Clinical Practice Guideline: **Hammertoe Surgical Repair**

Date of Implementation: **May 21, 2015**

Product: **Specialty**

GUIDELINES

A. American Specialty Health – Specialty (ASH) considers CPT code 28285 - surgical repair of hammertoe deformity (also called claw toe, mallet toe) (ICD-10 codes M20.40 – M20.42, M20.5X1 – M20.5X9, M20.60 – M20.62) in skeletally mature individuals (i.e., after epiphyseal closure) necessary when they have persistent pain, deformity, and dysfunction that adversely affects lifestyle and/or occupation AND upon meeting both the following criteria:
   1. When any of the following conditions are met:
      - Adventitious bursitis on the dorsal surface of the hammertoe
      - Ankylosis of the proximal interphalangeal joint (PIPJ)
      - Lateral metatarsophalangeal (MTP) capsular tear
      - Painful nail conditions secondary to persistent trauma
      - Presence of co-existing or causative conditions (e.g., tendon contracture) that need repair
      - Subluxation or dislocation of the MTP joint
      - Synovitis/capsulitis of the MTP joint
      - Ulceration of the apices
   2. Failure of **at least 2 of the following** non-operative treatments:
      - Adhesive devices
      - Corrective splinting
      - Shoe modification
      - Manipulation
      - Non-steroidal anti-inflammatory drugs
      - Orthotics
      - Protective padding
      - Removal of any corns or calluses

B. ASH considers services consisting of CPT Codes 28150, 28153, or 28160 to be medically necessary upon meeting **ALL** of the following criteria:
   1. Indications **(at least one** of the following): Treatment of foot ulcer or severe infection, gangrene, osteomyelitis, exostosis, tumor, other hammertoe(s), acquired (M20.40 – M20.42), other deformities of toe(s), acquired (M20.5X1 - M20.5X9), or unspecified acquired deformity of toe(s) (M20.60 – M20.62); and

2. Nonoperative therapy consisting of protective padding AND shoe modification has been tried and failed or is not appropriate.

C. ASH considers services consisting of CPT Code 28312 to be medically necessary for correction of hammertoe deformity **upon meeting ALL of the following criteria:**
   1. When supported by **1 or more of the following diagnoses**:
      - Contracture, ankle, and foot (M24.571 – M24.576)
      - Other hammer toe(s) (acquired) (M20.40 – M20.42)
      - Other deformities of toe(s), acquired (M20.5X1 - M20.5X9)
      - Acquired deformity of toe(s), unspecified (M20.60 – M20.62)
   2. Persistent pain and dysfunction
   3. Failure of **at least 1 of the following** non-operative treatments:
      - Orthotics/bracing
      - Activity modification

ASH considers hammertoe repair unproven when the above-described criteria are not met. Due to a lack of evidence of efficacy and safety in peer-reviewed published medical literature (with the exception of k-wires), ASH considers fixation implants unproven for hammertoe repair.

ASH does not cover joint replacement implants for hammertoe repair because there is insufficient evidence to demonstrate that this procedure is comparable to other treatment options and is therefore considered experimental, investigational, or unproven. Further, hammertoe surgery solely for cosmetic purposes is considered not medically necessary.

CPT CODES AND DESCRIPTIONS

CPT® Code	CPT® Code Description
28150	Phalangectomy, toe, each toe
28153	Resection, condyle(s), distal end of phalanx, each toe
28160	Hemiphalangectomy or interphalangeal joint excision, toe, proximal end of phalanx, each
28285	Correction, hammertoe (e.g., interphalangeal fusion, partial or total phalangectomy)
28312	Osteotomy, shortening, angular or rotational correction; other phalanges, any toe

