Diagnosis and Treatment of Common Foot Conditions

- Your Name and address here

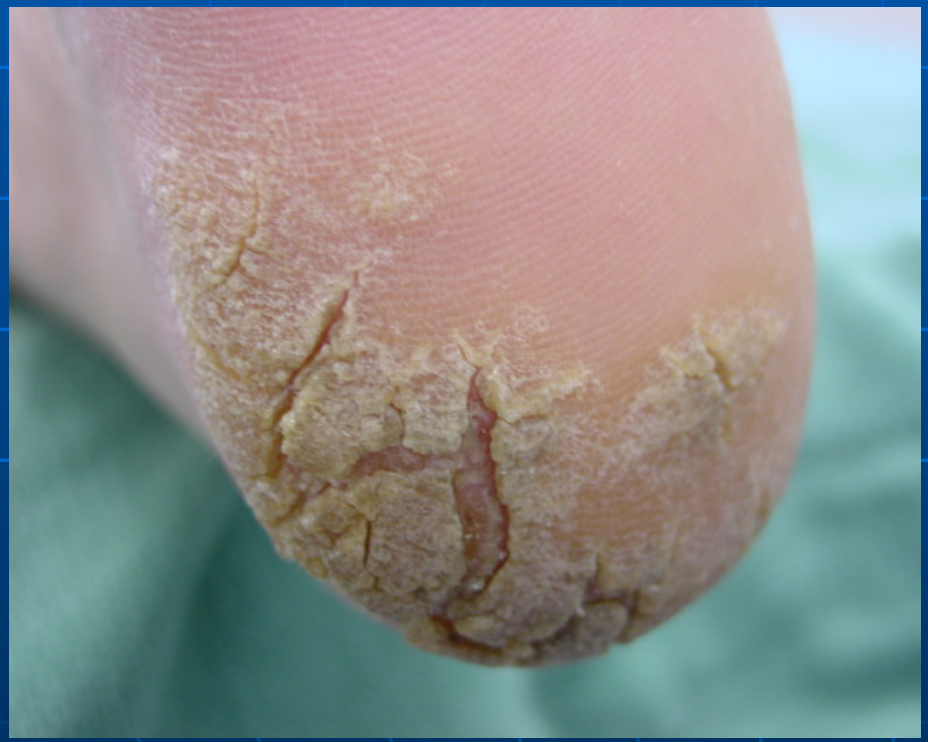
What is a Podiatrist?

- Specializes in diagnosis and treatment of conditions effecting the foot, ankle and lower leg in all age groups
- Attends one of seven Colleges of Podiatric Medicine for four years
- Completes a post-graduate residency between one and four years

Conditions We Treat

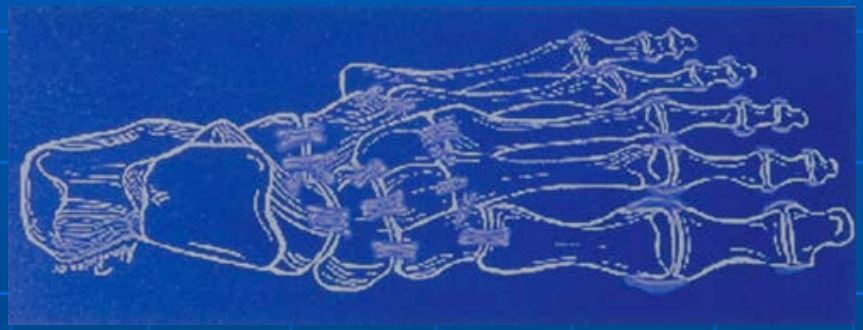
- Dermatologic
- Orthopedic
- Neurologic
- Diabetes-related foot and ankle ailments

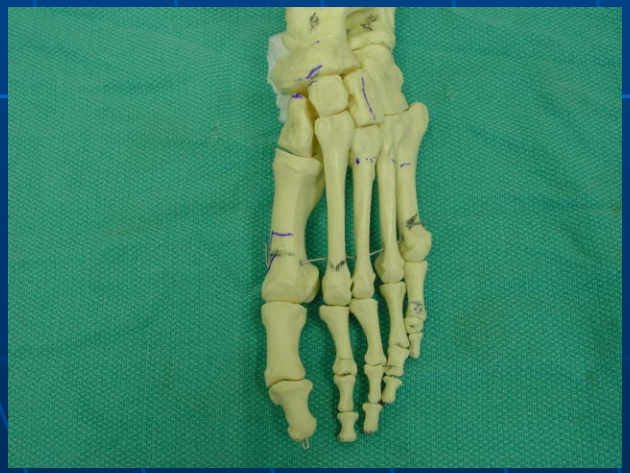
Dermatologic Conditions



- Onychomycosis
- Paronychia
- Verucca
- Tinea Pedis

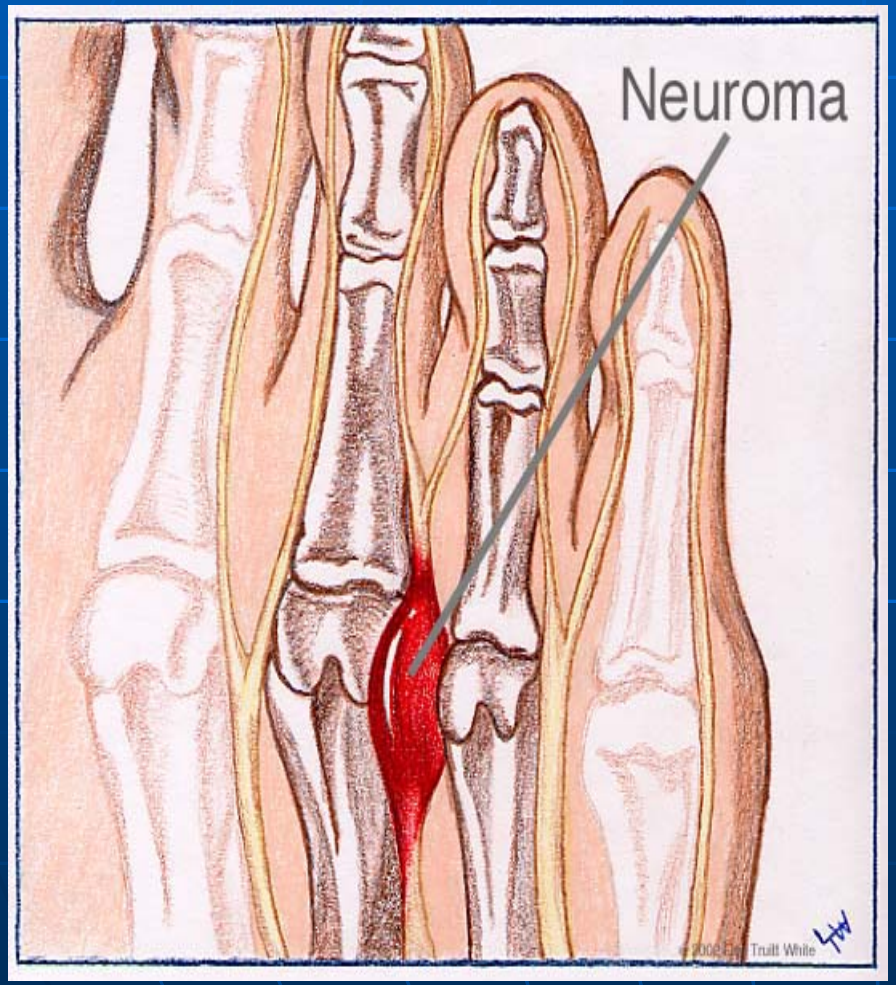
Orthopaedic Conditions





- Plantar Fasciitis
- Hammertoe
- Bunion and bunionette
- Osteoarthritis and Bone spurs
- Sports medicine related injuries

