

1 **Clinical Practice Guideline: Hallux Rigidus Correction with Cheilectomy**

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3 **Date of Implementation: July 16, 2015**

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5 **Product: Specialty**

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8 **GUIDELINES**

9 American Specialty Health – Specialty (ASH) considers services consisting of CPT Code
10 28289 to be medically necessary for the treatment of hallux rigidus deformity of the first
11 metatarsophalangeal joint **upon meeting ALL of the following criteria:**

- 12 1. Diagnosis of one or more of the following ICD-10 codes: post-traumatic and
13 secondary osteoarthritis of the ankle and foot (great toe arthritis with bone spurring)
14 (M19.171 - M19.179, M19.271 - M19.279); hallux rigidus (M20.20 - M20.22);
15 other specific arthropathies, not elsewhere classified, ankle and foot (M12.871-
16 M12.879); arthropathy, unspecified (M12.9); osteophyte, unspecified joint
17 (M25.70); pain in the ankle and joints of foot (M25.571 - M25.579)
- 18 2. Failure of **AT LEAST 2** of the following non-operative treatments:
- 19 ○ Shoe modifications
 - 20 ○ Orthotic devices
 - 21 ○ Medications
 - 22 ○ Padding
 - 23 ○ Injection therapy
 - 24 ○ Physical therapy
- 25 3. Residual pain and dysfunction with gait

26
27 **CPT CODES AND DESCRIPTIONS**

CPT® Code	CPT® Code Description
28289	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; without implant

28
29 **BACKGROUND**

30 Hallux rigidus is a syndrome with symptoms that are related to degenerative arthritis of the
31 great-toe metatarsophalangeal joint. The symptoms result from cartilage wear, altered joint
32 mechanics, and osteophyte formation, particularly on the dorsal aspect of the first
33 metatarsal head. Hallux rigidus usually causes pain from impingement of dorsal
34 osteophytes, from inflammation, and from shoe-related pressure on prominent osteophytes.
35 It also causes range-of-motion (ROM) pain related to the irregularity of the articular
36 cartilage surface.

1 Patients typically present with pain and stiffness at the first metatarsophalangeal (MTP)
2 joint. In the early stages of hallux rigidus, there is pain at terminal range of dorsiflexion
3 and plantarflexion. In the late stages, there is loss of motion especially dorsiflexion,
4 sometimes with crepitus at mid-arc of motion. Patients may complain of a dorsal
5 prominence from osteophytes or synovitis.

6
7 The true etiology of hallux rigidus is not known. However, several risk factors have been
8 identified and include an abnormally long or elevated first foot bone (metatarsal),
9 differences in foot anatomy, prior traumatic injury to the big toe and family history. Most
10 of these risk factors cause damage to the surfaces of the bone and lead to wear and tear of
11 the joint, which can in turn lead to arthritis.

12
13 In many cases, the diagnosis of hallux rigidus can be made by physical examination alone.
14 Physical examination often reveals tenderness, swelling, and/or ecchymosis of the first
15 MTP joint. The pain should be classified as dorsal, medial, and/or sesamoidal. Passive and
16 active range of motion is decreased most notably in dorsiflexion.

17
18 Non-operative management is always the first line treatment for this condition.
19 Conservative treatment includes foot orthoses with a firm support under the great toe
20 (Morton's extension), shoe wear modification, activity modification, physical therapy,
21 medications, and injection therapy.

22
23 Surgical treatments for hallux rigidus are determined by the failure of non-surgical
24 treatment and the extent of arthritis and deformity of the toe. The choice of operation
25 depends on the degree of involvement, the ROM limitations, the individual's activity level,
26 and the surgeon's and patient's preference. Options include joint-sparing procedures, such
27 as cheilectomy, with or without proximal phalanx osteotomy (the Moberg procedure), as
28 well as MT osteotomy, joint arthroplasty, and arthrodesis.

29
30 Dorsal cheilectomy is indicated in patients with mild to moderate arthritic changes with
31 less than 50% involvement of the joint surface. A cheilectomy consists of excision of the
32 dorsal osteophytes surrounding the first metatarsophalangeal (MTP) joint. These
33 osteophytes often interfere with first MTP joint motion, primarily dorsiflexion.
34 Cheilectomy of the first MTP joint has yielded favorable results for patients with earlier
35 stages of hallux rigidus. Multiple studies have examined the use of cheilectomy in the
36 treatment of hallux rigidus, and its use has been supported, mostly by Level IV studies.
37 Cheilectomy can be performed with predictable success to treat grades 1 and 2 hallux
38 rigidus, and select cases of grade 3 (Simpson et al., 2011).

39
40 Wagenmann et al. (2011) carried out a retrospective study on 44 patients (52 feet) who
41 underwent cheilectomy for the treatment of hallux rigidus. The assessment included a four-
42 stage subjective satisfaction rating scale, the American Orthopaedic Foot and Ankle

1 Society (AOFAS) metatarsophalangeal-interphalangeal score and first
 2 metatarsophalangeal joint (MTP) range of motion (ROM) measurements. Twenty-seven
 3 patients were very satisfied with the operation, and 10 patients reported satisfactory results.
 4 The mean AOFAS score increased significantly from 35 points pre-surgery to 88 points
 5 post-surgery. First MTP ROM increased from 18.1° before surgery to 49.1° at follow-up.
 6 Isolated dorsiflexion increased from 21.4° to 34.1° ($p=0.0009$) and isolated plantar
 7 flexion was 15.8° pre-surgery and 16.9° at follow-up ($p=0.214$). The researchers
 8 concluded that cheilectomy represents a reliable technique for hallux rigidus that can
 9 achieve good results in patient satisfaction and functional outcome.

10
 11 The advantages of cheilectomy are that it is a joint-sparing procedure, preserves range of
 12 motion, maintains joint stability, and does not preclude secondary procedures in the future
 13 (Lam et al., 2017).

14
 15 An absolute contraindication for operative treatment is poor peripheral circulation.

17 **PRACTITIONER SCOPE AND TRAINING**

18 Practitioners should practice only in the areas in which they are competent based on their
 19 education, training and experience. Levels of education, experience, and proficiency may
 20 vary among individual practitioners. It is ethically and legally incumbent on a practitioner
 21 to determine where they have the knowledge and skills necessary to perform such services
 22 and whether the services are within their scope of practice.

23
 24 It is best practice for the practitioner to appropriately render services to a member only if
 25 they are trained, equally skilled, and adequately competent to deliver a service compared
 26 to others trained to perform the same procedure. If the service would be most competently
 27 delivered by another health care practitioner who has more skill and training, it would be
 28 best practice to refer the member to the more expert practitioner.

29
 30 Best practice can be defined as a clinical, scientific, or professional technique, method, or
 31 process that is typically evidence-based and consensus driven and is recognized by a
 32 majority of professionals in a particular field as more effective at delivering a particular
 33 outcome than any other practice (Joint Commission International Accreditation Standards
 34 for Hospitals, 2020).

35
 36 Depending on the practitioner's scope of practice, training, and experience, a member's
 37 condition and/or symptoms during examination or the course of treatment may indicate the
 38 need for referral to another practitioner or even emergency care. In such cases it is prudent
 39 for the practitioner to refer the member for appropriate co-management (e.g., to their
 40 primary care physician) or if immediate emergency care is warranted, to contact 911 as
 41 appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* clinical practice
 42 guideline for information.

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