankle, surgical, excision of osteochondral defect of talus and/or tibia, including drilling of the defect

CPT Code	CPT Code Description
29894	Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; with removal of loose body or foreign body
29895	Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; synovectomy, partial
29897	Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical, debridement, limited
29898	Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; debridement, extensive

BACKGROUND

Chronic ankle pain is a common presenting complaint in foot and ankle surgery. The differential diagnosis for chronic ankle pain is quite broad. Ankle pain can be caused by intra-articular or extra-articular pathology and may be a result of a traumatic or nontraumatic event. Ankle problems that can be managed by ankle arthroscopy include soft tissue and bony impingement, synovitis, loose bodies, ossicles, arthrofibrosis, ankle fractures, certain cases of infection (i.e., septic arthritis), and osteochondral defects (van Dijk et al., 2008). A detailed patient history and physical examination, coupled with selection of the appropriate imaging modalities, are vital in making an accurate diagnosis and providing effective treatment.

Conservative treatment is the first line of care for ankle pain. Operative treatment is reserved for those who have had a failure of non-operative therapy. Arthroscopy of the ankle joint has become an important therapeutic tool for the management of post-traumatic and chronic ankle problems. Both anterior and posterior ankle arthroscopy are routinely carried out as day care procedures.

Soft tissue lesions, which generally involve the synovium, account for approximately 30-50 percent of disease in the ankle joint. However, the capsule and the ligamentous tissues of the ankle may also be affected. The sources of synovial irritation may include congenital, traumatic, rheumatic, infectious, degenerative, neuropathic, and miscellaneous causes. Arthroscopic synovectomy, predicated on a case-by-case basis, may provide relief for these conditions (Coughlin et al., 2013).

Synovitis can occur due to an acute trauma, inflammatory arthritis (i.e., rheumatoid arthritis), overuse, degenerative joint disease (osteoarthritis), and as a musculoskeletal complication of hemophilia. The Agency for Healthcare Research and Quality (Srivastava, 2020) published a guideline detailing practical recommendations on the diagnosis and general management of hemophilia, as well as the prevention and management of

complications, including musculoskeletal issues. The guideline reported that synovectomy should be considered if chronic synovitis persists with frequent recurrent bleeding not controlled by other means.

Choi et al. (2013) carried out a case study to evaluate the outcome of arthroscopic synovectomy of the ankle joint in patients (*N*=18) with early-stage rheumatoid arthritis (RA). The results indicated visual analog scale (VAS) and American Orthopaedic Foot and Ankle Society Ankle-Hindfoot Scale scores of the patients were significantly improved at the final follow-up (60 months; $P < .0001$). The authors concluded that arthroscopic synovectomy is a safe and successful procedure in ankle joints affected by RA. The best clinical outcomes are achieved when the procedure is performed early in the disease course and when there is no evidence of cartilage degeneration.

Osteochondral defects (OCD) of the talus are lesions of the articular cartilage lining the joint that can be caused by both acute and/or chronic trauma. This includes acute ankle sprains and repetitive ankle injuries caused by chronic instability. Typical causes of OCDs include vascular insults, genetic predisposition, degeneration, and metabolic abnormalities. Patients will often present with complaints of persistent and progressive ankle pain and swelling. This can be associated with mechanical symptoms of catching, clicking, or popping, and decreased range of motion. The treatment will be based on the size and location of the OCD, associated symptoms, patient demographics, and activity demands of the patient. After the diagnosis is made arthroscopically, treatment options include microfracture, subchondral drilling, abrasion arthroplasty, fragment fixation, and bone grafting procedures (Zengerink, 2010).

Arthroscopic debridement may be indicated for the treatment of osteoarthritis. In osteoarthritis, as the cartilage wears away, the protective space between the bones decreases. This can result in bone rubbing on bone, producing painful osteophytes. Debridement can be used to remove loose cartilage, inflamed synovial tissue, and bone spurs from around the joint for patients in the early stages of arthritis.

Articular cartilage and/or scar tissue following trauma to the ankle can become free floating in the joint and form loose bodies. Synovial chondromatosis of the ankle is a rare disorder in which metaplastic proliferation of synovia, tendon sheaths, and/or bursae leads to the formation of loose cartilaginous bodies within the joint space. These loose bodies can cause problems such as clicking, catching, and frank locking that often lead to pain, swelling, and loss of motion. Al Farii et al. (2020) reviewed the literature on the arthroscopic management of synovial chondromatosis of the ankle joint and found that arthroscopic synovectomy with excision of loose bodies was a consistent feature of treatment, and bursectomy, debridement of osteochondral lesions or involved tendons, and osteophyte

resection were performed as indicated. Based on the available data, complication and recurrence rates following arthroscopic management were very low.

Absolute contraindications for ankle arthroscopy are infection and severe degenerative changes. Relative contraindications are degenerative changes with diminished range of motion, narrowing of the joint space, vascular disease, and edema (van Dijk et al., 2008).

PRACTITIONER SCOPE AND TRAINING

Practitioners should practice only in the areas in which they are competent based on their education, training, and experience. Levels of education, experience, and proficiency may vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine where they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

It is best practice for the practitioner to appropriately render services to a member only if they are trained, equally skilled, and adequately competent to deliver a service compared to others trained to perform the same procedure. If the service would be most competently delivered by another health care practitioner who has more skill and training, it would be best practice to refer the member to the more expert practitioner.

Best practice can be defined as a clinical, scientific, or professional technique, method, or process that is typically evidence-based and consensus driven and is recognized by a majority of professionals in a particular field as more effective at delivering a particular outcome than any other practice (Joint Commission International Accreditation Standards for Hospitals, 2020).

Depending on the practitioner's scope of practice, training, and experience, a member's condition and/or symptoms during examination or the course of treatment may indicate the need for referral to another practitioner or even emergency care. In such cases it is prudent for the practitioner to refer the member for appropriate co-management (e.g., to their primary care physician) or if immediate emergency care is warranted, to contact 911 as appropriate. See policy *Managing Medical Emergencies (CPG 159 – S)* for information.

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