

Surgery of the Foot (for North Carolina Only)

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Related Policies
None

Application

This Medical Policy only applies to the state of North Carolina.

Coverage Rationale

Surgery of the foot is proven and medically necessary in certain circumstances. For medical necessity clinical coverage criteria, refer to the InterQual® 2022, Apr. 2022 Release, CP: Procedures:

- Arthrodesis or Arthroplasty, Interphalangeal Joint, Second-Fifth Toes
- Exostectomy, First Metatarsophalangeal (MTP) Joint (Bunionectomy)
- Osteotomy, Distal Transpositional, First Metatarsal (MT) (Bunionectomy)
- Osteotomy, Proximal, First Metatarsal (MT) (Bunionectomy)
- Plantar Fascial Release

Click [here](#) to view the InterQual® criteria.

Correction of the First Metatarsophalangeal (MTP) Joint with cheilectomy, debridement, and capsular release is proven and medically necessary when the following criteria are met:

- Diagnosis of hallux limitus or hallux rigidus to include the following:
 - Radiographic imaging to confirm a mild to moderate pathology (e.g., a [grading scale such as the Coughlin and Shurnas or Hattrup Johnson Classification](#) may be used)
- Persistent pain despite a reasonable trial of conservative treatment including all of the following:
 - Orthotics and/or shoe inserts; and
 - Medical therapy (NSAIDs, analgesics or intra-articular injections); and
 - Activity modification; and
 - Debridement of hyperkeratotic lesions if present

Due to insufficient evidence of efficacy, correction of the first metatarsophalangeal (MTP) joint with cheilectomy, debridement, and capsular release is unproven and not medically necessary for severe hallux rigidus (e.g., a [grading scale such as the Coughlin and Shurnas or Hattrup Johnson Classification](#) may be used).

Description of Services

Hallux rigidus also known as a stiff great toe, is a common condition in patients with a degenerative joint disease such as osteoarthritis, rheumatoid arthritis, or gout. Symptoms involve pain and swelling resulting from friction between denuded bone surfaces of the damaged metatarsophalangeal joint and stiffness resulting from abnormal bone growths, known as osteophytes, that lock the joint in place. The condition typically worsens over time and may cause significant disability if untreated. Surgery is indicated when conservative measures fail to provide sufficient relief.

In cases of early hallux limitus and/or hallux rigidus with mild damage, removing some bone and the bone spur on the dorsum of the foot and big toe can be sufficient. This procedure is known as a Cheilectomy. Osteophyte and outer epiphysis bone resection to restore range of motion. Cheilectomy is less drastic than arthrodesis and/or joint arthroplasty and can preserve motion, but symptoms are likely to return as joint degeneration progresses. This procedure can be combined with other procedures such as an osteotomy where the metatarsal diaphysis is shortened to separate the metatarsophalangeal joint surfaces which relieves pressure at the top of the joint.

Advanced stages of hallux rigidus with moderate to severe joint damage can be treated with arthrodesis and/or arthroplasty.

Clinical Evidence

King et al. (2017) in a systematic review looked at the non-operative management of hallux rigidus. Currently, there is very little on the evidence for the non-operative management of hallux rigidus. The results of this review included 11 studies that were then assigned to a level of evidence (I-IV). Individual studies were reviewed to provide a grade of recommendation (A-C, I) according to the Wright classification in support of or against the non-operative modality. Based on the results of this evidence-based review, there is poor evidence (grade C) to support use of intra-articular injections for pain relief for a period of three months and fair evidence (grade B) against the use of intra-articular injections for long term efficacy. There is poor evidence (grade C) to support manipulation and physical therapy and poor evidence (grade C) to support modifications in footwear, insoles, and orthotics. There was no good evidence (grade A) recommending any interventions. Overall, most of the interventions showed improvement after the non-operative. However, the evidence is poor in recommending orthosis, manipulation, and intra-articular injections. One study limitation included the different grades of hallux rigidus that were reviewed. There is a need for high-quality Level I randomized controlled trials with validated outcome measures to allow for stronger recommendations to be made. Non-operative management should still be offered, prior to surgical management.

Deland and Williams (2012) performed a review on the surgical management of Hallux rigidus. Hallux rigidus is the most common degenerative joint pathology of the foot. If left untreated, it may result in notable limitations in gait, activity level, and daily function. Positive outcomes can be achieved with nonsurgical management; surgery is recommended for the symptomatic patient when nonsurgical measures have failed to adequately control symptoms. Surgery is carefully chosen based on the grade of involvement. Early to mid-stage hallux rigidus is best treated with cheilectomy or cheilectomy and proximal phalanx osteotomy. Cheilectomy, whether alone or in combination with phalangeal osteotomy, has resulted in high rates of satisfaction in persons with grade 1 or 2 hallux rigidus and without pain during the midrange of motion. Studies have often grouped grades 1 through 3 together, and there is a lack of studies that specifically evaluate patients with grade 3 hallux rigidus. Arthrodesis and arthroplasty are reserved for late-stage hallux rigidus.

Maffulli et al. (2011) performed a systematic review on the surgical management of hallux rigidus. This included cheilectomy, Keller resection arthroplasty, arthrodesis, Silastic implantation, phalangeal or metatarsal osteotomy, capsular arthroplasty, partial or total joint replacement, interposition arthroplasty. A total of 70 studies were included in the results. Results indicated that the success rate as 74% after cheilectomy, 69% after osteotomy, 73.2% after arthrodesis, 70.2% after arthroplasty, and 73.4% after interpositional arthroplasty. The surgical criteria are based on the deformity grading classified by a grading scale. Hattrup and Johnson's classification and Coughlin and Shurnas's classification are the most used scales. The indications for surgical management are somewhat unclear. Regardless of the classification, cheilectomy and osteotomy should be performed in the early stages of hallux rigidus (stages I-II), arthrodesis or arthroplasty are indicated to manage more severe cases (stages III-IV). No study reported on the clinical and functional status and the return to a preoperative level. (Hattrup 2013 and Coughlin 2003 are included in this review.)

