Clinical Practice Guideline: **Metatarsal Ostectomy**

Date of Implementation: **August 20, 2015**

Product: **Specialty**

GUIDELINES

American Specialty Health – Specialty (ASH) considers services consisting of CPT Code 28112, 28113, and 28288 to be medically necessary for metatarsal ostectomy **upon meeting the following criteria:**

1. When supported by **1 or more of the following diagnoses**:

Diagnosis Code	Description
I70.235, I70.239, I70.245, I70.249	Atherosclerosis of native arteries of leg with ulceration of other part of foot or unspecified site
I70.335, I70.345, I70.435, I70.445, I70.535, I70.545, I70.635, I70.645, I70.735, I70.745	Atherosclerosis of bypass graft(s) of the leg with ulceration of other part of foot
I70.339, I70.349, I70.439, I70.449, I70.539, I70.549, I70.639, I70.649, I70.739, I70.749	Atherosclerosis of bypass graft(s) of the leg with ulceration of unspecified site
L89.891, L89.91	Pressure ulcer of other and unspecified site, stage I
L89.892, L89.92	Pressure ulcer of other and unspecified site, stage II
L89.893, L89.93	Pressure ulcer of other and unspecified site, stage III
L89.94	Pressure ulcer of unspecified site, stage IV
L89.899, L89.90	Pressure ulcer of other and unspecified site, unspecified stage
L89.890 - L89.899	Pressure ulcer of other site
L89.90 - L89.95	Pressure ulcer of unspecified site
L97.501 - L97.529	Non-pressure chronic ulcer of other part of foot
L98.491 - L98.499	Non-pressure chronic ulcer of skin of other sites
M05.471 - M05.479, M05.49, M05.571 - M05.579, M05.59, M05.771 - M05.779, M05.79 - M05.80, M05.871 - M05.879,	Rheumatoid arthritis with rheumatoid factor and other rheumatoid arthritis

Diagnosis Code	Description
M05.89, M05.9, M06.071 - M06.079, M06.09, M06.271 - M06.279, M06.29, M06.371 - M06.379, M06.39, M06.871 - M06.879, M06.89, M06.9	
M12.571 - M12.579	Traumatic arthropathy, ankle and foot
M12.871 - M12.879	Other specific arthropathies, not elsewhere classified, ankle and foot
M12.9	Arthropathy, unspecified
M19.071 - M19.079	Primary osteoarthritis, ankle and foot
M20.10 - M20.12	Hallux valgus (acquired), foot
M20.40 - M20.42	Other hammer toe(s) (acquired)
M20.5X1 - M20.5X9	Other deformities of toe(s), acquired (including claw toe)
M20.60 - M20.62	Acquired deformities of toe(s), unspecified
M25.774 - M25.776	Osteophyte, foot
M77.40 - M77.42	Metatarsalgia

2. Failure of **at least 2 of the following** non-operative treatments with persistent pain and dysfunction
    - Physical therapy
    - Orthotics/bracing
    - Shoe modification
    - Activity modification
    - Medication

Cases of infection requiring urgent or emergent care are always allowed; thus are **NOT** subject to the non-operative care criteria. The diagnoses of infections requiring urgent or emergent care are listed below:

Diagnosis Code	Description
A18.03	Tuberculosis of other bones
M86.071 - M86.079, M86.171 - M86.179, M86.271 - M86.279	Osteomyelitis, ankle and foot – acute hematogenous, other acute and subacute
M86.08, M86.18, M86.28	Osteomyelitis, other site – acute hematogenous, other acute and subacute