BACKGROUND

Hammertoes, claw toes and mallet toes are a very common lesser toe (2^{nd} – 5^{th} digit) deformity that frequently presents as painful with limited function. The proximal interphalangeal joint (PIP) is flexed in a hammer toe deformity. A mallet toe is a deformity in which the distal interphalangeal joint (DIP) is flexed. A claw toe is a lesser toe deformity involving the metatarsophalangeal (MTP) joint being pulled up or extended. Both the DIP and the PIP joints are flexed such that the toe appears like a claw. Claw toes may be bendable or rigid, with stiff joints or tight tendons preventing correction. A claw toe deformity can cause increased pressure or friction on the tip of the toe and across the top of the PIP and DIP joints. This is attributed to rubbing against the shoe toe box. When the toe cocks up, the metatarsal bone is pushed downward, resulting in increased pressure under the ball of the foot and may result in metatarsalgia. This increased pressure can also lead to development of a painful, thick callus under the ball (MTP joint) of the involved toe.

Although claw toes, hammertoes, and mallet toes are technically different, their similar appearance and functional limitations provide for their collective discussion. Such a deformity typically develops over time but can also be traumatic (e.g., stubbing the toe and fracturing or tearing the toe extensor tendons). Neuromuscular diseases such as cerebral palsy, polio, Charcot Marie Tooth disease, stroke, closed-head injury; or nerve injury or other rare, neuromuscular problems can cause imbalance between the tendons that straighten and bend the toes. This tendon imbalance can result in a progressive claw toe deformity. Additionally, inflammatory conditions (e.g., rheumatoid arthritis, gout, systemic lupus, exanthematous [eruptive] disease, and Reiter's disease) can cause synovitis of the joints and resulting joint ligament laxity, allowing the deformity to develop.

People with hammertoe may feel pain in their toes or feet and may have corns or calluses on the top of the PIP joint or on the tip of the toe. Initial treatment is frequently self-directed and can include shoe modifications (larger toe box, lower-heeled shoes), padding, ice, over-the-counter analgesics, and nonsteroidal anti-inflammatory medications (NSAIDs). Relieving the pressure will not cure the problem but will lessen the symptoms. If the deformity has not become chronic and there is no extension deformity at the MTP joint, then daily stretching for range of motion/mobility and taping the toe to prevent MTP extension occasionally can correct the PIP joint flexion deformity. A shoe with a firm sole to absorb upward forces against the plantar plate, a large, high toe box, and a soft upper portion of the shoe is appropriate. A metatarsal bar can be added to the shoe to reduce metatarsal pressure, but patients typically find metatarsal pads more tolerable. Cushioning sleeves or stocking caps with silicon linings can also relieve pressure points. A longitudinal pad under the toe can also prevent point pressure at the toe tips. Conservative treatment may also include debridement, anti-inflammatory and/or steroidal injections, and foot orthoses.

Initially, hammertoes are flexible and can be corrected with simple measures. If neglected however, they can become fixed requiring surgical intervention. In an otherwise healthy patient with a digital deformity, selection of an appropriate procedure(s) is based upon the joint(s) involved, the associated flexibility of the contracture(s), and the related abnormalities that exist. Because the MTP joint is always dorsiflexed, some correction of its position is necessary to reestablish a more neutral MTP joint angle. Such corrective measures include Z lengthening of the extensor tendon, dorsal MTP capsulotomy, and collateral ligament release. Hemiphalangectomy, which involves resection of the condyles of the proximal phalanx, is a commonly used procedure for the correction of hammertoe deformity (Kitaoka et al., 2013). O'Kane et al. (2005) carried out a retrospective review of 75 patients (100 toes) who had excisional arthroplasty of the PIP joint for the correction of second hammertoe at an average follow-up of 44 months. The AOFAS clinical rating scale was used preoperatively and at final follow-up. The mean preoperative AOFAS clinical rating scale was 46. At final follow-up this increased to 94, showing an average improvement of 48 points ($p < 0.0001$). The mean satisfaction on a scale of 0 to 10 was 9.3 (SD 1.3), indicating high satisfaction. The authors concluded that PIP joint resection for the correction of second hammertoe resulted in high levels of patient satisfaction. No serious complications were encountered, and revision surgery was required in just two cases.

