



## Accessory navicular

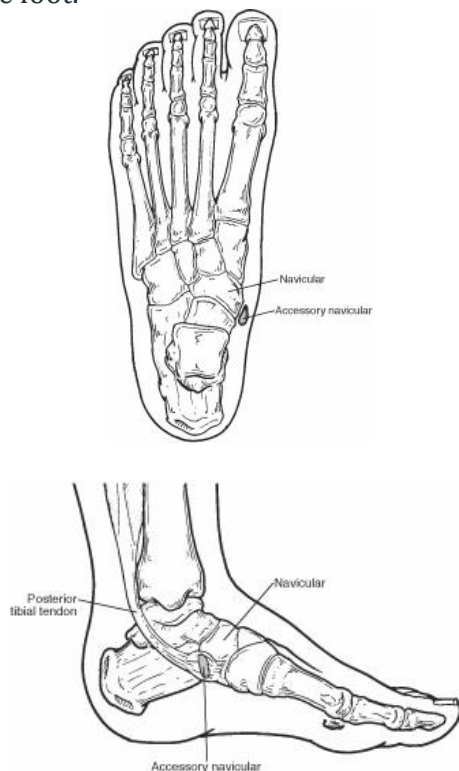
An accessory navicular is a normal developmental variant involving the navicular bone.

It is more common in females and is seen in 4-20% of the population.

There is a genetic component.

It is often associated with a flat foot.

The tibialis posterior tendon inserts into the navicular tuberosity on the inside of the arch of the foot.



During growth the navicular bone develops from 2 ossification centres.

In patients with an accessory navicular the tuberosity centre where tibialis posterior tendon inserts fails to unite with the main body of the navicular.

There are 3 types:

- Type 1- the accessory navicular sits within the tibialis posterior tendon
- Type 2- there accessory navicular is attached to the navicular by fibrous synchondrosis( most common )
- Type 3 – The accessory navicular is attached but is larger than the normal tuberosity



### *What are the symptoms?*

- Majority are asymptomatic
- Medial arch pain with activity
- Swelling and prominence which rubs on shoes

### *Diagnosis*

- X-rays will show the accessory navicular
- MRI may be required to confirm inflammation in the fibrous Type 2 variety

### *What is the non surgical treatment*

- Activity modification
- Pain relief
- Orthotics
  - Arch supports
  - Shoe modification to stop rubbing
  - Boot for short term immobilisation
- Steroid medications in some situations

### *When is surgery considered ?*

If there are ongoing symptoms and impairment of function after non surgical management.

### *What surgery is recommended?*

- Excision of the accessory navicular
  - Type 1 and small Type 2
- Removal of the fibrous synchondrosis and fixation of the accessory navicular with a screw onto the body of the navicular.
- Additional procedures may be required to address the flat foot

This handout is an overview of accessory navicular pathology and is not all inclusive. If you have any questions regarding this please contact Mr. Curry's rooms on **(03) 99286560**