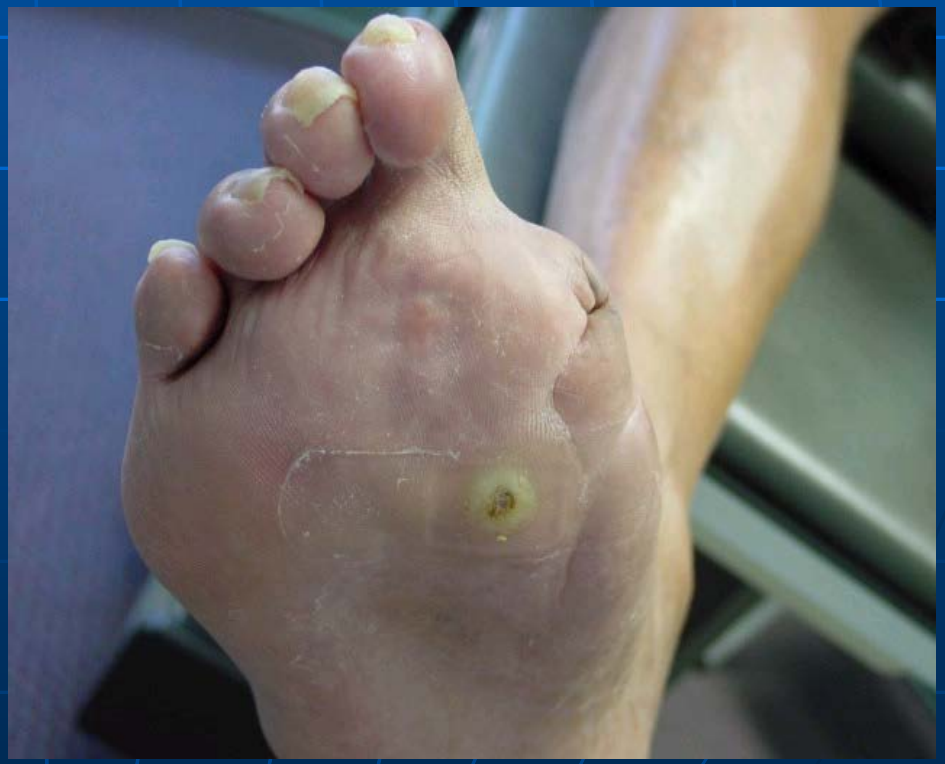
Neurologic Conditions



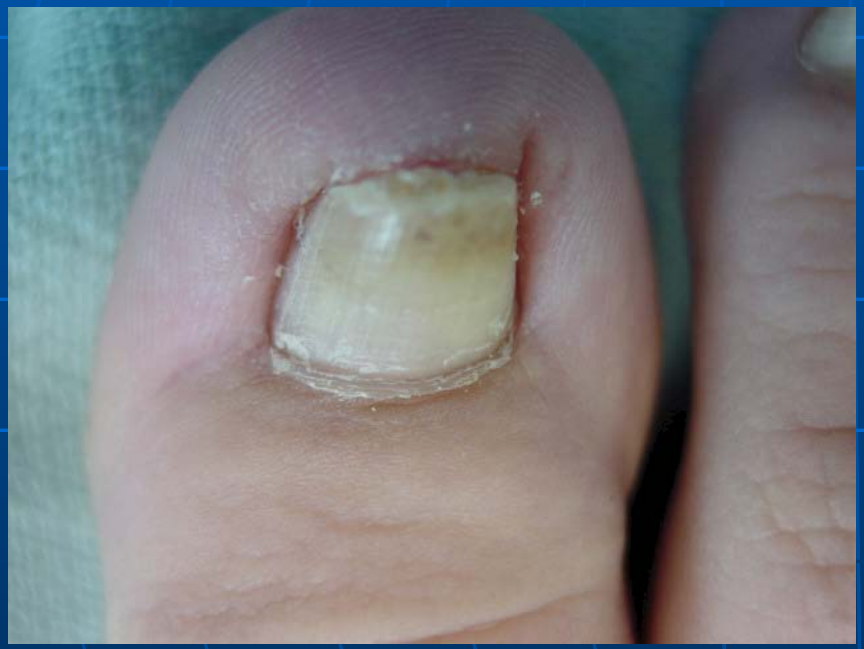
- Neuroma
- Cutaneous Nerve Entrapment
- Neuropathy
- Tarsal Tunnel Syndrome

Diabetes Related Foot and Ankle Conditions

- Neurotrophic Ulcers
- Neuropathy
- Charcot Foot

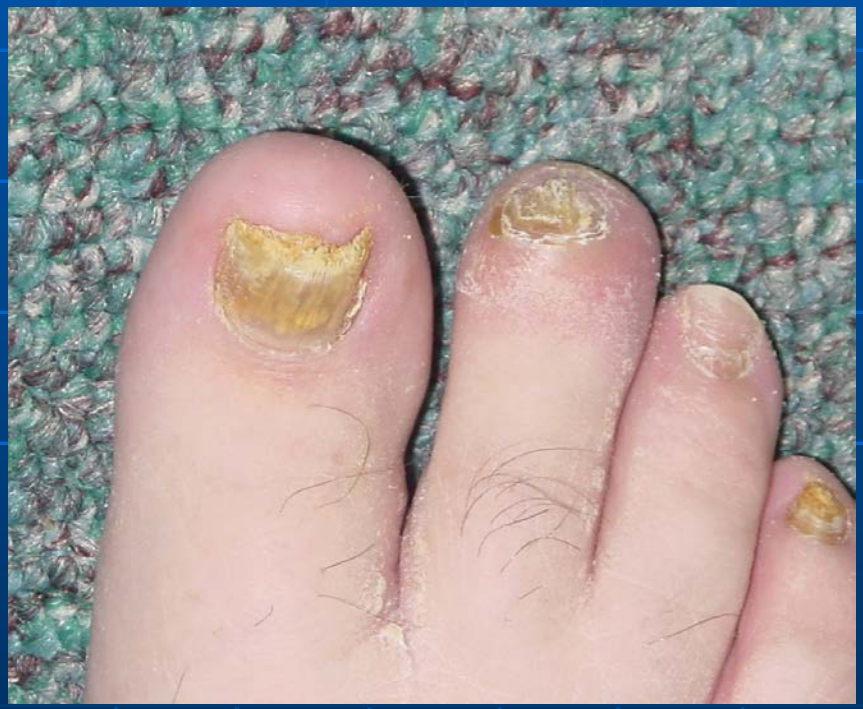


Onychomycosis



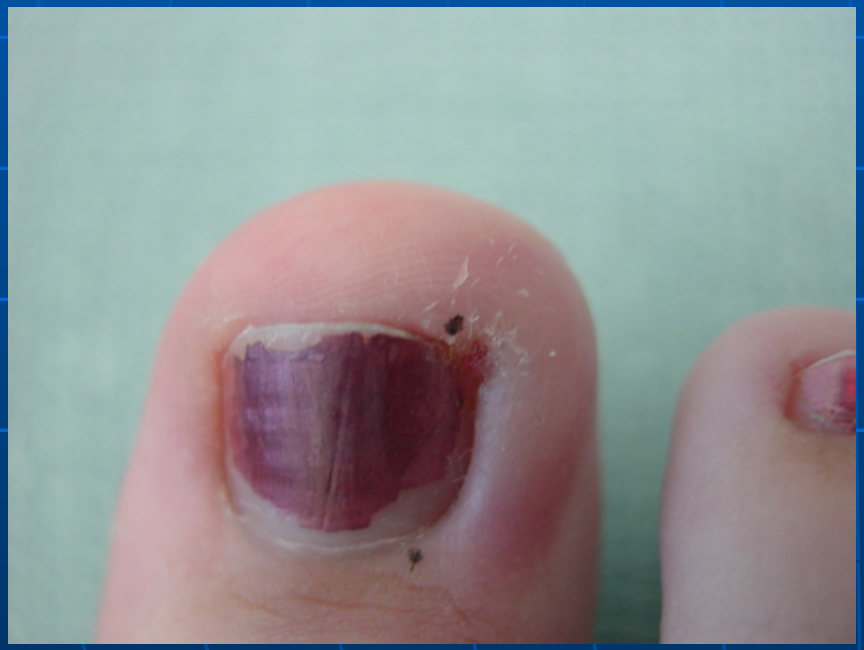
- Dermatophyte
- Often seen with skin manifestations
- Usually acquired but may be inherited
- More treatable than in the past
- Differentiate from Melanoma

Onychomycosis Treatment



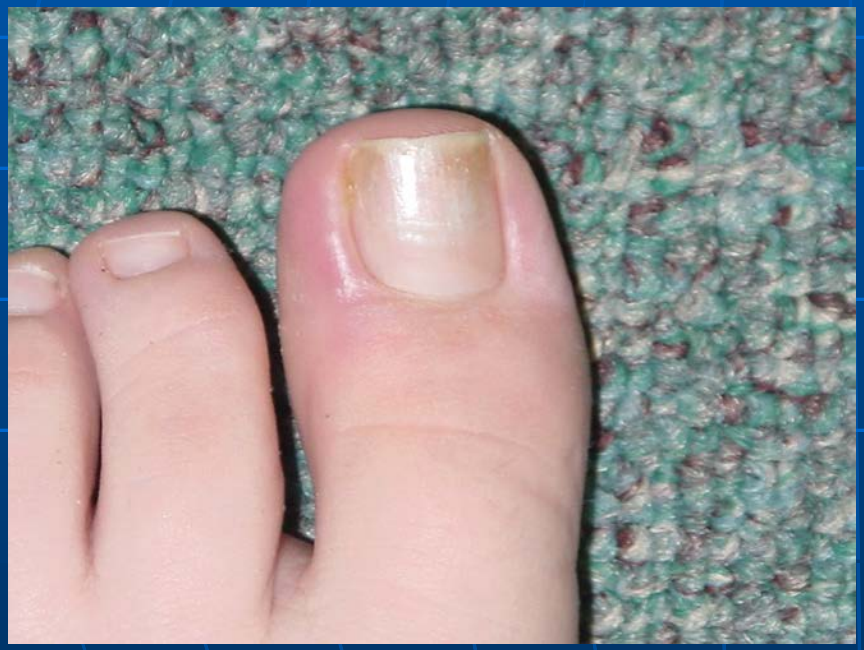
- Debridement
- Topical
- Oral
- Matrixectomy
- Nail Biopsy for dermatopathology

