Cohere Medical Policy - Ankle Arthrodesis

Clinical Guidelines for Medical Necessity Review

Version: 3
Effective Date: January 16, 2025

Important Notices

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Other Notices:

Guideline Information:

Specialty Area: Disorders of the Musculoskeletal System
Guideline Name: Cohere Medical Policy - Ankle Arthrodesis

Date of last literature review: 1/6/2025
Document last updated: 1/16/2025
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Ankle Arthrodesis

Recommended Clinical Approach

Ankle arthrodesis is indicated when ankle arthroscopy or arthroplasty is not appropriate, and the patient has failed at least six months of conservative therapy. Additional surgery may be authorized when medically necessary and initial surgery was unsuccessful. Ankle arthrodesis is often performed for end-stage arthritis to relieve pain and improve function. The procedure involves the bonding of the tibiotalar joint and is performed arthroscopically or with an open approach. Compared to ankle arthrodesis, ankle arthroplasty is preferred for pain relief and functional improvement.[1-2]

Medical Necessity Criteria

Indications

- ➔ An **ankle arthrodesis** is considered appropriate if **ALL** of the following are **TRUE**:
  - ◆ No nicotine product use for 6 weeks with a negative lab test within 30 days of planned surgery; **AND**
  - ◆ The patient has **ANY** of the following:
    - Musculoskeletal congenital or acquired dysfunction[3-4]; **OR**
    - Increased arthritis pain due to **ANY** of the following:
      - ○ Infection-related to septic or reactive arthritis; **OR**
      - ○ Trauma[5-6]; **OR**
      - ○ Chronic instability; **OR**
      - ○ Avascular necrosis of the talus [7-8]; **OR**
      - ○ Inflammatory arthropathy; **OR**
      - ○ Primary osteoarthritis; **OR**
    - Neuropathic arthropathy; **OR**
    - Tumor resection; **OR**
    - Unsuccessful open reduction and internal fixation [9-10]; **OR**
    - Unsuccessful total ankle arthroplasty[11]; **OR**
    - The patient demonstrates evidence of end-stage arthritis[12]; **AND**

- Failure of conservative management for greater than 6 months, including **ALL** of the following:
  - Oral steroids, anti-inflammatory medications, or analgesics; **AND**
  - Physical therapy; **AND**
  - Orthotic devices; **AND**
  - **ANY** of the following:
    - Corticosteroid injection if medically appropriate; **OR**
    - Corticosteroid injection is contraindicated.

Non-Indications

➔ An **ankle arthrodesis** is not considered appropriate if **ANY** of the following is **TRUE**[12]:

- Active viral, bacterial, parasitic, or fungal infection; **OR**
- Development of subtalar arthritis after calcaneus fracture; **OR**
- Asymptomatic or has minimal symptoms of arthritis.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
27870	Arthrodesis, ankle, open
27871	Arthrodesis, tibiofibular joint, proximal or distal
28705	Arthrodesis; pantalar
29899	Arthroscopy, ankle (tibiotalar and fibulotalar joints), surgical; with ankle arthrodesis

Medical Evidence

Daniels et al. (2014) conducted a prospective study to evaluate and compare the intermediate-term (4 to 10 year) clinical outcomes of total ankle replacement and ankle arthrodesis in patients with end-stage ankle arthritis. Patients from the Canadian Orthopaedic Foot and Ankle Society (COFAS) Prospective Ankle Reconstruction Database were included. A total of 388 ankles were analyzed and separated into two groups; 281 in the ankle replacement group and 107 in the arthrodesis group. The follow-up rate was 83%. The mean Ankle Osteoarthritis Scale scores improved from 53.4 points to 33.6 in the arthrodesis group and from 51.9 points to 26.4 in the group that underwent ankle replacement.[7]

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, which may also cause the joints to 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 entitled *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.[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	1/16/2025	• Annual review:
		• Reviewed boolean logic.
		• Changes the language in the following indications:
		  ○ Added " …within 30 days of planned surgery" to the first indication ("No nicotine product use for 6 weeks with a negative lab test requirement").
		  ○ "Recovery of an unsuccessful TAA" has been replaced with "Unsuccessful TAA"
		  ○ "The patient demonstrates evidence of end-stage arthritis functional impairment that ankle arthroscopy is not appropriate" has been replaced with "The patient demonstrates evidence of end-stage arthritis."
		• Updated references.