# Children's Bone and Spine Surgery

# **Tarsal Coalition**

### What is a Tarsal Coalition?

- A tarsal coalition is an abnormal connection of two or more bones in the foot. The bones affected — called tarsal bones — are located toward the back of the foot and in the heel, and the connection of the bones can result in a severe, rigid flatfoot.
  - O There are two types of coalition:
    - Congenital: Most common
    - Acquired: Less common and caused by trauma, degeneration and infection

#### Signs and Symptoms:

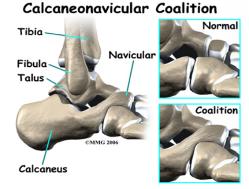
- Asymptomatic
  - Most coalitions are found incidentally
  - 75 percent of people are asymptomatic
- Symptomatic
  - Previous medical history of repeated ankle sprains
  - O Location of pain can determine what type of coalition
  - Pain worsened by activity
    - Onset of symptoms correlates with age of ossification of coalition

#### Imaging:

- Radiographs
- CT scan
  - Assists to rule out additional coalitions
  - Determine size and location of coalition
- MRI
- May be helpful to visualize a fibrous or cartilaginous coalition

#### Treatment

- Conservative:
  - Continual observation for asymptomatic patients
  - Shoe inserts
  - Casting
- Surgical Intervention
  - Surgical intervention is deemed necessary with persistent symptoms despite prolonged period of conservative management.
  - Coalition involves <50% of joint surface</li>



### Talocalcaneal Coalition