Paronychia



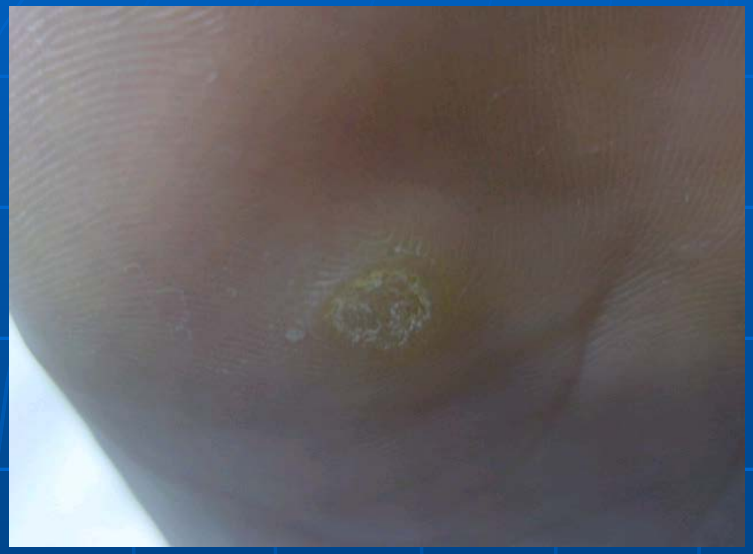
- Erythema and edema of the ungual labia
- Wide or incurvated nail plate
- May drain serous to purulent exudate
- Hallux most effected

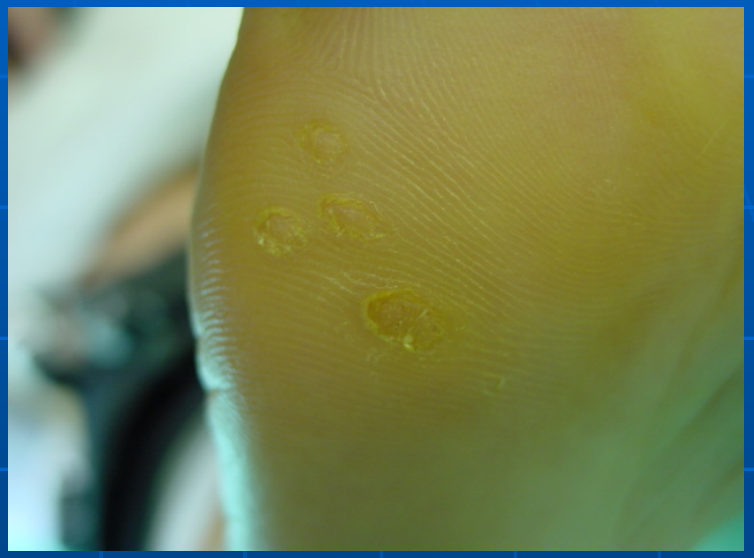
Paronychia Treatment

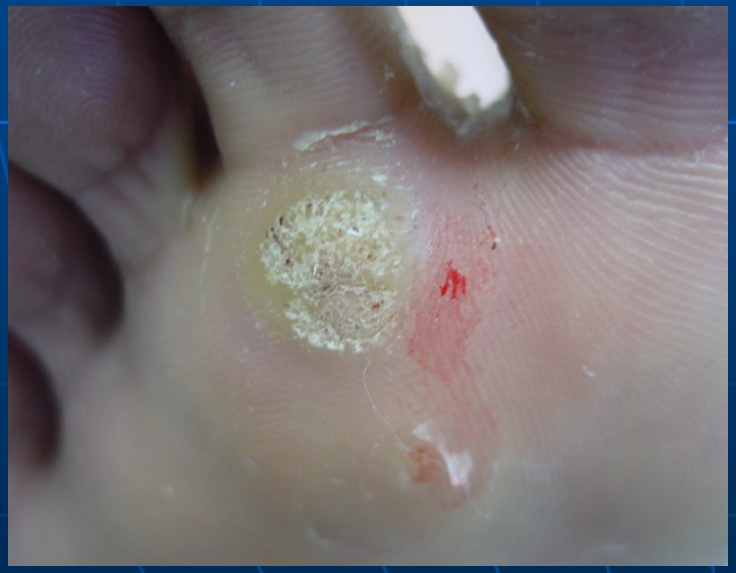


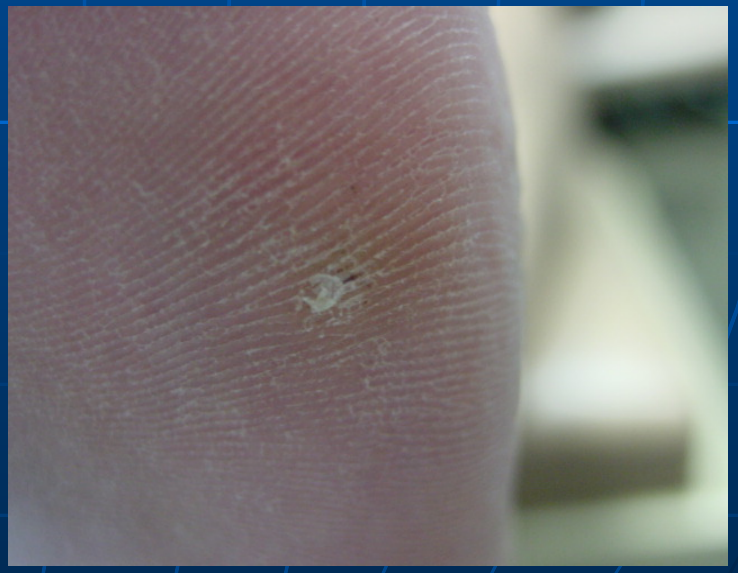
- Incision and Drainage
- Oral antibiotics usually not necessary
- Longstanding infection may require X-ray
- Chemical matrixectomy, partial or total

Verruca?

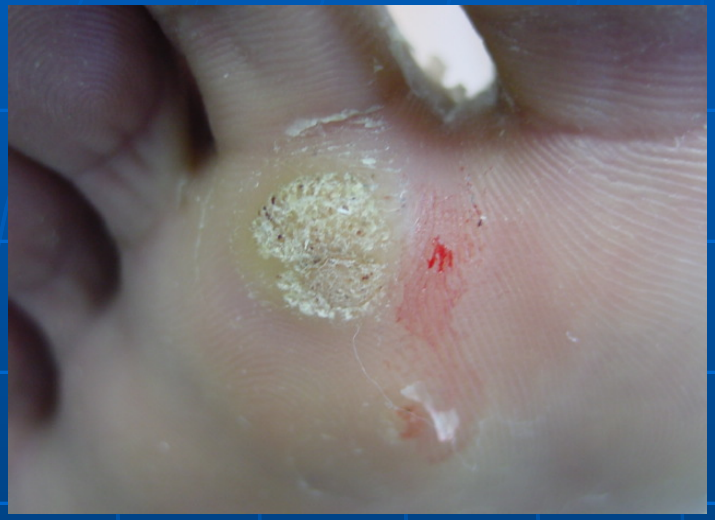


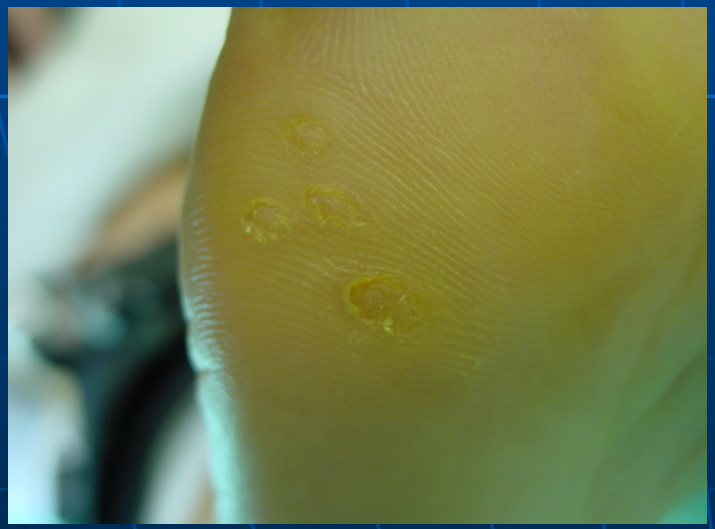






Verruca!