The literature describes several procedures to correct hammertoe deformity. Regardless of the surgical intervention selected, the following key goals need to be achieved:

- Delay the rate of progression and severity;
- Reduce discomfort;
- Prevent complications such as atrophic ulcerations over osseous prominences in the patient with sensory deficit (e.g., diabetic neuropathy);
- Improve stability; and
- Restore and/or maintain ambulatory ability.

Contraindications to surgical treatment include:

- Severe vascular insufficiency; and
- An active foot infection unless surgical correction of hammertoe deformity is necessary for appropriate wound management.

Hammertoe surgical repair may include other procedures as medically necessary (e.g., CPT codes 28150, 28153 and 28285 (as indicated within this policy), 28124 and 28126). Refer to ASH clinical practice guideline *Partial Excision of Foot or Ankle Bone (CPG 193 – S)* for CPT codes 28124 and 28126.

PRACTITIONER SCOPE AND TRAINING

Practitioners should practice only in the areas in which they are competent based on their education, training, and experience. Levels of education, experience, and proficiency may

vary among individual practitioners. It is ethically and legally incumbent on a practitioner to determine where they have the knowledge and skills necessary to perform such services and whether the services are within their scope of practice.

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

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

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

References

Akoh, C. C., & Phisitkul, P. (2018). Plantar Plate Injury and Angular Toe Deformity. *Foot and ankle clinics, 23*(4), 703–713. https://doi.org/10.1016/j.fcl.2018.07.010

American College of Foot and Ankle Surgeons (ACFAS) Cosmetic Surgery Position Statement (2020). Retrieved on October 24, 2023 from: https://www.acfas.org/policy-advocacy/policy-position-statements/acfas-position-statement-on-cosmetic-surgery

American Medical Association. (current year). Current Procedural Terminology (CPT) Current year (rev. ed.). Chicago: AMA.

American Medical Association. (current year). ICD-10-CM. American Medical Association.

Catena F, Doty J. F., Jastifer J., Coughlin, M. J., & Stevens, F. (2014). Prospective study of hammertoe correction with an intramedullary implant. *Foot & Ankle International, 35*(4), 319-325 https://doi.org/10.1177/1071100713519780

Ellington J. K. (2011). Hammertoes and clawtoes: proximal interphalangeal joint correction. *Foot and Ankle Clinics, 16*(4):547-558.

Joint Commission International. (2020). Joint Commission International Accreditation Standards for Hospitals (7th ed.): Joint Commission Resources.

Kitaoka, H. (2013). *Master Techniques in Orthopaedic Surgery: The Foot and Ankle*: Lippincott Williams & Wilkins.

Konkel, K. F., Sover, E. R., Menger, A. G., Halberg, J. M. (2011). Hammer toe correction using an absorbable pin. *Foot & Ankle International, 32*(10), 973-978.

O'Kane, C., & Kilmartin, T. (2005). Review of proximal interphalangeal joint excisional arthroplasty for the correction of second hammer toe deformity in 100 cases. *Foot & Ankle International, 26*(4), 320-325.

Pietrzak, W. S., Lessek, T. P., & Perns, S. V. (2006). A bioabsorbable fixation implant for use in proximal interphalangeal joint (hammer toe) arthrodesis: Biomechanical testing in a synthetic bone substrate. *The Journal of Foot and Ankle Surgery, 45*(5), 288-294.

Scott, R. T., Hyer, C. F., & Berlet, G. C. (2013). The PROTOE intramedullary hammertoe device: An alternative to Kirschner wires. *Foot & Ankle Specialist, 6*(3), 214-216.

Witt, B. L., & Hyer, C. F. (2012). Treatment of hammertoe deformity using a one-piece intramedullary device: A case series. *The Journal of Foot and Ankle Surgery, 51*(4), 450-456.