



Cohere Medical Policy – Ankle Arthroplasty

Clinical Guidelines for Medical Necessity Review

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Important Notices

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Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System
Guideline Name: Cohere Medical Policy - Ankle Arthroplasty

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Type: ☒ Adult (18+ yo) | ☒ Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Ankle Arthroplasty

Recommended Clinical Approach

Ankle arthroplasty is a treatment for end-stage arthritis of the ankle using an FDA-approved artificial implant to replace a damaged ankle joint due to severe arthritis, arthrodesis of the contralateral ankle, or trauma. Revision ankle arthroplasty may be indicated if previous surgery has failed due to implant failure, infection, incorrect positioning, or periprosthetic fracture. Physical therapy increases expected outcomes post-surgery, including reduced pain and improved mobility, quality of life, and function.¹⁻²

Medical Necessity Criteria

Indications

- An **ankle arthroplasty** is considered medically necessary when **ALL** of the following are **TRUE**:
- ◆ No nicotine product use for 6 weeks with a negative lab test within 30 days of planned surgical procedure; **AND**
 - ◆ **ANY** of the following is **TRUE**:
 - The procedure is an initial ankle arthroplasty and **ALL** of the following are **TRUE**¹⁻²:
 - Degenerative joint disease is present with **ALL** of the following:
 - ◆ The patient requires treatment to improve **ANY** of the following³:
 - Disabling pain; **OR**
 - Functional disability; **AND**
 - ◆ Imaging findings are consistent with severe arthritis of the ankle; **AND**
 - ◆ Failure of conservative management for greater than 6 months, including **ALL** of the following:
 - Anti-inflammatory medications, analgesics, or prescription medications

(e.g., oral steroids, narcotics, neuropathic pain medications) if not contraindicated;

AND

- Physical therapy; **AND**
- Orthotic devices; **AND**
- **ANY** of the following:
 - Corticosteroid injection if medically appropriate; **OR**
 - Corticosteroid injection is contraindicated; **AND**
- ◆ The patient is not a candidate for joint preserving procedures; **AND**
- The patient is experiencing **ANY** of the following:
 - ◆ Moderate or severe pain that limits activities of daily living appropriate for the patient's age for a minimum of three months; **OR**
 - ◆ Reduction of mobility; **OR**
 - ◆ The affected ankle has a loss of function; **AND**
- The provider educated the patient regarding other available treatments and their respective outcomes (e.g., joint debridement, distraction arthroplasty, osteotomy, arthrodesis)⁴; **OR**
- The procedure is a revision ankle arthroplasty and previous surgery has failed due to **ANY** of the following¹⁻²:
 - Implant failure; **OR**
 - Infection; **OR**
 - Incorrect positioning; **OR**
 - Periprosthetic fracture; **OR**
 - Aseptic loosening.

Non-Indications

→ An **ankle arthroplasty** is not considered appropriate for patients with **ANY** of the following:

- ◆ Absence of the distal part of the fibula; **OR**
- ◆ Acute or chronic infection (with or without osteomyelitis or osteitis)^{3,5}; **OR**
- ◆ Allergic reaction to metal⁵; **OR**
- ◆ Circulatory disorders⁵; **OR**
- ◆ Neuropathy (e.g., Charcot foot)³; **OR**

- ◆ Neuromuscular diseases⁵; **OR**
- ◆ Osteonecrosis⁵; **OR**
- ◆ Peripheral vascular disease³; **OR**
- ◆ Poor bone quality (e.g., due to steroid treatment)⁵; **OR**
- ◆ Poor skin integrity due to scarring or trauma³; **OR**
- ◆ Severe malalignment; **OR**
- ◆ Severe osteoporosis⁵; **OR**
- ◆ Significant bone loss.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Codes	Code Description
C1776	Joint device (implantable)
27700	Arthroplasty, ankle
27702	Arthroplasty, ankle; with implant (total ankle)
27703	Arthroplasty, ankle; revision, total ankle
27704	Removal of ankle implant
27870	Arthrodesis, ankle, open

Medical Evidence

Norvell et al. (2019) conducted a multisite prospective cohort study on treatment methods for end-stage ankle arthritis. A total of 517 participants were included. Foot and Ankle Ability Measure (FAAM) activities of daily living and Short Form-36 scores were higher at 24-month follow-up among patients who underwent total ankle arthroplasty compared to those who underwent ankle arthrodesis. The authors conclude that both procedures are effective; however, arthroplasty yields greater improved outcomes.⁶

The American College of Foot and Ankle Surgeons (ACFAS) published a position statement titled *Total Ankle Replacement Surgery*. Ankle fusion has been the long-standing treatment for end-stage ankle arthritis. The restriction of the range of motion can put additional stress on adjacent joints thus, the joints may also become arthritic. Ankle replacement techniques are more refined and offer an additional treatment option. While both procedures have comparable safety profiles, the ACFAS recommends ankle replacement over ankle fusion due to better patient function, pain relief, and quality of life.¹

The American Orthopaedic Foot and Ankle Society (AOFAS) published a position statement titled *The Use of Total Ankle Replacement for the Treatment of Arthritic Conditions of the Ankle*. While pain reduction is achieved with both ankle replacement and ankle arthrodesis, complication rates are higher following ankle replacement, including the need for a secondary surgical procedure. Compared to ankle arthrodesis, ankle arthroplasty shows “marked improvement in quality of life, pain, and function.” Patients undergoing ankle arthroplasty report higher satisfaction with range of motion and gait when compared to ankle arthrodesis. Based on evidence in peer-reviewed literature, the AOFAS supports ankle arthroplasty over ankle arthrodesis for the treatment of ankle arthritis when conservative management has failed.²

References

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Clinical Guideline Revision History/Information

Original Date: September 7, 2023		
Review History		
Version 2	9/20/2024	Updated language regarding conservative treatment and nicotine use.
Version 3	1/2/2025	<ul style="list-style-type: none"> • Annual review. • No changes to procedure codes. • Removed specific device names from indications. • Removed “Instability due to incompetent ligaments” from non-indications. • Reviewed boolean logic. • Literature review – Medical Evidence section updated (including references). • References accessed, reviewed, and updated.