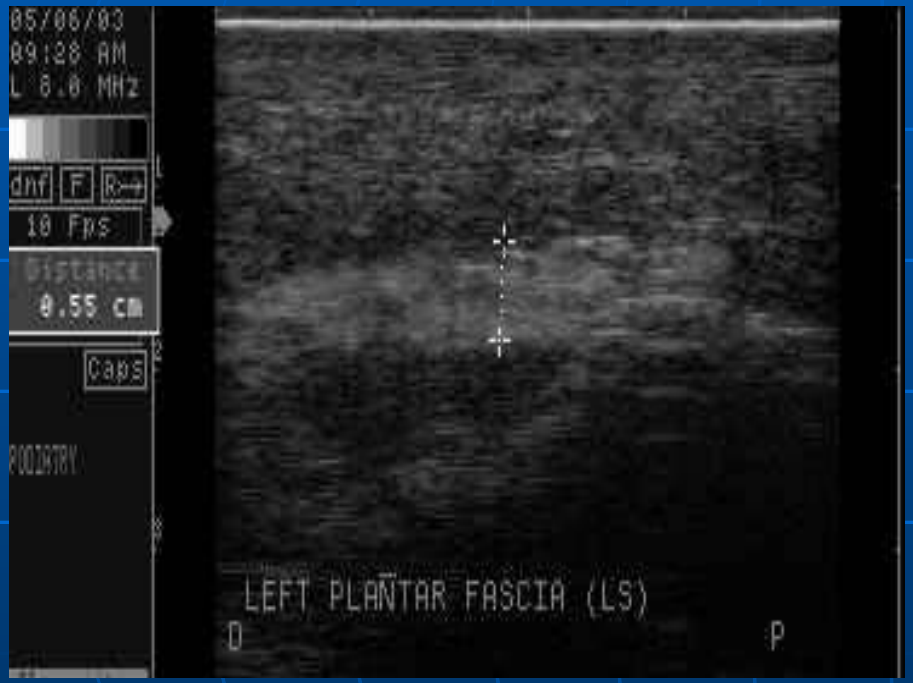


- Human Papilloma Virus (HPV)
- Contagious
- Usually plantar on foot

Verruca Treatment

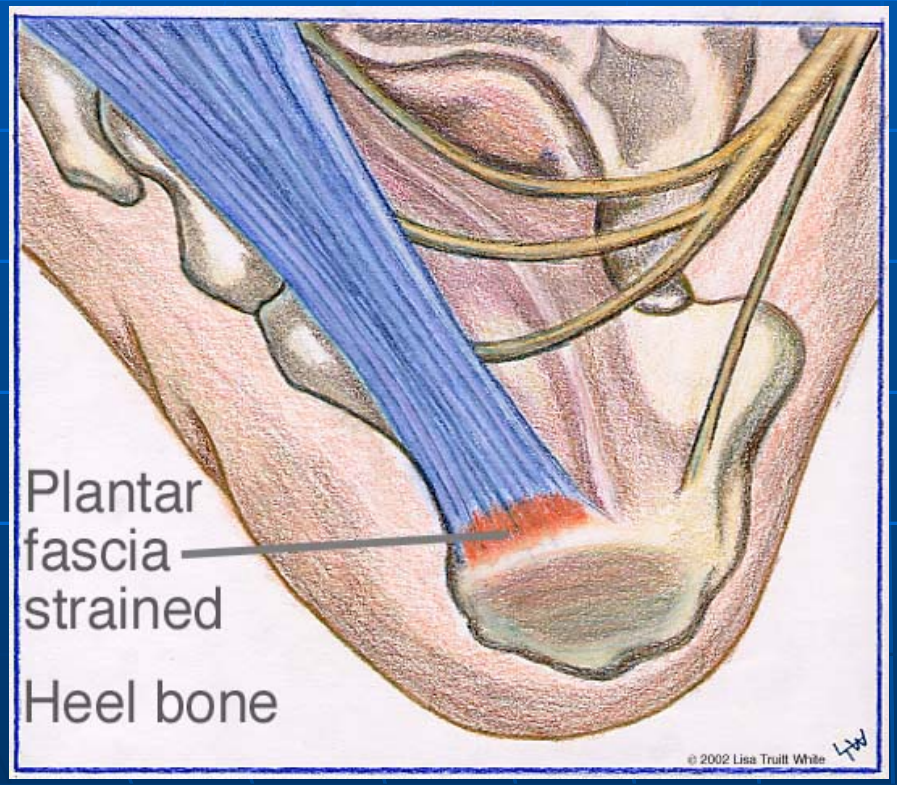
- Debridement is diagnostic and therapeutic
- Chemocautery
- Various topical treatments available
- Oral Cimetidine for pediatric usage (30-40Mg/Kg in 3 divided doses)
- Curretage

Plantar Fasciitis



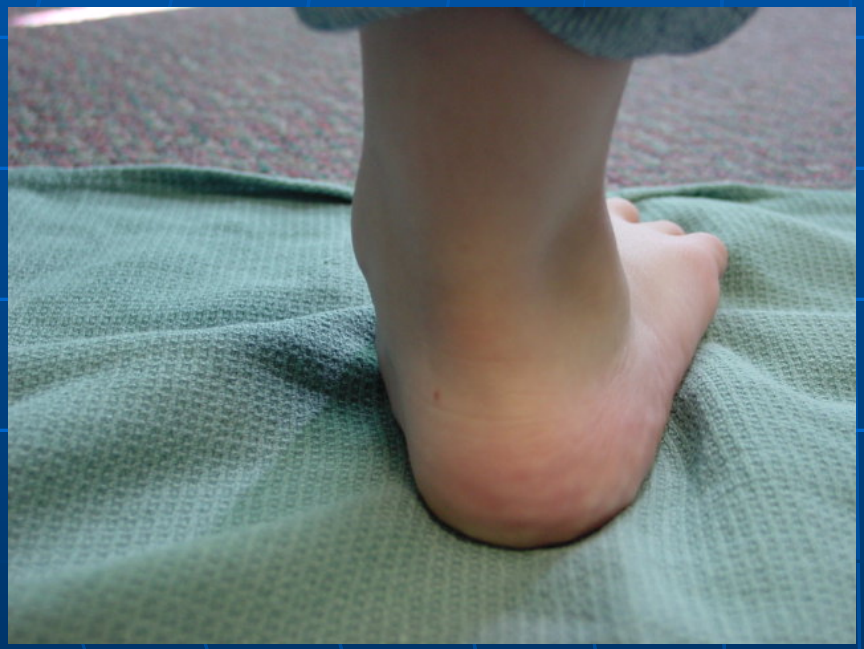
- Inflammation and pain of the plantar fascia, usually at its insertion at the plantar medial tubercle of the calcaneous
- Becomes chronic in 5-10% of all patients
- Is not necessarily associated with a heel spur
- Over 90% resolve with conservative treatment

Plantar Fasciitis Symptoms



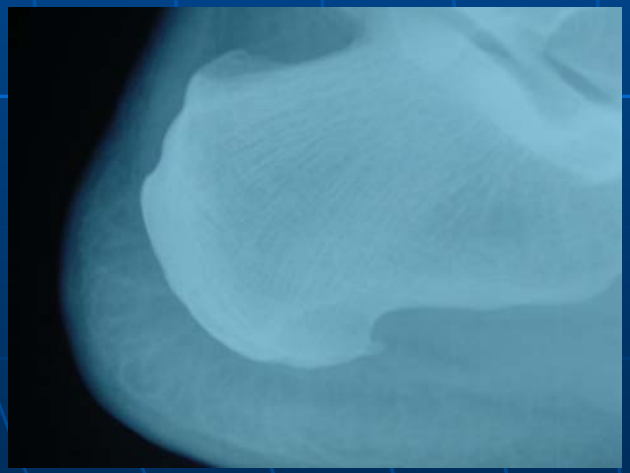
- Weight-bearing pain on arising
- Pain subsides, returns with activity
- Footwear related to pain?

