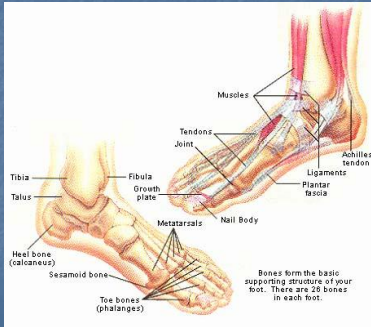
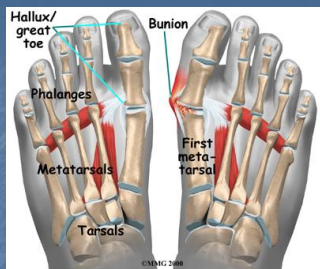


## DD Foot/Ankle



## Common Conditions

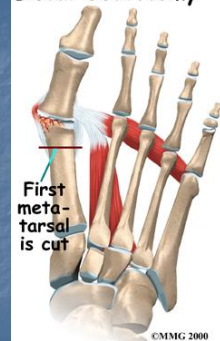
- Bunion Formation (OA)
- Hallux Limbitus
- Hallux Rigidus
- Morton's Neuroma
- Tarsal Tunnel Syndrome
- Sinus Tarsi Syndrome
- Severs Disease
- Achilles Tendonitis
- Haglunds Deformity
- Pronation/Supination
- Fungal Infections



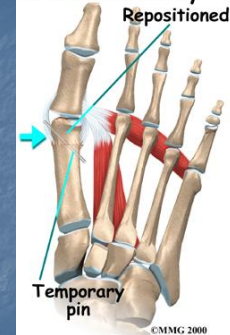
### Clinical Presentation

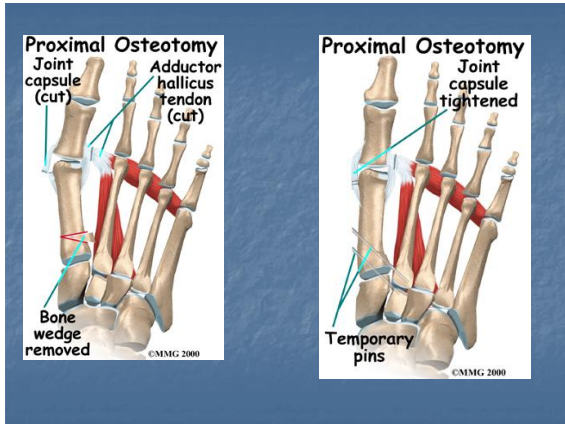
- Red, calloused skin along the foot at the base of the big toe
- A bony bump at this site
- Pain over the joint, aggravated by pressure from shoes
- Big toe turned toward the other toes

### Distal Osteotomy



### Distal Osteotomy Repositioned





## Hallux Limitus

**Clinical Picture**

- Painful limited big toe ROM
- Palpable bone remodeling
- Swollen
- Oblique crease on shoes
- Spinning disc on sole of shoe

**Clinical Picture**

- Claw-like deformity of a toe (normally 2<sup>nd</sup>)
- Corn formation on the top of a toe
- Callus formation on the sole of the foot
- Foot pain - (MTP joint)
- Altered gait

