Clinical Practice Guideline: **Soft Tissue Reconstruction of Angular Toe Deformity**

Date of Implementation: **October 15, 2015**

Product: **Specialty**

GUIDELINES

American Specialty Health – Specialty (ASH) considers services consisting of CPT Code 28313 to be medically necessary for soft tissue reconstruction of angular toe deformity **upon meeting ALL of the following criteria:**

1. When supported by **1 or more of the following diagnoses**:
    - Other hammer toe (acquired) (M20.40 - M20.42)
    - Other deformities of toe(s) acquired [e.g., claw toe, crossover toe, floating toe (moderate to severe), etc. (M20.5X1 - M20.5X9)
    - Acquired deformity of toe(s), unspecified (M20.60 - M20.62)
2. Failure of **at least 2 of the following** non-operative treatments
    - Physical therapy
    - Orthotics
    - Shoe modification
    - Toe splints or pads
    - Anti-inflammatory medicines
    - Injections
    - Rest/immobilization
3. Persistent pain and dysfunction

CPT CODES AND DESCRIPTIONS

CPT® Code	**CPT® Code** Description
28313	Reconstruction, angular deformity of toe, soft tissue procedures only (e.g., overlapping second toe, fifth toe, curly toes)

BACKGROUND

CPT code 28313 describes reconstructive, soft tissue correction of toe angular deformity conducted by release of soft tissues, and possibly to include tendon transfers.

Hammertoes, claw toes, and mallet toes are common lesser toe deformities that are often painful, and limit function and shoe wear selection. Hammertoe deformity primarily comprises flexion contracture/deformity of the proximal interphalangeal (PIP) joint of the toe, with hyperextension of the metatarsophalangeal (MTP) and distal interphalangeal (DIP) joints. It is often combined with a hallux valgus deformity. Claw toe is defined by

flexion of both the PIP and DIP joints and hyperextension of the MTP joint, resembling a claw. Claw toe represents an imbalance between the intrinsic and extrinsic muscle units controlling the positioning of the toe. Mallet toe is defined by a flexion deformity at the distal interphalangeal (DIP) joint. The proximal interphalangeal (PIP) joint and the MTP joints are in a neutral position.

There also are separate and distinct digital deformities involving the second toe and fifth toe. When an extension contracture is combined with medial deviation (subluxation) at the level of the second MPJ, a "crossover" second toe deformity results. This deformity often is combined with a hallux valgus deformity. Adduction or abduction digital deformities may involve all lesser MTP joints or, in some cases, divergent digital contractures are seen. Fifth toe pathology may include deformity in multiple planes (adductovarus deformity), or significant overlap of the fifth toe over the fourth toe may be seen.

A floating toe is a potential complication of lesser metatarsal and digital surgery. it can be defined as the inability to flex the MTP joint, causing dorsiflexion deformity. The lack of plantarflexion power may be present for a multitude of reasons and represents a functional imbalance of the forefoot.

A significant population of patients respond to conservative treatment for digital deformities. Conservative care is the first line of treatment for foot and toe deformity. Among the various nonsurgical treatment options, orthotic devices or shoe insole modifications using a metatarsal pad may offer relief of excessive metatarsal head pressures. Taping to reduce and splint flexible deformities may be performed, especially for a reducible MTPJ subluxation associated with plantar plate tears in early crossover second toe deformity. Additionally, footwear changes such as a wider shoe with a larger toe box region may be used to accommodate the deformity by decreasing shoe pressure and preventing progression of the deformity (Malhotra et al., 2016). However, surgery is recommended when non-operative care does not relieve pain and/or restore function.

The objective of treatment is realignment of the toe in the least invasive manner possible, specific to the needs of the patient. After careful physical examination to differentiate the deformity, the degree and flexibility of the deformity along with any associated pathology determine the surgical procedure(s) to be performed. If the MTP joint is dislocated, a metatarsal osteotomy may be needed to allow appropriate correction of the proximal phalanx position. Extension of the MTP joint might be corrected with tendon release or tendon transfer, or even adding proximal phalanx osteotomy. PIP joint flexion can be realigned using procedures ranging from plantar capsular release to resectional arthroplasties. Localization, type of deformity, reducibility, and cause should be evaluated to determine operative procedure (Frey-Ollivier et al., 2018).

Surgical treatment of multiplanar (varus and dorsal angulation) second toe deformities due to degenerative instability can lead to recurrence, stiffness, and pain. Ellis et al. (2013) carried out a retrospective study to evaluate the short-term outcomes associated with using an extensor digitorum brevis (EDB) tendon reconstruction to correct deviation of the second MTP joint (*N*=10 patients, 11 toes). The technique was indicated when MTP and medial partial plantar plate release alone were not sufficient to correct multiplanar deformity. Radiographic parameters (AP and lateral metatarsal-proximal phalanx angles), physical exam (MTP joint range of motion), and subjective outcomes (the Foot and Ankle Outcome Score [FAOS]) were assessed. Preoperatively, the average MTP joint angle was 4.5 degrees in the varus direction, which changed to 14.2 degrees in the valgus direction postoperatively. On exam, the average MTP joint range of motion was 60.9 ± 11.6 degrees dorsiflexion and 11.1 ± 2.5 degrees plantarflexion. Postoperative FAOS scores demonstrated an average of 89.9 ± 9.8 for the symptoms domain. In all, 9 of 11 patients were either highly satisfied or moderately satisfied (none dissatisfied). The EDB tendon reconstruction technique, when performed in conjunction with collateral ligament and partial plantar plate release provided significant deformity correction within this sample.

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)* clinical practice guideline for information.

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