Plantar Fasciitis Risk Factors



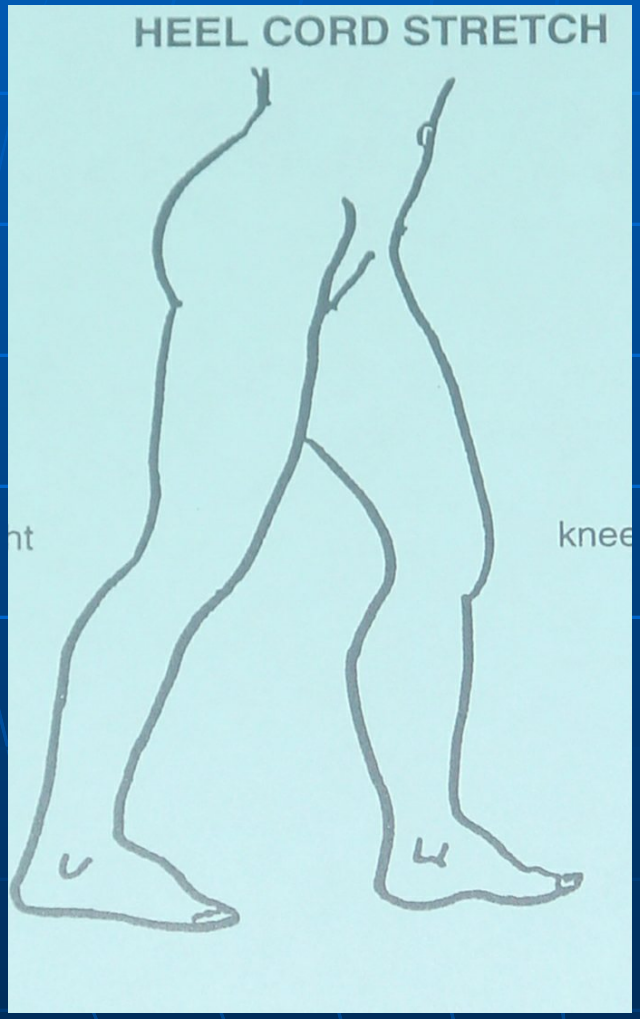
- Weight gain
- Equinus deformity
- Poor shoegear
- Biomechanical abnormalities
- Work Surface

Plantar Fasciitis Diagnosis



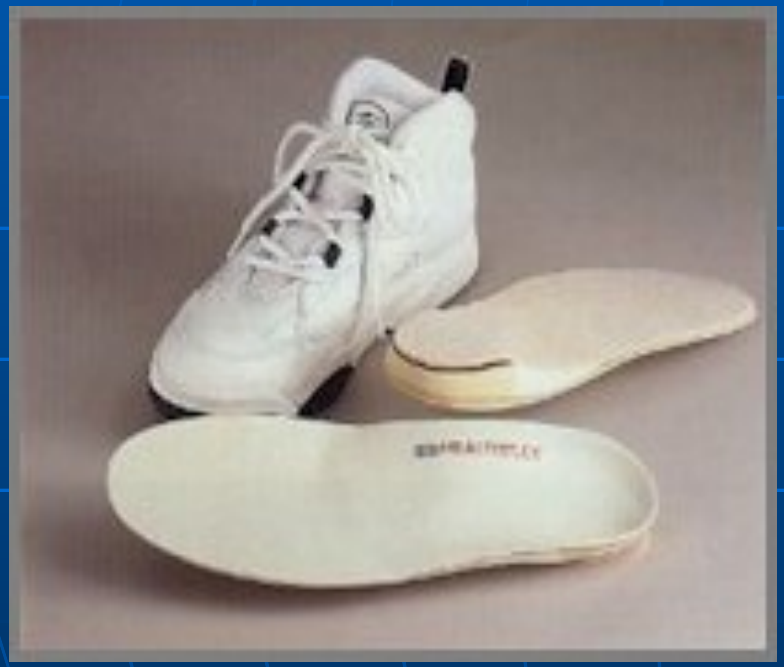
- Pain on palpation
- Antalgic gait
- Pes planus
- X-ray
- Ultrasound

Plantar Fasciitis Treatment



- Stretching
- RICE
- Change shoes
- OTC inserts

Plantar Fasciitis Treatment

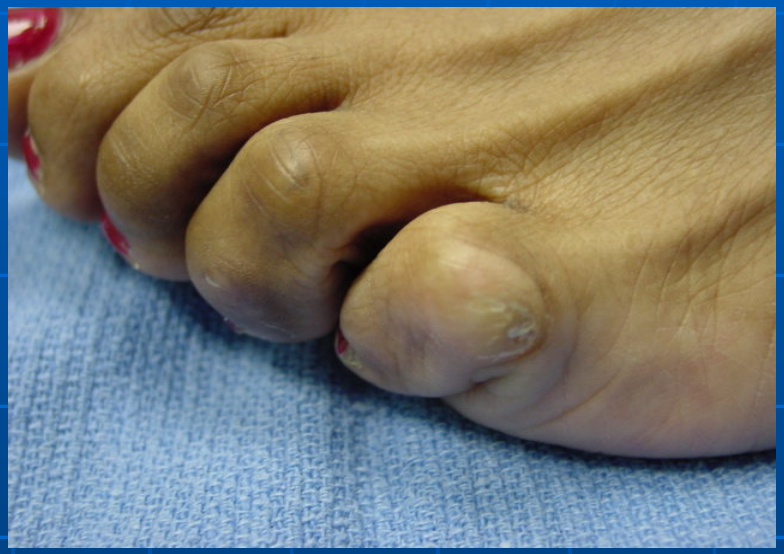


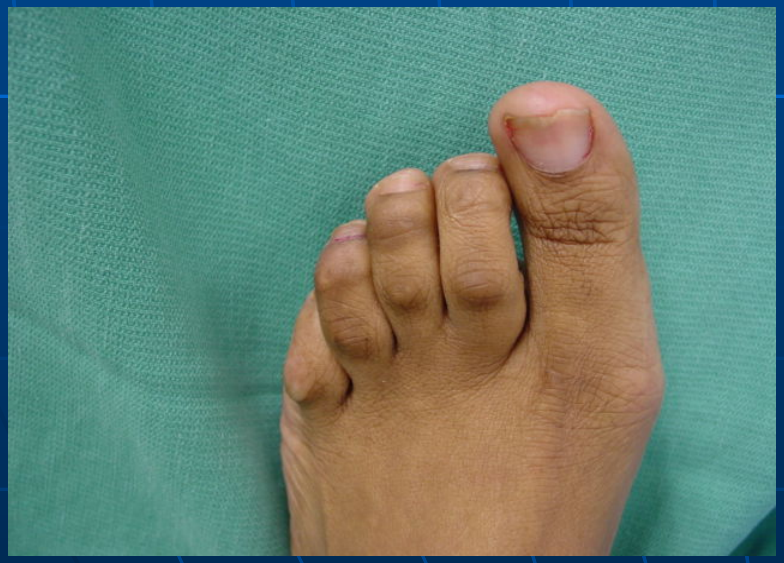
- Nocturnal Anti-contracture Devices
- Orthotics
- NSAIDS
- Cortisone shot(s)
- Rarely surgery

ESWT

- Heel Lithotripsy
- Surgical alternative
- 72% effective
- 3 months until significant relief in most patients
- Few complications

