

Clinical Practice Guideline: Ankle/Foot Bone Cyst or Benign Tumor Treatment

Date of Implementation: June 18, 2015

Product: Specialty

GUIDELINES

A. Excision of bone cyst or benign tumor from the tibia or fibula (CPT Code 27635) is **considered medically necessary when indicated for the following conditions:**

- Benign neoplasm of long bones of lower limb (D16.20 - D16.22)
- Solitary bone cyst (tibia and fibula, ankle and foot, other site) (M85.461 - M85.479, M85.48)
- Aneurysmal bone cyst (lower leg, ankle and foot, other site and multiple sites) (M85.561 - M85.579, M85.58 - M85.59)
- Fibrous dysplasia (monostotic) – Other cyst of bone; lower leg, ankle and foot, other and multiple sites (M85.061 - M85.069, M85.071 - M85.079, M85.08 - M85.09, M85.661 - M85.679, M85.68 - M85.69)

B. Excision of bone cyst or benign tumor from the metatarsals, tarsals, talus, calcaneus or phalanges (CPT Codes 28100, 28102, 28103, 28104, 28106, 28107, and 28108) is **considered medically necessary when indicated for the following conditions:**

- Benign neoplasm of short bones of lower limb (D16.30 - D16.32) for excision of bone cyst or benign tumor from the tarsal, talus, or calcaneus
- Benign neoplasm of long bones of lower limb (D16.20 - D16.22) for excision of bone cyst or benign tumor from the metatarsal or phalanges of the foot
- Solitary bone cyst (ankle and foot, other site) (M85.471 - M85.479, M85.48)
- Aneurysmal bone cyst (ankle and foot, other site and multiple sites) (M85.571 - M85.579, M85.58 - M85.59)
- Fibrous dysplasia (monostotic) – Other cyst of bone; ankle and foot, other and multiple sites (M85.071 - M85.079, M85.08 - M85.09, M85.671 - M85.679, M85.68 - M85.69)

Alternative treatment for benign bone cyst (unicameral/simple) includes aspiration and injection (CPT code 20615).

CPT CODES AND DESCRIPTIONS

CPT Code	Description
20615	Aspiration and injection for treatment of bone cyst

CPT Code	Description
27635	Excision or curettage of bone cyst or benign tumor, tibia or fibula
28100	Excision or curettage of bone cyst or benign tumor, talus or calcaneus
28102	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with iliac or other autograft (includes obtaining graft)
28103	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with allograft
28104	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal, except talus or calcaneus
28106	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal, except talus or calcaneus; with iliac or other autograft (includes obtaining graft)
28107	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal, except talus or calcaneus; with allograft
28108	Excision or curettage of bone cyst or benign tumor, phalanges of foot

GENERAL

Benign Tumors of the Foot and Ankle

Benign cartilage tumors of the foot and ankle bone are the most common benign primary bone tumors and include osteochondroma, (en)chondroma, periosteal chondroma, chondroblastoma and chondromyxoid fibroma. While osteochondroma and enchondroma are very common benign cartilage lesions, which are usually asymptomatic and often discovered incidentally, chondroblastoma and chondromyxoid fibroma are rare benign cartilage tumors that usually present with pain. The majority of these lesions can confidently be diagnosed based on a combination of clinical findings, lesion location and imaging characteristics.

Osteoblastomas can be locally aggressive with rare malignant transformation. Treatment options include wide surgical excision and curettage. Treatment of chondroblastoma typically involves aggressive curettage of the lesion followed by bone grafting.

Curettage or marginal resection is the treatment of choice for chondromyxoid fibroma. The recurrence rate is reported at approximately 20% to 25%. Studies indicate that curettage and packing with allograft or PMMA may be helpful in lowering the incidence of local

recurrence. Additionally, symptomatic osteochondroma tumors may be treated with surgical resection. Lesions with sarcomatous degeneration are treated with wide en bloc excision.

The standard treatment for symptomatic enchondromas is surgical excision with intralesional curettage and chemical cauterization. Recurrence is extremely uncommon (Rhee et al., 2009).

Bone Cysts

A simple bone cyst is a benign, fluid-containing lesion. This lesion also is called a “solitary” or “unicameral” bone cyst, although it often is multiloculated. The etiology is unknown, but there is some evidence that it may arise from obstruction of venous drainage. Most simple bone cysts occur within tubular bones, usually in the proximal metaphysis of either the humerus or the femur. They may also occur in the calcaneus, distal tibia, distal fibula, talus, and metatarsals. Simple bone cysts generally do not increase in size after physeal closure. In symptomatic cases, treatment options include curettage and bone grafting, cryotherapy, intramedullary nailing, steroid injection, or injection of bone marrow (Mascard et al., 2015).

Aneurysmal Bone Cyst

An aneurysmal bone cyst is an expansile collection of blood-filled cavities that are considered primary in most of cases, but also occur secondary to pre-existing lesions (i.e., giant cell tumor, chondroblastoma, osteoblastoma, and telangiectatic osteosarcoma). Aneurysmal bone cysts mainly occur in the long bones but only rarely in the bones of the feet (Chowdry et al., 2010). Treatment is mainly surgical with intralesional, rather than wide, excision techniques. Adjuvant therapies include liquid nitrogen, phenol, and polymethylmethacrylate (PMMA) placement (Rhee et al., 2009).

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.

References

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