Clinical Practice Guideline: Reconstruction of Posterior Tibial Tendon

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Date of Implementation: June 18, 2015

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Product: Specialty

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GUIDELINES

American Specialty Health – Specialty (ASH) considers procedures consisting of CPT Code 28238 to be medically necessary for the reconstruction of the posterior tibial tendon with excision of accessory tarsal navicular bone **upon meeting ALL of the following conditions**:

- 1. Diagnosis of at least 1 of the following conditions with the presence of accessory navicular bone:
 - Ruptured posterior tibial tendon
 - Posterior tibial tendon dysfunction
 - Posterior tibial tendonitis
 - Adult flat foot
- 2. Failure of at least 3 of the following non-operative treatments with continued pain and dysfunction:
 - Physical therapy
 - Orthotics/bracing
 - Immobilization
 - Activity modification
 - Medications
 - Shoe modifications

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CPT CODES AND DESCRIPTIONS

CPT Code	Description
28238	Reconstruction (advancement), posterior tibial tendon with excision of accessory tarsal navicular bone (e.g., Kidner type procedure)

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BACKGROUND

Accessory bones are common skeletal variations in the human foot and ankle. Accessory naviculars are developmental in nature and originate from a secondary ossification center of the navicular bone. Most accessory bones are asymptomatic, yet, a small portion can cause painful symptoms. Symptomatic accessory tarsal navicular is most commonly seen with a type II accessory navicular and is thought to be the result of altered biomechanics, presenting as shoe irritation and pain localizing to the navicular bone. Clinical symptoms may be attributed to tension and repetitive shearing stress at the synchondrosis from the

posterior tibial tendon, causing disruption of the synchondrosis, posterior tibial tenosynovitis and even osteonecrosis. Imaging may demonstrate degenerative changes at the synchondrosis and navicular tubercle, within the adjacent soft tissues and in the posterior tibial tendon.

Nonsurgical treatment for accessory navicular syndrome includes immobilization, medications, physical therapy, and orthotics. If non-surgical treatment fails to relieve the symptoms of accessory navicular syndrome, surgery may be appropriate. Surgery may involve removing the accessory bone as this extra bone is not needed for normal foot function, reshaping the area, and repairing the posterior tibial tendon to improve its function.

There are multiple surgical treatment options for symptomatic accessory naviculars described in the literature. They vary from simple excision, to excision and rerouting of the posterior tibial tendon under the navicular, excision and restoring the continuity of the posterior tibial tendon, percutaneous drilling, or arthrodesis of the accessory ossicle (Leonard & Fortin, 2010).

The Kidner procedure is the most common surgical treatment for accessory navicular bones that cause pain. This procedure is a surgery to treat a painful accessory navicular through reconstruction of the posterior tibial tendon with excision of the accessory navicular bone.

Additionally, for the correction of symptomatic flexible flatfeet with minimal deformity, adjunctive soft tissue procedures can be considered. This may include the Kidner posterior tibial tendon advancement soft tissue procedure (Lee et al., 2005; Tao et al., 2019). Posterior tibial tendon dysfunction is the most common cause of the adult acquired flatfoot. Dysfunction of the posterior tibial tendon is typically a progressive, unilateral condition caused by pathologic changes within the tendon. The deformity is usually progressive and results in a flexible to rigid flatfoot, depending on the stage of the condition. Giorgini et al. (2010) carried out a review of the literature to determine the efficacy of the modified Kidner-Cobb procedure for symptomatic pes planovalgus or Mueller stage II posterior tibial tendon dysfunction (50 feet in 39 patients). All patients visually demonstrated postoperative elevation of the medial longitudinal arch height. The results of this review indicated that the modified Kidner-Cobb procedure is a useful treatment option for patients with symptomatic flexible flatfoot with stage II posterior tibial tendon dysfunction.

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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