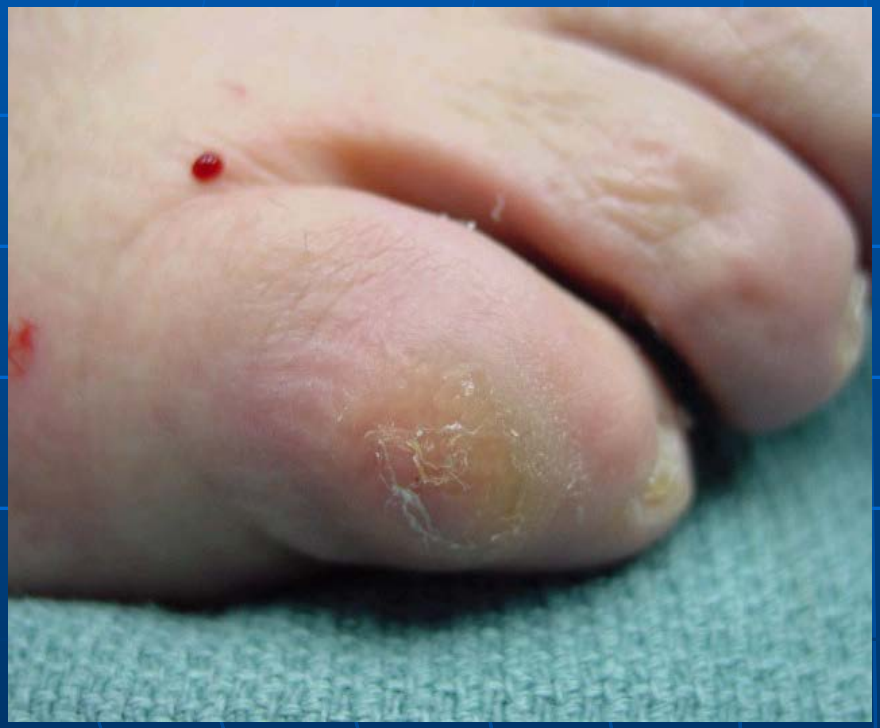
Hammertoe





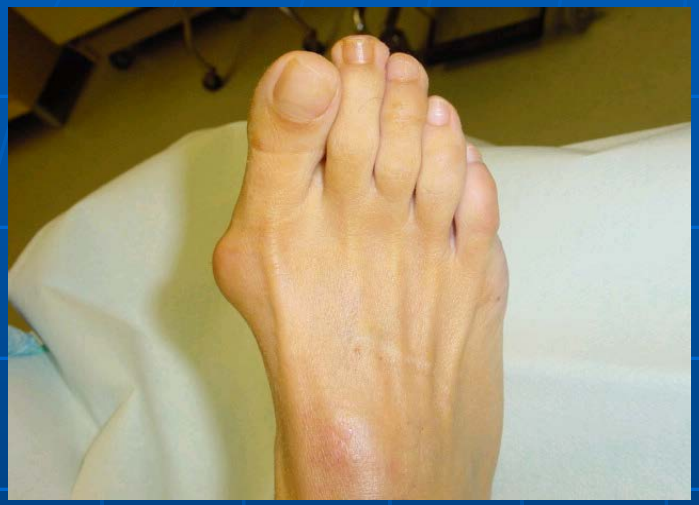
- Digital Contracture
- Usually PIPJ
- May have MPJ dorsiflexion
- May have clavus
- Pre-ulcerative in patients with diabetes

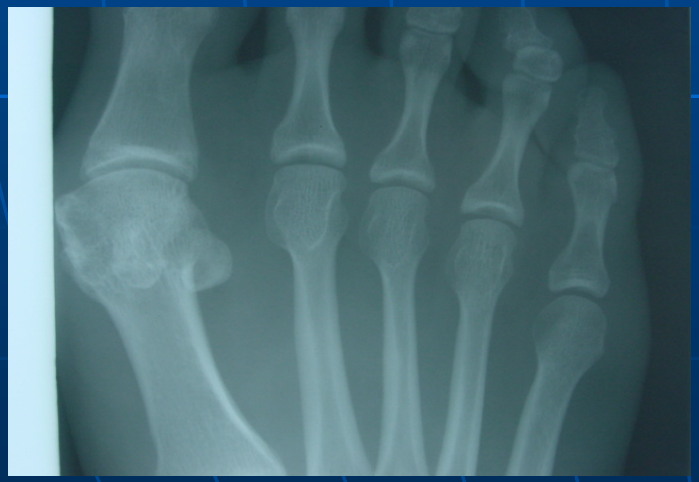
Hammertoe Treatment



- Debridement
- Padding
- Shoe gear change
- Surgery as a last option

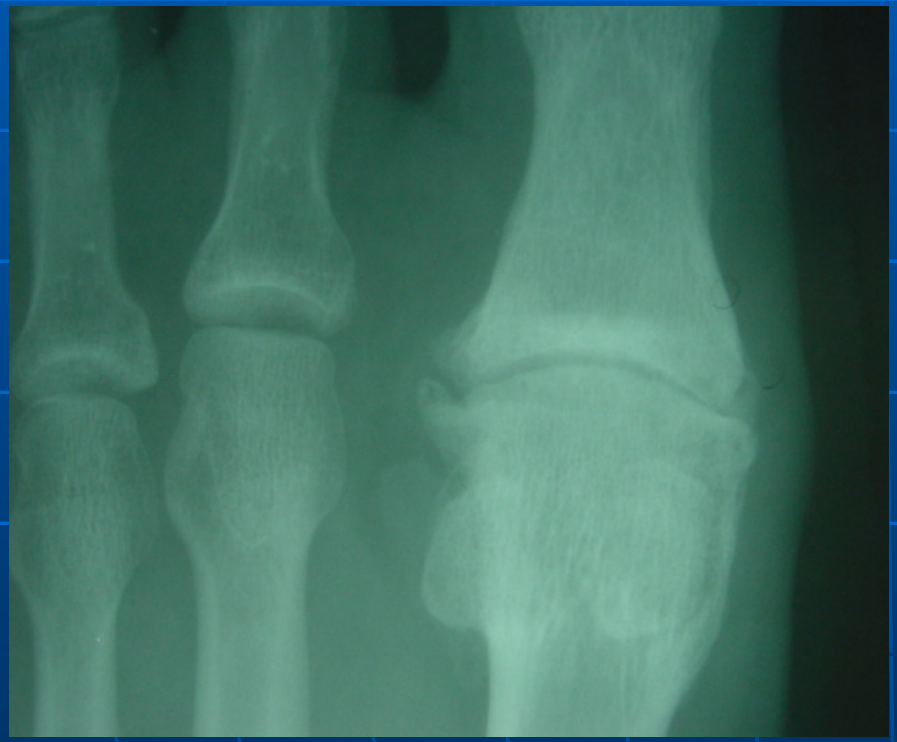
Hallux Valgus





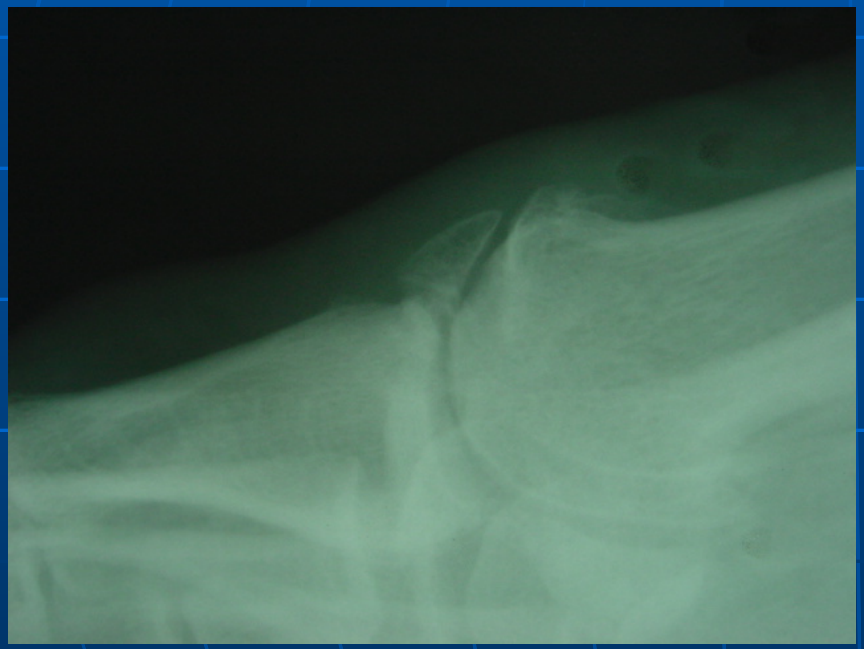
- Painful bump secondary to increase IM angle
- Poor biomechanics
- Hurts in shoes
- Usually bump pain vs joint pain
- Wider shoes help
- Orthotics slow or stop progression and pain

Osteoarthritis



- Usually at first MPJ
- Hallux limitus/ rigidus
- Poor biomechanics
- Painful to walk

Osteoarthritis Treatment



- Cortisone injection
- Physical therapy
- NSAIDS
- Orthotics
- Surgery

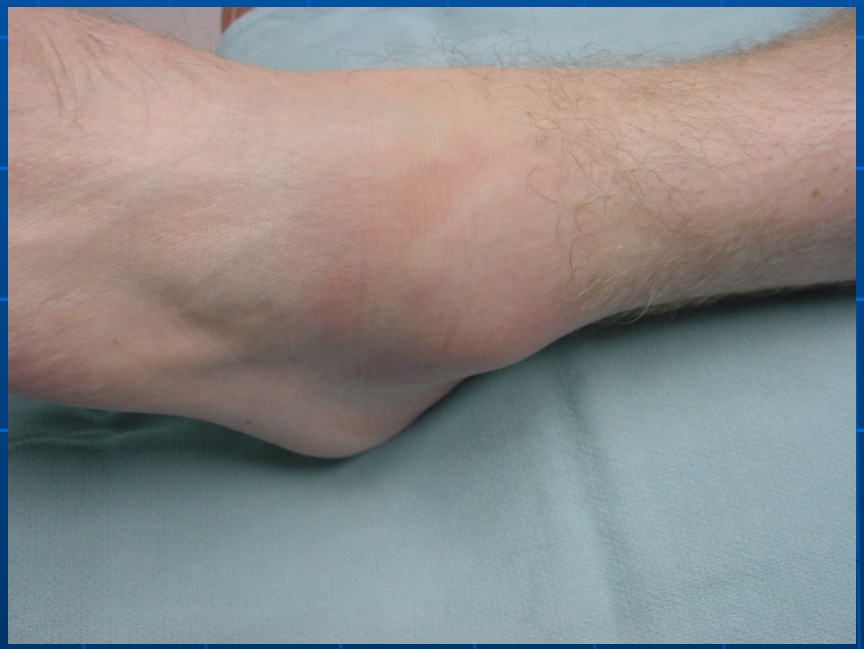
Ankle - Foot Orthosis

- Articulated hinge device
- Used when functional orthotic fails or will fail
- For active patient that can tolerate motion
- Excellent for sports

