Cohere Medical Policy - Open Meniscus Repair

Clinical Guidelines for Medical Necessity Review

Version: 2
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Important Notices

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Guideline Information:

Specialty Area: Disorders of the Musculoskeletal System
Guideline Name: Cohere Medical Policy - Open Meniscus Repair

Date of last literature review: 2/18/2025
Document last updated: 2/18/2025
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Open Meniscus Repair

Recommended Clinical Approach

Open meniscus repair is a surgical procedure in which an incision is made behind the collateral ligaments of the knee to repair a peripheral or nearly peripheral tear. The procedure is not recommended for tears more than 1-2 mm beyond the meniscosynovial junction, as such lesions are better suited to arthroscopic repair. While open meniscus repair has almost entirely been replaced by arthroscopic meniscus repair, open repair may still be useful when a complex posterior horn tear is difficult to access otherwise.[1-4]

Medical Necessity Criteria

Indications

- ➔ **Open meniscus repair** is considered appropriate if **ANY** of the following is **TRUE**[5-7]:
  - ◆ Meniscus tear in young, active patient[8]; **OR**
  - ◆ **ALL** of the following is **TRUE**:
    - The patient has **ANY** of the following:
      - Mechanical symptoms following an acute tear; **OR**
      - A chronic tear, and **ALL** of the following:
        - ◆ Persistent mechanical symptoms; **AND**
        - ◆ Documented failure (including detailed evidence of the measures taken) of conservative management (e.g., rest, analgesics, physical therapy, home exercise program, oral or injectable corticosteroids); **OR**
    - The tear is a recurrent tear or failed repair demonstrated on advanced imaging;[1] **AND**
    - Limited activities of daily living (ADLs) due to pain and mechanical symptoms; **AND**
    - The patient has **ANY** of the following advanced imaging findings:[1]
      - Meniscus tear in a young, active patient[8]; **OR**
      - Unstable tears, such as bucket handle and double longitudinal tears; **OR**

- Isolated simple-pattern meniscus tears in stable knees; **OR**
- Posteromedial and posterolateral root tears; **OR**
- Longitudinal tears greater than 10 millimeters (mm; **OR**
- Tears primarily in the vascular zones of the meniscus; **OR**
- Acute traumatic meniscal tear[1]

Non-Indications

➔ **Open meniscus repair** is not considered appropriate if **ANY** of the following is **TRUE**:[9]

- Degenerative tears; **OR**
- Isolated meniscus repair in an unstable knee[10-12];**OR**
- Osteoarthritis of the knee (moderate, severe, or KL grade III or IV).[13,14]

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS/CPT Code	Code Description
27403	Arthrotomy with meniscus repair, knee

Medical Evidence

Kopf et al. (2020) examined management of traumatic meniscus tears through an expert consensus process, and determined that preservation of the meniscus should be the first line of treatment when possible. Clinical and radiological long-term outcomes are worse after partial meniscectomy as opposed to meniscus preservation. They also concluded that meniscus repair types that were previously considered irreparable (older tears, tears in obese patients, long tears, etc.) should be repaired.[1]

Maffulli et al. (2010) concluded that in meniscal tears, meniscal tissue should be preserved whenever possible. When repair is not possible, partial meniscal resection would be indicated, as well as consideration of meniscal transplantation.[2]

Carreau et al. (2017) systematically evaluated the literature regarding sub-acute root tears with medial meniscal extrusion in middle-aged patients. Previously, repair was recommended in younger, more active patient populations, though such injuries are more common in the middle-aged. These patients typically present with co-existing arthritis and treatment should be based on the severity. When there is early or minimal arthritis, root repair can ideally restore meniscal function and improve symptoms.[12]

A systematic review conducted by Peterson et al. (2022) examined the long-term results of meniscus repair. The authors reviewed 12 retrospective case series that included either open or arthroscopic meniscus repair and at least 7 years of follow-up data. No statistical difference was found between the failure rates of open repair, arthroscopic inside-out with posterior incisions, or arthroscopic all-inside repair with flexible non-resorbable implants. However, the authors noted that the failure rate of meniscal repair in studies with children and adolescents was significantly higher than in studies that included only adults.[15]

References

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Clinical Guideline Revision History/Information

Original Date: December 29, 2023		
Review History		
Version 2	2/20/2025	• Annual Review • Replaced General Guidelines section with Recommended Clinical Approach. • Updated conservative care language to reflect standard MSK policy language. • In the indication, “Limited activities of daily living (ADLs) due to pain and instability,” “instability” has been replaced by “mechanical symptoms.” • Deleted “Tight medial compartment and posterior open approach is indicated” indication, as tight medial compartment pathology is now typically addressed with an arthroscopic "pie-crusting" technique of the MCL. • The conservative care language in the indications has been replaced with “Failure of conservative management (e.g., rest, analgesics, physical therapy, home exercise program, oral or injectable corticosteroids).” • Added a recent systematic review (Peterson et al. 2022) to the Medical Evidence section. • Included indication for meniscus tear in young, active patient. • Added references 2, 3, and 13.