A variety of scales have been used to grade the severity of hallux rigidus, although the scales proposed by Hattrup and Johnson and Coughlin and Shurnas are most common. Either scale can be to determine whether hallux rigidus is mild, moderate, or severe.

Radiographic	Clinical	Qualitative	Hattrup and Johnson	Coughlin and Shurnas
No radiographic evidence for osteoarthritis	No pain +/- mild stiffness		–	0
Mild-to-moderate osteophyte formation with no joint space involvement	Mild pain maximal with flexion, mild stiffness	Mild	I	1
Moderate osteophyte formation and joint space narrowing; subchondral sclerosis	Moderate-to-severe pain constant at the extremes of motion, moderate-to-severe stiffness	Moderate	II	2
Marked osteophyte formation and loss of the joint space, cystic changes with or without subchondral sclerosis	Nearly constant pain (3), pain throughout the range of motion (including midrange) (4)	Severe	III	3 or 4

Roukis et al. (2010) in a systematic review studied the actual safety and efficacy of Cheilectomy with phalangeal dorsiflexory for the treatment of all grades of hallux rigidus. Studies were considered only if they involved consecutively enrolled patients undergoing cheilectomy with phalangeal dorsiflexory osteotomy. Eleven studies involving a total of 374 procedures were identified that met the inclusion criteria. Pain was relieved or improved in 149/167 (89.2%) procedures, and 139/217 (77%) patients related being satisfied or very satisfied with their outcomes. A total of 18 (4.8%) procedures underwent surgical revision. Six studies involving 177 procedures specified the grade of hallux rigidus as follows: grade I, 10.2%; grade II, 72.3%; and grade III, 17.5%. The results of this systematic review validate the general improvement in objective and subjective data as well as the low incidence of revision surgery required after cheilectomy with phalangeal dorsiflexory osteotomy for hallux rigidus. Consequently, cheilectomy with phalangeal dorsiflexory osteotomy should be considered a first-line surgical treatment for hallux rigidus. Nevertheless, there is still a need for methodologically sound prospective cohort studies that concentrate on the use of this procedure for specific grades of hallux rigidus and compare the subjective and objective outcomes as well as the need for surgical revision with other procedures.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by federal, state, or contractual requirements and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
Arthrodesis or Arthroplasty, Interphalangeal Joint, Second-Fifth Toes	
28285	Correction, hammertoe (e.g., interphalangeal fusion, partial or total phalangectomy)
Exostectomy, First Metatarsophalangeal (MTP) Joint (Bunionectomy)	
28289	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; without implant
28291	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint; with implant
28292	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with resection of proximal phalanx base, when performed, any method

CPT Code	Description
Osteotomy, Proximal, First Metatarsal (MT) (Bunionectomy)	
28295	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with proximal metatarsal osteotomy, any method
28297	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with first metatarsal and medial cuneiform joint arthrodesis, any method
28298	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with proximal phalanx osteotomy, any method
28299	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with double osteotomy, any method
Osteotomy, Distal Transpositional, First Metatarsal (MT) (Bunionectomy)	
28296	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with distal metatarsal osteotomy, any method
28299	Correction, hallux valgus (bunionectomy), with sesamoidectomy, when performed; with double osteotomy, any method
Plantar Fascial Release	
29893	Endoscopic plantar fasciotomy

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U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Surgeries of the foot and ankle are procedures and, therefore, not regulated by the FDA. However, devices and instruments used during the surgery may require FDA approval. Refer to the following website for additional information:

<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm>. (Accessed June 23, 2021)

References

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- Deland JT, Williams BR. Surgical management of hallux rigidus. *J Am Acad Orthop Surg*. 2012 Jun;20(6):347-58
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- Maffulli N, Papalia R, Palumbo A, et al. Quantitative review of operative management of hallux rigidus. *Br Med Bull*. 2011; 98:75-98.
- McNeil DS, Baumhauer JF, Glazebrook MA. Evidence-based analysis of the efficacy for operative treatment of hallux rigidus. *Foot Ankle Int*. 2013 Jan;34(1):15-32.
- Roukis TS. The need for surgical revision after isolated cheilectomy for hallux rigidus: a systematic review. *J Foot Ankle Surg*. 2010 Sep-Oct;49(5):465-70.

Policy History/Revision Information

Date	Summary of Changes
05/01/2022	<p data-bbox="337 218 594 247">Coverage Rationale</p> <ul data-bbox="337 254 1328 348" style="list-style-type: none"><li data-bbox="337 254 646 283">● Replaced reference to:<ul data-bbox="386 289 1328 348" style="list-style-type: none"><li data-bbox="386 289 1328 319">○ “InterQual® 2021, Apr. 2021 Release” with “InterQual® 2022, Apr. 2022 Release”<li data-bbox="386 325 1328 348">○ “InterQual® 2021, Oct. 2021 Release” with “InterQual® 2022, Apr. 2022 Release” <p data-bbox="337 359 639 388">Supporting Information</p> <ul data-bbox="337 394 935 422" style="list-style-type: none"><li data-bbox="337 394 935 422">● Archived previous policy version CSNCT0555.02

Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state or contractual requirements for benefit plan coverage govern. Before using this policy, please check the federal, state or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. The UnitedHealthcare Medical Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.