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

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>29891</td>
<td>Arthroscopy, ankle, surgical, excision of osteochondral defect or talus and/or tibia, including drilling of the defect</td>
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<tr>
<td>29894</td>
<td>Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; with removal of loose body or foreign body</td>
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<tr>
<td>29895</td>
<td>Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; synovectomy, partial</td>
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<tr>
<td>29897</td>
<td>Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical, debridement, limited</td>
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<tr>
<td>29898</td>
<td>Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; debridement, extensive</td>
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### 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 (AOFAS, 2012; 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% 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 (World Federation of Hemophilia, 2012) 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 (AOFAS) 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 (AOFAS, 2012).

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. The
American Academy of Orthopaedic Surgeons recommends arthroscopic debridement as a
surgical option 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. These can also occur with synovial chondromatosis
where the lining of the joint becomes redundant for unexplained reasons. These loose
bodies can cause problems such as clicking, catching, and frank locking that often lead to
pain, swelling, and loss of motion. Occasionally loose bodies can be identified with
standard x-rays or a CT scan, but frequently require an MRI is needed to visualize them.
Ankle arthroscopy can be used to find and remove the loose body (AOFAS, 2012).
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 (Dizk 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, 2017).

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 in a Health Care Facility (CPG 159 – S) for information.

**References**


Cimon K, Cunningham J. Total ankle replacements: Clinical effectiveness and a review of the guidelines. Health Technology Inquiry Service (HTIS). Ottawa, ON: Canadian Agency for Drugs and Technologies in Health (CADTH); October 20, 2008.