Diagnosis Code	Description
M86.09, M86.19, M86.29	Osteomyelitis, multiple sites – acute hematogenous, other acute and subacute
M86.371 - M86.379, M86.471 - M86.479, M86.571 - M86.579, M86.671 - M86.679	Chronic osteomyelitis, ankle and foot
M86.38, M86.48, M86.58, M86.68	Chronic osteomyelitis, other site
M86.39, M86.49, M86.59, M86.69	Chronic osteomyelitis, multiple sites
M86.8X0, M86.8X7 - M86.8X9	Other osteomyelitis; ankle and foot, other site, multiple sites, unspecified sites
M86.9	Osteomyelitis, unspecified
M90.871 - M90.879	Osteopathy in diseases classified elsewhere, ankle and foot
M90.88	Osteopathy in diseases classified elsewhere, other site
M90.89	Osteopathy in diseases classified elsewhere, multiple sites

CPT CODES AND DESCRIPTIONS

CPT Code	Description
28112	Ostectomy, complete excision; other metatarsal head (second, third or fourth)
28113	Ostectomy, complete excision; fifth metatarsal head
28288	Ostectomy, partial, exostectomy or condylectomy, metatarsal head, each metatarsal head

BACKGROUND

Conservative care is the first line of treatment for foot and toe deformity. However, surgery is recommended when non-operative care does not relieve pain and/or restore function. Ostectomy procedures entail removal of a portion of bone. These procedure codes consist of excising bony prominences or sections of bone - either partial or complete.

Diabetes results in multiple complications involving the foot, including compromised circulation. Poor circulation to the feet can cause foot ulcers and prevent timely healing of wounds and injuries in the patient with diabetes. Conservative off-loading techniques using orthotics and shoe modifications can help minimize pressure and prevent ulcers associated with deformity, however surgery may be required if non-operative measures fail to relieve

pain. If ulcers are intractable, ostectomy may be considered to resect the bone prominence. This procedure can work well in such instances, provided that there is no associated instability of the adjacent joints (Ahluwalia et al., 2021; Chiu et al., 2020; Sabathy & Periasamy, 2016). Infections and Diabetic foot infections (DFIs) typically begin in a wound, most often a neuropathic ulceration. Empiric antibiotic therapy can be targeted toward organisms most commonly involved in these infections. Patients at risk for infection with antibiotic-resistant organisms or with chronic, previously treated, or severe infections usually require broader spectrum regimens. Osteomyelitis and other infections involving bone can occur in diabetic patients and other patients with a foot wound and can be difficult to diagnose (optimally defined by bone culture and histology) and treat (often requiring surgical debridement or resection, and/or prolonged antibiotic therapy). These conditions result in an emergency situation and do not require a trial of non-operative measures.

Toe Deformities

Hammertoes and claw 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.

A combination of osseous and soft tissue procedures is typically performed for manually semi-reducible or rigid digital deformities. Osseous procedures of the toe include phalangeal head resection metatarsal osteotomy, partial metatarsal head resection, or phalangeal base resection to achieve complete correction of the digital deformity, with the treatment of choice to be determined on a case-by-case basis. Exostectomy or condylectomy may also be beneficial, particularly in addressing hyperkeratotic lesions along the medial or lateral aspects of the toe (Campbell & Myerson, 2011; Marti-Martinez et al., 2021).

Rheumatoid Arthritis

Rheumatoid arthritis is a systemic autoimmune inflammatory disease. This chronic and progressive disease is polyarticular, usually with a symmetric distribution. The typical deformities encountered in the rheumatoid forefoot are joint and soft tissue swelling, hallux valgus, and dorsal subluxation or dislocation of the proximal phalanges on the metatarsal heads with or without fixed claw toe deformity. These forefoot deformities can often be associated with dorsal, medial, or lateral deviation of the toes; in fact, almost any conceivable deformity may occur in the toes. Clawing of the toes is usually present, and although initially flexible, these become progressively fixed in flexion at the proximal interphalangeal joint. These deformities are associated with plantar displacement of the

metatarsal heads, distal displacement of the plantar fat pad, thick painful callosities, and possible ulceration under the prominent metatarsal heads. Based on a review of the literature, the authors concluded that lesser metatarsal head resection allows reduction of this increased pressure while providing a stable forefoot with a low rate of recurrence of deformity. This procedure has good success rates with an acceptable level of complications over long-term follow-up (Molloy & Myerson, 2007).

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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