Cohere Medicare Advantage Policy - Subchondroplasty

Clinical Guidelines for Medical Necessity Review

Version: 3
Revision Date: May 22, 2025

Important Notices

Notices & Disclaimers:

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

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Other Notices:

Policy Information:

Specialty Area: Disorders of the Musculoskeletal System
Policy Name: Non-Covered Cohere Medicare Advantage Policy - Subchondroplasty
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

Table of Contents

Medical Necessity Criteria

Service: Subchondroplasty

Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.

- There are no applicable NCDs and/or LCDs for subchondroplasty.

Description

Subchondroplasty is a novel technique that may reduce pain by treating bone lesions caused by knee osteoarthritis (OA) and insufficiency fractures. The procedure involves injecting bone substitute material into areas requiring structural support in the subchondral bone.[1-3]

Medical Necessity Criteria

Indications

Subchondroplasty is considered appropriate if **ALL** of the following are **TRUE**:

- This procedure is unproven and not medically necessary. There is insufficient evidence of its effectiveness for these indications.

Non-Indications

Subchondroplasty is not considered appropriate if **ALL** of the following are **TRUE**:

- This is not applicable as there are no indications.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
0707T	Injection(s), bone-substitute material (e.g., calcium phosphate) into subchondral bone defect (i.e., bone marrow lesion, bone bruise, stress injury, microtrabecular fracture), including imaging guidance and arthroscopic assistance for joint visualization

Disclaimer: S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Medical Evidence

Wood et al. (2023) discussed subschondroplasty to slow or eliminate the need for knee arthroplasty. While effective, the authors note that previous randomized trials lacked control groups that demonstrated successful long-term outcomes. Limitations of the study included transfer bias and the lack of long-term follow-up.[8]

DiMatteo et al. (2024) conducted a small study of 79 patients to measure outcomes at 12-month follow-up of patients with knee OA and recurring BMLs. While the authors note that the procedure is effective for this population, randomized studies are needed to support subchondroplasty.[9] Tran et al. (2022) reported similar results and the need for randomized studies that include a control group and evaluation of long-term clinical.[10]

Di Matteo et al. (2021) performed a systematic review to study the efficacy of intraosseous injections for patients with BMLs and knee osteoarthritis (OA). Twelve studies with 459 patients were included in the review that addressed using three types of injections (calcium phosphate, platelet-rich plasma, and bone marrow concentrate). While injections are minimally invasive and have a low complication rate, the research lacks high-quality evidence to establish support.[5]

Krebs et al. (2020) conducted a small retrospective chart review to determine the outcomes of knee arthroscopy with adjunctive subchondroplasty. These include improving self-rated visual analog scale (VAS) pain scores, conversion rate to arthroplasty, and overall satisfaction following the procedure. While the procedure demonstrated positive outcomes, additional research is needed on the limitations of the procedure. The size of the case series was small (12 patients) without a control group; hence, there was no ability to compare it to the intervention group. Postoperative data did not have a standardized collection process (e.g., missed appointments and inability to obtain VAS pain scores at specific follow-up appointments). Finally, magnetic resonance imaging (MRI) was missing for patients, and BML status could not be determined after subchondroplasty.[4]

References

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8. Wood DS, Paulson S, Nolan JR, et al. What factors are associated with conversion to knee arthroplasty after subchondroplasty? *Clin Orthop*

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9. Di Matteo B, Anzillotti G, Conte P, et al. Subchondroplasty (SCP) provides resolution of symptoms and functional improvements in mild-to-moderate knee osteoarthritis with persistent bone marrow lesions: 12-month follow-up results from a multicentric open-label prospective clinical trial. *Cartilage*. 2024 Jul 30:19476035241264011. doi:10.1177/19476035241264011
10. Tran Y, Pelletier-Roy R, Merle G, et al. Subchondroplasty in the treatment of bone marrow lesion in early knee osteoarthritis: A systematic review of clinical and radiological outcomes. *Knee*. 2022 Dec:39:279-290. doi:10.1016/j.knee.2022.10.004

Clinical Guideline Revision History/Information

Original Date: May 27, 2024		
Review History		
Version 2	06/12/2024	422.101 disclaimer added.
Version 3	05/22/2025	Annual review. No changes to medical necessity criteria or procedure codes. Literature review - Medical Evidence section updated to support non-coverage based on a lack of evidence (Di Matteo et al., 2024; Wood et al., 2023).