Ankle – Foot Orthosis

- Gauntlet style for total control
- For patients that cannot tolerate motion
- Good for severe DJD and Charcot foot

Ankle Sprains



- Tear or stretching of the ligaments of the ankle. Usually the ligaments on the outside of the ankle are involved.
- Caused by and twisting injury of the foot / ankle .
- Instability of the ankle can develop due to the ligament injury.
- Most often treated conservatively. Surgical repair can be performed to treat chronic ankle sprains.

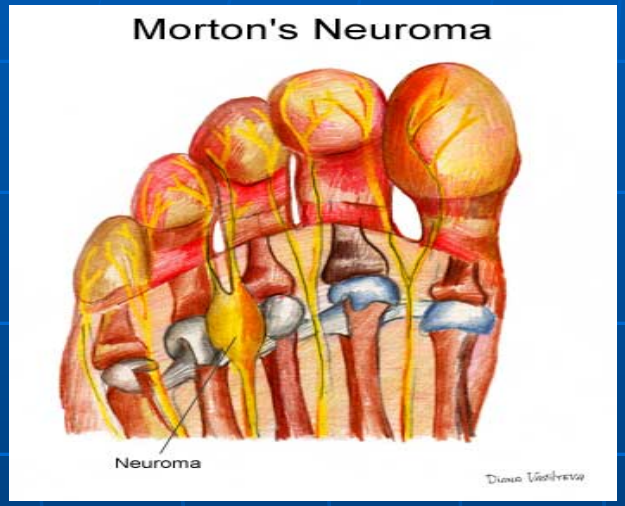
Ankle Sprains
Treatment

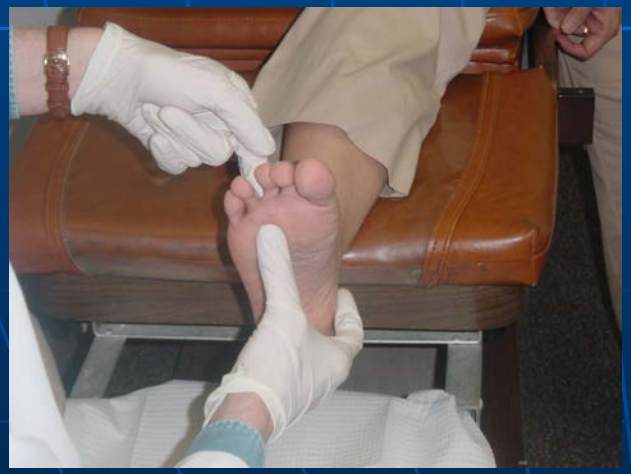
- Immobilize early
- Consider Non-Weight bearing
- RICE
- NSAIDS

Ankle Sprains Rehabilitation

- CAM walker to Stirrup
- Stirrup to gauntlet
- Physical therapy

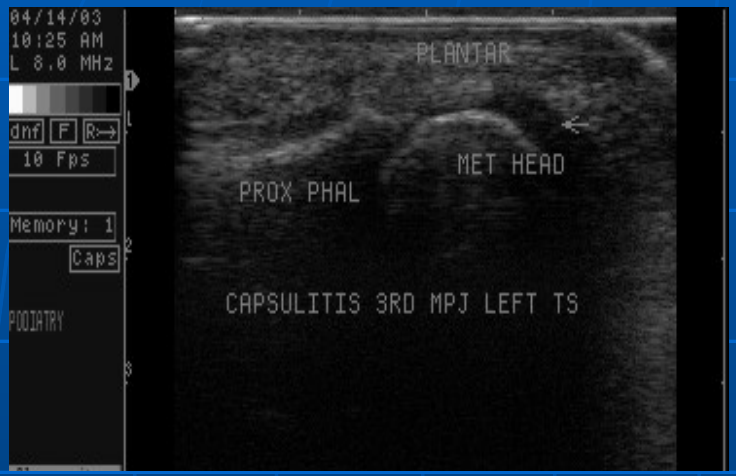
Morton's Neuroma

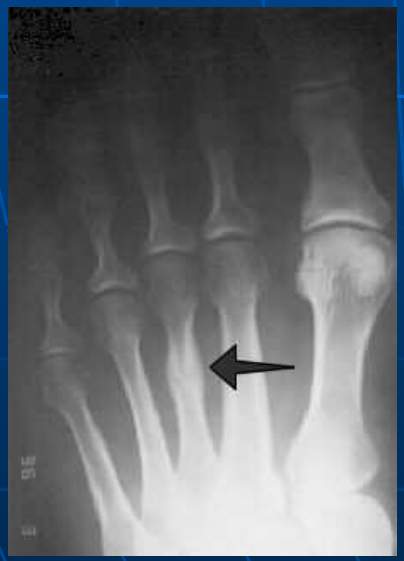




- Painful swelling of the interdigital nerve
- Most commonly seen in third web space
- Patients can feel numbness of adjacent digits and plantar pain
- Etiology is abnormal stretching of the nerve

