



Knee Open or Arthroscopic Bursectomy - Single Service

Clinical Guidelines for Medical Necessity Review

Version: 1
Effective Date: May 28, 2024

Important Notices

Notices & Disclaimers:

GUIDELINES SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION MAKING OF END USERS.

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice.

©2024 Cohere Health, Inc. All Rights Reserved.

Other Notices:

HCPCS® and CPT® copyright 2024 American Medical Association. All rights reserved.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

HCPCS and CPT are registered trademarks of the American Medical Association.

Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System

Guideline Name: Knee Open or Arthroscopic Bursectomy (Single Service)

Literature review current through: 5/28/2024

Document last updated: 5/28/2024

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

Table of Contents

Important Notices	2
Table of Contents	3
Medical Necessity Criteria	4
Service: Knee Open or Arthroscopic Bursectomy	4
General Guidelines	4
Medical Necessity Criteria	4
Indications	4
Non-Indications	4
Level of Care Criteria	4
Procedure Codes (CPT/HCPCS)	5
Medical Evidence	6
References	8
Clinical Guideline Revision History/Information	9

Medical Necessity Criteria

Service: Knee Open or Arthroscopic Bursectomy

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:** Endoscopic bursectomy can efficiently treat prepatellar bursitis, but open procedures are more common.¹
- **Exclusions:** None.

Medical Necessity Criteria

Indications

→ **Knee Open or Arthroscopic Bursectomy** is considered appropriate if **ANY** of the following is **TRUE**:

- ◆ Failure of conservative management for prepatellar bursitis for greater than 3 months including **ALL** of the following:
 - Oral steroids, anti-inflammatory medications, or analgesics; **AND**
 - Physical therapy; **AND**
 - Activity modification (avoiding kneeling); **AND**
 - Compression, immobilization, or knee pads; **AND**
 - **ANY** of the following:
 - Corticosteroid injection if medically appropriate; **OR**
 - Corticosteroid injection is contraindicated; **OR**
- ◆ Suspected septic prepatellar knee bursitis/infection when symptoms have not improved significantly within 36-48 hours after initiation of antibiotic treatment.⁴

Non-Indications

→ **Knee Open or Arthroscopic Bursectomy** is not considered appropriate if **ANY** of the following is **TRUE**:

- ◆ There are no published contraindications.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
27340	Excision, prepatellar bursa

Medical Evidence

Brown et al. performed a systematic review to determine the optimal treatment for prepatellar bursitis. It included 10 studies (702 patients) comparing endoscopic and open bursectomy and assessing the duration of antibiotics. The primary outcome was recurrence after 1 year. Results showed no significant difference in recurrence between endoscopic and open bursectomy or surgical complications. Endoscopic bursectomy offered shorter hospital stays and lower postoperative pain risk. Antibiotic treatment for less than 8 days did not significantly increase recurrence compared to longer treatment. The study suggests endoscopic bursectomy as a viable option for septic and aseptic prepatellar bursitis, with no significant improvement in recurrence or hospital stay with antibiotic treatment exceeding 7 days for septic bursitis.²

Uçkay et al. (2017) conducted a randomized trial to analyze the optimal surgical approach for patients with septic bursitis. A total of 164 patients were randomized to receive either 1-stage or 2-stage bursectomy, along with 7 days of oral antibiotic therapy post-surgery. Of these patients, 130 had elbow bursitis, and 34 had patellar bursitis. The results showed 22 treatment failures overall, with a slightly lower rate in the 1-stage group (10%) than in the 2-stage group (16%), though this difference was not statistically significant. Recurrent infections were observed in a small percentage of patients, some caused by the same pathogen and others by a different pathogen. However, outcomes favored the 1-stage approach in terms of lower rates of wound dehiscence for elbow bursitis (1 out of 66 vs 9 out of 64), shorter median hospital stay (4.5 vs 6.0 days), reduced nurses' workload, and lower total costs. The conclusion drawn was that for adults with moderate to severe septic bursitis requiring hospitalization, bursectomy with primary closure and 7 days of antibiotic therapy was safe, effective, and cost-saving. Additionally, the study suggested that using a 2-stage approach may be associated with a higher risk of wound dehiscence for olecranon bursitis than the 1-stage approach.³

Baumbach et al. (2015) report on a study aimed to develop a treatment algorithm for olecranon and prepatellar bursitis, common conditions predominantly affecting middle-aged male patients. About one-third of cases are septic, while two-thirds are non-septic, with treatment approaches varying internationally. A literature review identified 52 relevant papers. Differentiation between septic and non-septic bursitis relied on clinical presentation, bursal aspirate, and blood sampling analysis. Bursal aspirate criteria included purulence, glucose ratio, white cell count, cell type, Gram

staining, and culture. General treatment for both types involved bursal aspiration, NSAIDs, and PRICE. In non-septic cases with high demands, intrabursal steroid injection might be considered. Septic bursitis requires antibiotic therapy. Surgical intervention like incision, drainage, or bursectomy was reserved for severe, refractory, or chronic/recurrent cases. The authors concluded that immediate bursectomy lacked sufficient evidence support and suggested a conservative approach based on bursal aspirate differentiation between septic and non-septic bursitis.⁴

References

1. Meric G, Sargin S, Atik A, et al. Endoscopic versus open bursectomy for prepatellar and olecranon bursitis. *Cureus*. 2018 Mar 27;10(3):e2374. doi: 10.7759/cureus.2374. PMID: 29805943; PMCID: PMC5969792.
2. Brown OS, Smith TO, Parsons T, et al. Management of septic and aseptic prepatellar bursitis: A systematic review. *Arch Orthop Trauma Surg*. 2022 Oct;142(10):2445-2457. doi: 10.1007/s00402-021-03853-9. PMID: 33721054.
3. Uçkay I, von Dach E, Perez C, et al. One- vs 2-stage bursectomy for septic olecranon and prepatellar bursitis: A prospective randomized trial. *Mayo Clin Proc*. 2017 Jul;92(7):1061-1069. doi: 10.1016/j.mayocp.2017.03.011. PMID: 28602435.
4. Baumbach SF, Lobo CM, Badyine I, et al. Prepatellar and olecranon bursitis: Literature review and development of a treatment algorithm. *Arch Orthop Trauma Surg*. 2014 Mar;134(3):359-70. doi: 10.1007/s00402-013-1882-7. PMID: 24305696.

Clinical Guideline Revision History/Information

Original Date: May 28, 2024	
Review History	