## Morton's Neuroma

**Clinical Picture**

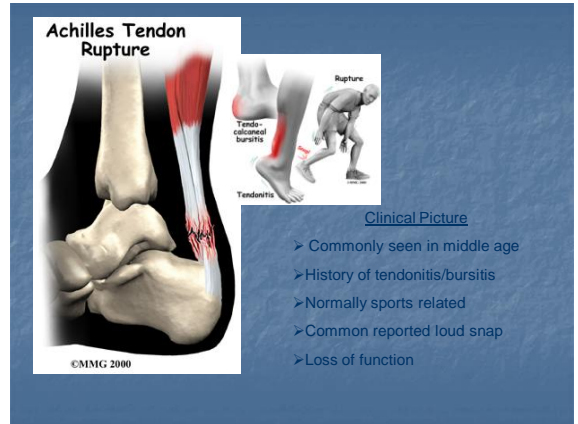
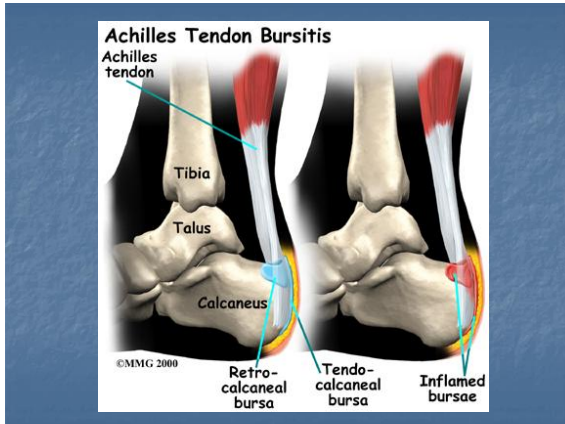
- Gradual onset
- WF: Tight toe box in footwear
- Tingling, burning, or numbness
- Pain & altered gait cycle
- A feeling that something is inside the ball of the foot, or that there's a rise in the shoe or a sock is bunched up.

## Treatment Morton's Neuroma

### Change Foot Wear

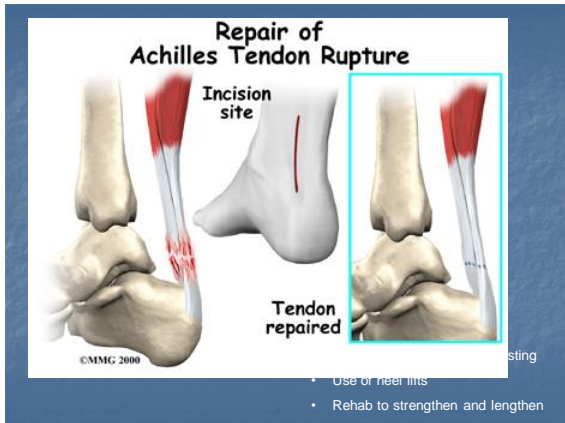
**Wide Toe Box**

### Surgical Methods

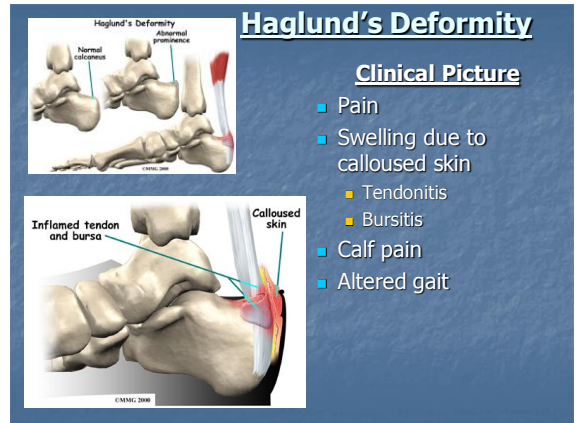


Clinical Picture

- Commonly seen in middle age
- History of tendonitis/bursitis
- Normally sports related
- Common reported loud snap
- Loss of function

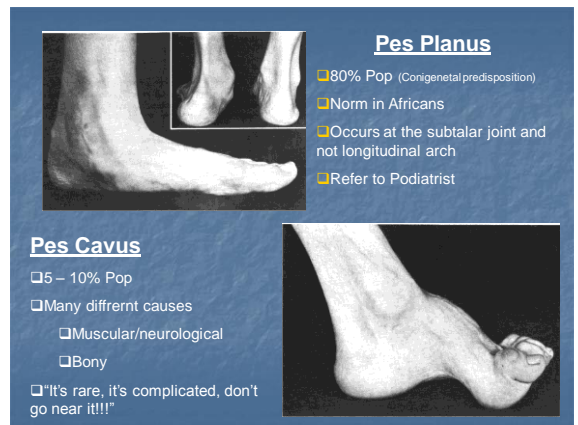
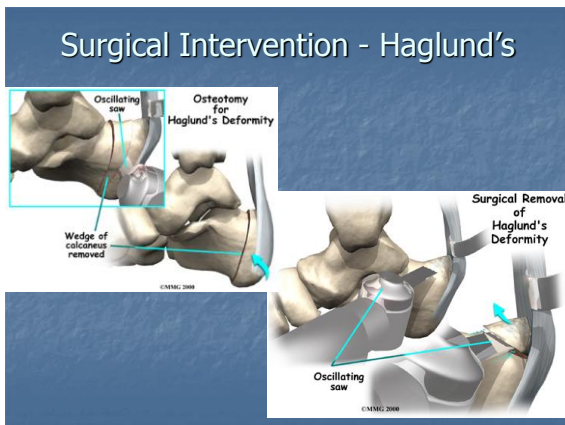