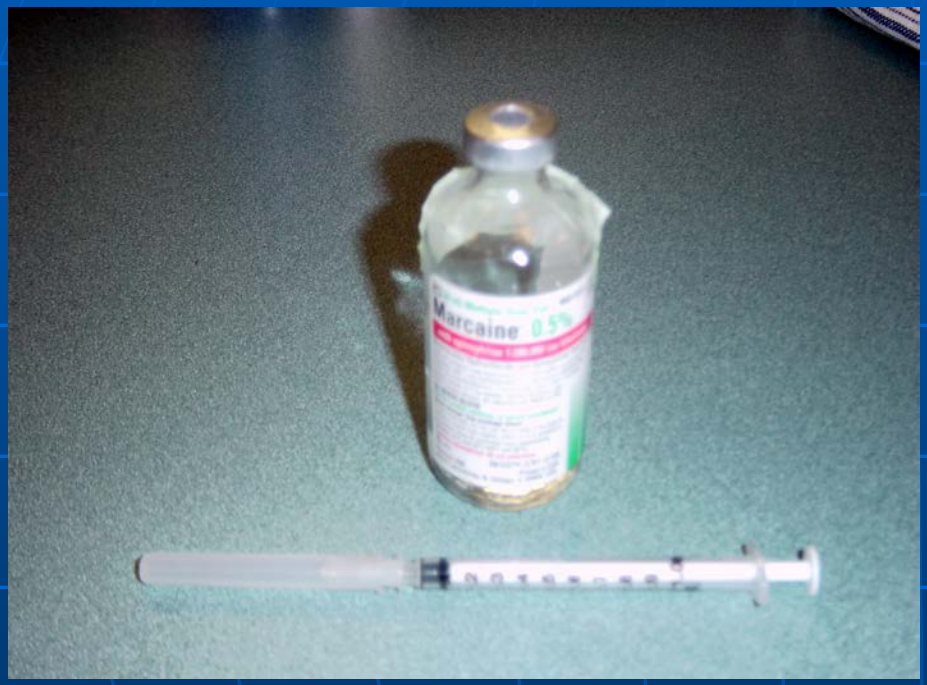
Morton’s Neuroma Differential Diagnosis





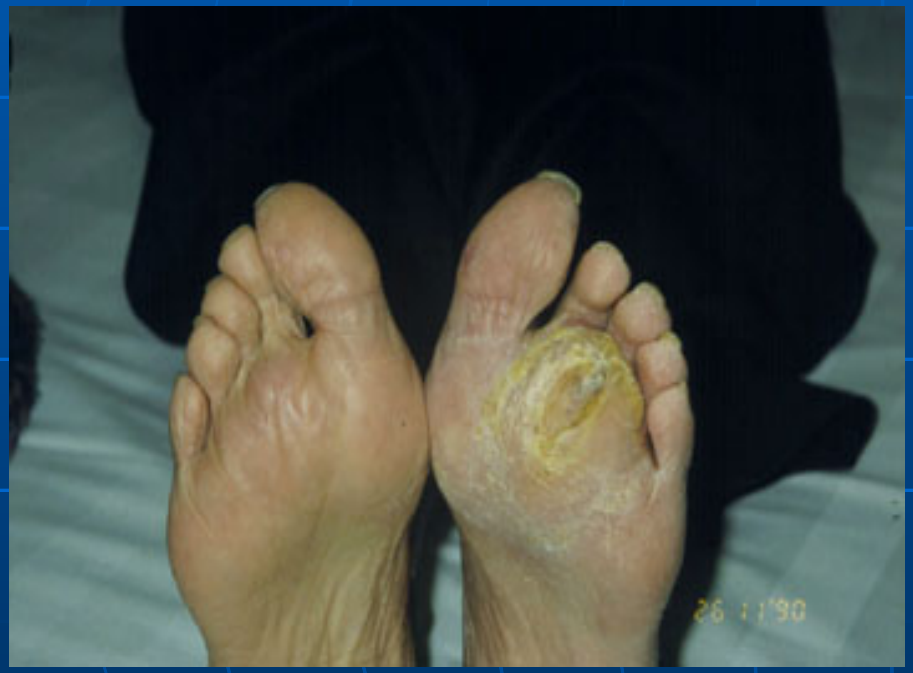
- Stress fracture
- Callus
- Freiberg's infraction
- Capsulitis
- Bone tumor
- Local manifestation of systemic disease

Morton's Neuroma Treatment



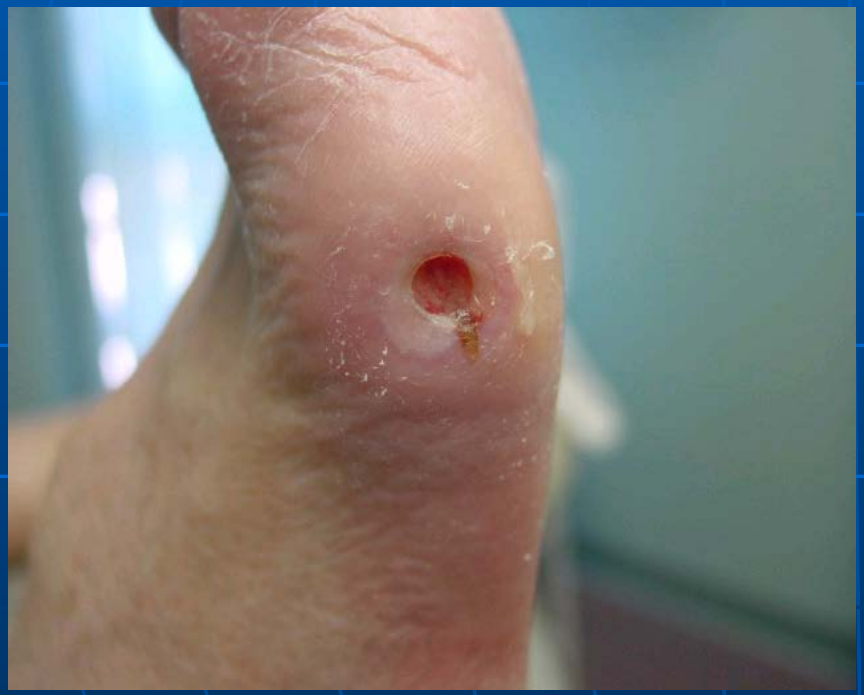
- Change shoe gear
- Padding
- Orthotic
- Cortisone injection
- 4% dehydrated alcohol injection for neurolysis
- Surgical excision

Diabetic ulcer



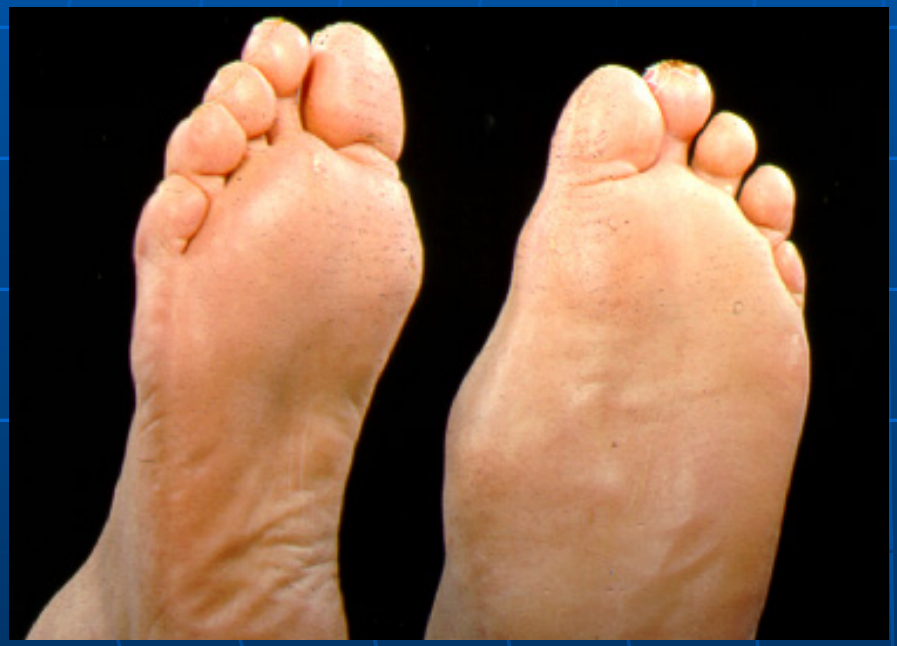
- Etiology is usually traumatic caused by shoes
- Bony promonence is usually involved (hammertoe, bunion, plantarflexed metatarsal, bone spur)
- Often start as a blister, corn or callous

Diabetic ulcer treatment



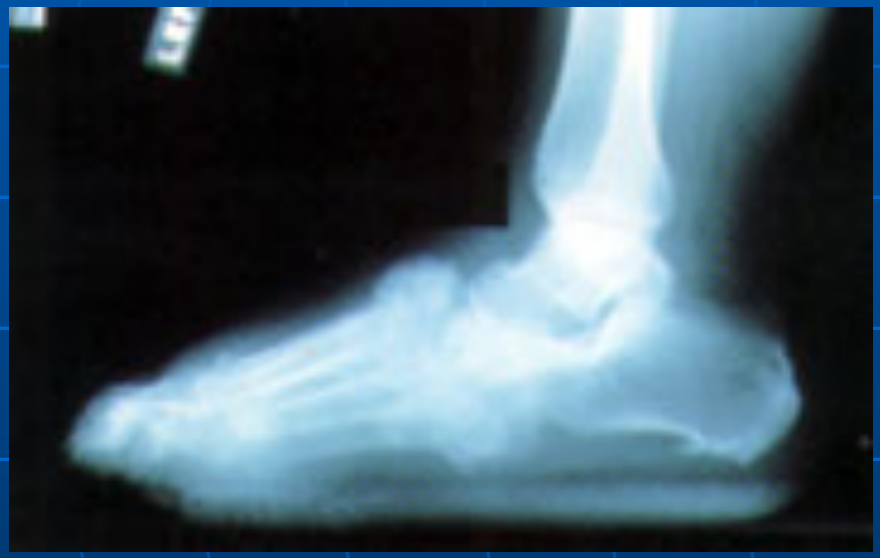
- Always obtain serial X-rays to rule out osteomyelitis
- Debride the wound to granular bed
- Remove hyperkeratosis
- Gently probe wound for deep sinus
- Dress initially with Silvadene cream
- Consider other wound products
- Consider offloading

Charcot Joint



- Diabetic Neuroarthropathy
- Often involves both pathologic dislocation and fracture
- Usually effects midfoot, but all lower extremity joints are susceptible
- Foot is acutely edematous and warm
- Deformity is common

Charcot Joint Treatment



- Non-weight bearing for 12 weeks
- Patient education is critical to outcome
- Serial X-rays to document deformity
- Molded shoe often needed after coalescence
- Surgical Treatment

Therapeutic Shoes

- Newly diagnosed + 33% 1990's
- Amputations + 28% 2000 -2001
- Medicare has stated that 50% of amputations were preventable

Therapeutic Shoes

- Focal pressure keratosis with accompanying risk factors are the major cause of ulcer.
- Patients who have regular, frequent foot clinic visits that include risk evaluation, debridement of lesions, prescription of appropriate shoes and patient education are less likely to ulcerate. 1

1 Sage RA, Webster JK, Fisher SG: Outpatient Care and Morbidity Reduction in Diabetic Foot Ulcers Associated with Chronic Pressure Callus. JAPMA **91**:275, 2001.

Thank You!