

# POSTERIOR TIBIAL TENDON DYSFUNCTION (PTTD)

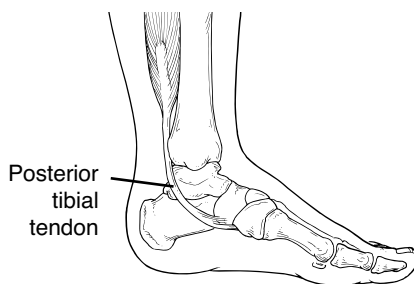


American College of  
Foot and Ankle Surgeons

## What Is PTTD?

**P**osterior tibial tendon dysfunction (PTTD) is an inflammation and/or overstretching of the posterior tibial tendon in the foot. An important function of the posterior tibial tendon is to help support the arch. But in PTTD, the tendon's ability to perform that job is impaired, often resulting in a flattening of the foot.

The posterior tibial tendon is a fibrous cord that extends from a muscle in the leg. It descends the leg and runs along the inside of the ankle, down the side of the foot, and into the arch. This tendon serves as one of the major supporting structures of the foot and helps the foot to function while walking.



PTTD is often called “adult-acquired flatfoot” because it is the most common type of flatfoot developed during adulthood. Although this condition typically occurs in only one foot, some people may develop it in both feet. PTTD is usually progressive, which means it will keep getting worse — especially if it isn't treated early.

## Symptoms of PTTD

The symptoms of PTTD may include pain, swelling, a flattening of the arch, and an inward rolling of the ankle. As the condition progresses, the symptoms will change.

For example:

- When PTTD initially develops, typically there is pain on the inside of the foot and ankle (along the course of the tendon). In addition, the area may be red, warm, and swollen.
- Later, as the arch begins to flatten, there may still be pain on the inside of the foot and ankle. But at this point, the foot and toes begin to turn outward and the ankle rolls inward.



- As PTTD becomes more advanced, the arch flattens even more and the pain often shifts to the outside of the foot, below the ankle. The tendon has deteriorated considerably and arthritis often develops in the foot. In more severe cases, arthritis may also develop in the ankle.

## What Causes PTTD?

Overuse of the posterior tibial tendon is frequently the cause of PTTD. In fact, the symptoms usually occur after activities that involve the tendon, such as running, walking, hiking, or climbing stairs.

## Treatment:

### Non-surgical Approaches

Because of the progressive nature of PTTD, it's best to see your foot and ankle surgeon as soon as possible. If treated early enough, your symptoms may resolve without the need for surgery and progression of your condition can be arrested. In contrast, untreated PTTD could leave you with an extremely flat foot, painful arthritis in the foot and ankle, and increasing limitations on walking, running, or other activities.

In many cases of PTTD, treatment can begin with non-surgical approaches that may include:

- **Orthotic devices or bracing.** To give your arch the support it needs, your foot and ankle surgeon may provide you with an ankle stirrup brace or a custom orthotic device that fits into the shoe.
- **Immobilization.** Sometimes a short-leg cast or boot is worn to immobilize the foot and allow the tendon to heal, or you may need to completely avoid all weight-bearing for a while.

- **Physical therapy.** Ultrasound therapy and exercises may help rehabilitate the tendon and muscle following immobilization.
- **Medications.** Nonsteroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen, help reduce the pain and inflammation.
- **Shoe modifications.** Your foot and ankle surgeon may advise you on

changes to make with your shoes and may provide special inserts designed to improve arch support.

### When Is Surgery Needed?

In cases of PTTD that have progressed substantially or have failed to improve with non-surgical treatment, surgery may be required. For some

advanced cases, surgery may be the only option. Surgical treatment may include repairing the tendon, realigning the bones of the foot, or both. Your foot and ankle surgeon will determine the best approach for your specific case. ▲



Melissa J. Lockwood, D.P.M.

Melissa J. Lockwood, D.P.M. – As founder of Heartland Foot and Ankle Associates, P.C., Dr. Melissa J. Lockwood happily returns to central Illinois after seven years in Cleveland, Ohio. She is a graduate of Providence Catholic High School in New Lenox, Illinois. Dr. Lockwood completed her undergraduate degree from the University of Illinois (Urbana/Champaign) in 2001 with a Bachelor of Science in Biology and a minor degree in Chemistry. Dr. Lockwood has a great interest in archaeology and also received a minor degree in Anthropology from the U of I in 2001.

Dr. Lockwood went on to the Ohio College of Podiatric Medicine and matriculated with her Podiatric Medical Degree in 2005. While at OCPM, Dr. Lockwood served as both a delegate to the student branch of the APMA

as well as President of the Student Government organization (OPMSA). Dr. Lockwood was the recipient of several awards while attending OCPM, including the Ohio Podiatric Medical Association Dr. James Conforti Community Relations Award and the OCPM Mildred Kaufman Memorial Award for Proficiency in Orthopedics and Biomechanics.

Dr. Lockwood arrives in Bloomington following a three year residency in Cleveland, Ohio. Dr. Lockwood completed a 36 month Podiatric Medical and Surgical Residency Program based out of the University Hospital System/Richmond Heights Medical Center. Dr. Lockwood has extensive training in both forefoot (bunions, hammertoes, neuromas) elective surgical procedures as well as rearfoot reconstruction. She has a special interest in the treatment of chronic wounds as well as diabetic palliative care. Dr. Lockwood enjoys working with patients one on one in a clinical setting and chatting about her favorite sports teams!

Dr. Lockwood and her husband Scott are pleased to be back in their home state and rooting on the Illini, Redbirds, Chicago Bears, and White Sox! Scott is a 2000 Illinois State University Alumni with a BS degree in Accountancy. He is a CPA working in Bloomington.

#### EDUCATION

University of Illinois, Urbana-Champaign, BS Biology (01)  
Professional: Ohio College of Podiatric Medicine, (05)  
Residency: University Hospital Richmond Medical Center (05-June 08)

#### PROFESSIONAL ACCREDITATION

NBPME Part I (03) NBPME Boards Part II & Part III - PM Lexus (05)  
State of Illinois Licensure (08)

#### HONORS AND AWARDS

Illinois State Scholar (1997)  
OCPM Academic Scholarship (01) OCPM Dean's List (04)  
OPMA Dr. James Conforti Community Relations Award (05)  
OCPM Mildred Kaufman Memorial Award for Proficiency in Orthopedics and Biomechanics (05)  
University Hospitals Richmond Medical Center Outstanding Podiatric Resident (08)

#### PROFESSIONAL ORGANIZATIONS

President, Ohio Podiatric Medical Student's Association (02-04)  
Delegate, American Podiatric Medical Student's Association (02-04)  
Chairman, President's Committee, American Podiatric Medical Student's Association Feb. 2004  
Member – OCPM Board of Trustees (02-04)  
APMA/IPMA, AAPP, AAAP member at large

#### RESEARCH/PUBLICATIONS

*Sesamoid Pathology*, coauthored with  
Dr. Joseph Favazzo, D.P.M., December 2005. Compilation of forefoot pathology edited by Vincent J. Hetherington, D.P.M.



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