- Use of heel lifts
- Rehab to strengthen and lengthen



Clinical Picture

- Pain
- Swelling due to calloused skin
  - Tendonitis
  - Bursitis
- Calf pain
- Altered gait



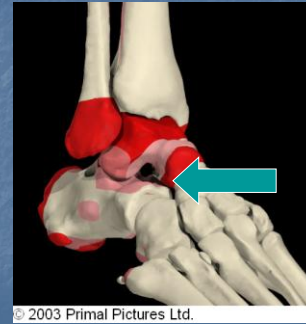
## Sinus Tarsi Syndrome

- 1<sup>st</sup> described in '57 (O'Connor)
- Cause by inversion ankle sprain (70-80%)
- Pinching or impingement of the soft tissues in the ST due to a Exs pronation (20-30%)

### Clinical Presentation

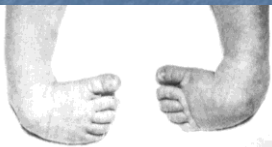
- Localised pain, instability and pain on wt bearing
- Pain on palpation of the "eye of the ankle"

## Sinus Tarsi



© 2003 Primal Pictures Ltd.

## Talipes

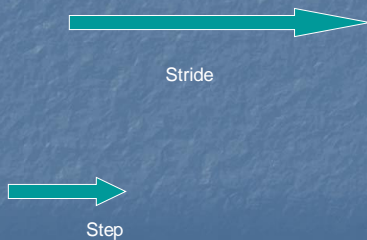


Equino-Varus



Calcaneo-Valgus

## Gait Cycle



## Stance Phase (68%)

The time from initial contact until the toes leave the floor at pre-swing.

- Initial heel contact (**Heel Strike**)
- Followed by instantaneous plantar flexion which lowers the rest of the foot to achieve **foot flat** position.
- As the opposite leg advances over the stationary foot, ankle dorsiflexion results, (**Mid Stance**)
- When the ankle reaches maximum dorsiflexion the heel begins to rise until the **Toe Off**.

## Swing Phase (38%)

The time from when the big toe leaves the floor until the heel makes floor contact.

- Swing phase corresponds with the period of single leg stance on the contralateral leg.
- Note that while the stance leg extends as the body advances over it, the swinging leg flexes at hip and knee in order to ensure floor clearance.
- The knee reaches its maximum extension just before initial contact, at which time the knee flexes slightly to allow for shock absorption.

## Pathological Gait Cycles

- Gluteal Lurch
- High Steppage Gait
  - Foot Drop
  - Peripheral Neuropathy
  - LLI
- Forefoot Spinning
- Wide Base
- Limp
- Other (excluding alcohol induced!!!)



## Rehab & Treatment

- Wobble Board
- Pro Stretcher
- Stretching
- Wt Training/ Theraband
- Fitball core stabilisation

## Casino Royale



## DD Ankle Pain

- Male patient presents with heel pain
- PMI over the plantar aspect of heel
- No neuro symptoms
- Onset at work 1/52 previously
- Prog: Getting better, still limping
- PD: Pain on heel strike VAS 5/10 constant dull ache

## DD based on current info!

- What's your DD at this point?
- What other Q's would you like to ask to aid your diagnostic picture building?
- What **Red Flags** are you concerned about?
- What Tests would you carry out to test your DD
- Most likely cause of pain???



### Fat Pad

- Resists & dissipates vertical compression
- Absorbs 20-25% off heel strike
- 18mm thick
- Free nerve endings & Pacinian