

Tarsal Coalition

Mark Locke, MD

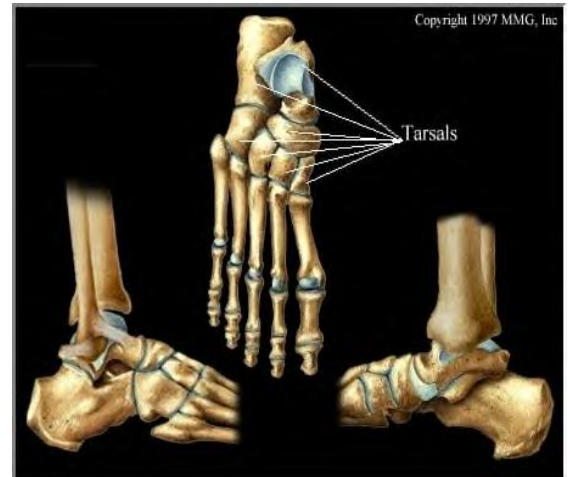
mark.locke@mooreclinic.com

Synonyms:

- Calcaneal bar
- Talocalcaneal bar
- Peroneal spastic flat foot
- Rigid flat foot

Definition- The tarsal bones make up the bones in the hind foot and the mid foot. In total, there are 7 bones. Tarsal coalition is a condition in which 2 or more of the bones develop with an abnormal connection or “bridge”. This connection can be made up of cartilage, fibrous tissue, or bone. The condition is bilateral (occurring in both feet) in ~50% of patients.

The most common locations are between the calcaneus and the navicular (calcaneonavicular coalition) and between the talus and calcaneus (talo-calcaneal coalition).



Clinical Symptoms- Pain typically develops in older children and adolescents and is likely related to increased body weight and increased demands placed on the feet with sports participation. Children may also present to the doctor with a history of repeated ankle sprains or flat feet.

Physical Exam- When a coalition is suspected, the doctor will check your child’s feet for abnormal rigidity, muscle spasm, and motion.

Diagnostic Tests- X-rays of the feet can detect some types of tarsal coalition, but not all. Often a CT or MRI is necessary to diagnose tarsal coalition.

Differential Diagnosis:

- Accessory navicular
- Congenital vertical talus
- Flexible flat foot

Outcomes of the Disease- Some individuals live their entire lives with a coalition and are symptom free. Possible consequences include pain, frequent ankle sprains, limited activity, and the development of Early arthritis.



Treatment- Conservative treatment measures include limiting activities which cause pain, icing the affected area, and ibuprofen or Tylenol as needed for pain. Immobilization for a brief period may also be indicated. If symptoms persist, resection of the coalition by surgery is the preferred treatment.

Dr. Locke’s clinical care team

Tammie Gillam 227-8176
tammie.gillam@mooreclinic.com

Lacey Davis 227-8158
lacey.davis@mooreclinic.com