Oh my aching feet

Office Management of Common Foot and Ankle Disorders

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Bunion or Hallux Valgus

• Bunion- derived from Latin for turnip
• Definition- Valgus angulation of great toe on 1\textsuperscript{st} MTPJ
Bunions

- Swelling or prominence medial forefoot
  - all are not painful
  - ugly is what ugly feels
Bunions

- Treatment
  - Shoe wear
  - Pads/ toe spacers
  - www.footsmart.com
  - Counseling for painless bunions
  - Surgery is last resort
Bunions

• **Indications for Bunion surgery**
  
  – Pain over the bunion
  – Inability to find reasonable shoes
  – Lesser toe symptoms
Hammertoes

- Clawing of toes
  - Flexion of PIP joint
  - 2nd toe most commonly involved
  - More common in women
  - Shoes are usually the problem
Hammertoes

- Treatment
  - Wider, deeper shoes
  - Pads / Toe sleeves
  - www.footsmart.com
  - Flexible vs fixed
  - Tape or strap if flexible
  - Cushion if fixed
  - Surgery last resort
Hammertoes

• Surgery
  – Usually shortens the toe to straighten it
  – Can get short fat toes
  – Do for symptoms not cosmetics
Corns and Callus

- Foot response to pressure
- If relieve the pressure they will usually go away
- Trimming and softeners can help symptoms
Corns and Callus

• 5th Toe is a common offender
Corns and Callus

• Soft corns in the 4th web space can be very painful
  – Toe spacers can help alleviate the condition
Metatarsalgia

- Pain under plantar aspect of metatarsal heads
Metatarsalgia – Non Geriatric
The “Big Three”

• Second/Third MTP instability

• Interdigital Neuroma (Morton’s Neuroma)

• Metatarsal Stress Fracture
Second/Third MTP Instability

- Chronic instability of the second and third MTP very common. Seen in patients with long second toes, runners and a normal foot.
- Pain worse with shoes off or dress shoe.
- Treatment is steroid injection, taping, rest, and using shoes with stiffer soles.
- Surgical stabilization of the joint once conservative measures fail.
Fig. 16-35. **A**, Instability of the second MP joint with a crossover second toe may occur due to degeneration of the lateral collateral ligament. **B**, Malalignment as demonstrated with a crossover second toe.
Fig. 16-34. A drawer sign is used to detect dorsal plantar instability.
Fig. 16-37. Technique of taping toe. (From Coughlin MJ: Cross-over second toe deformity, Foot Ankle 8:29, 1987.)
BUDIN SPLINT
Interdigital Neuroma
(Morton’s Neuroma)

- Forefoot pain/burning radiating to toes
- Third web space common, second is rare
- Pain worse with shoewear, relieved with barefoot walking whereas in MTP instability it is just the opposite
Treatment of Interdigital Neuroma

• Begin with wider shoes and metatarsal pad
• If no better consider cortisone injection
Treatment of Interdigital Neuroma

• Begin with wider shoes and metatarsal pad
• If no better consider cortisone injection
• If still not improved then surgical decompression vs excision
Metatarsal Stress Fracture

- Very common in all age groups
- Increase in activity, weight gain, change of shoewear
- Constant pain with or without shoewear
- Swelling is common finding
- Radiographs usually normal
- Bone scan or MRI for the diagnosis
- Treatment is activity modification with a hard sole boot for six weeks
Geriatric Metatarsalgia

- Pain under plantar aspect of metatarsal heads
- Worse with weightbearing / worse when barefoot
- Association with aging / loss of fat pad, tight calf muscles
Geriatric Metatarsalgia

- Metatarsal pads / metatarsal bars
- Keep calluses soft / shave when necessary
- Full length soft inserts to redistribute pressure
- Calf stretching/PT
Forefoot

- In general, majority of forefoot conditions can initially be managed non-operatively by primary care physicians
  - Refer for failure of appropriate nonoperative management
  - Refer when patients interested in learning more about surgical options
  - Refer for progression of deformity with worsening symptoms
  - Exception- Diabetic patients: Early referral to avoid skin ulcerations / deformity
Midfoot

- Midfoot arthritis
  - Common in elderly patients
  - Dorsal foot swelling
  - Pain with shoewear
  - Often have nerve symptoms
Midfoot

- Midfoot arthritis
  - Exam- tenderness dorsal midfoot
  - Pain with abduction / adduction
  - Often visible swelling
  - Palpable spurs

Workup with plain wtbearing x-rays
Midfoot

- Midfoot arthritis
- Treatment
  - NSAIDS
  - Inserts
  - Shoewear modification / lacing
  - Fluoro injections
- Surgery if all else fails
Flatfoot

- All flat foot is not pathologic
  - 18% of Americans have what can be reasonably called flatfoot
  - Puts patient at greater risk for foot pain
Flatfoot

- When do we get concerned about flatfoot?
  - Asymmetry
  - Progressive
    - painful
    - painless
    - swelling
Flatfoot

- Posterior tibial tendon dysfunction (Adult Acquired Flat Foot)

- Common in geriatric population

- Atraumatic medial ankle pain / swelling

- Rare history of trauma
Flatfoot

- Early treatment
  - Arch supports
  - Boot / braces
  - NSAID
  - Acutely- boot
  - Physical therapy
- For ANY progression

↓ referral
Plantar Fasciitis (Heel Spur)

- An acute or attritional tearing of the insertion of the PF into the calcaneus
- History of recent increased weight gain or increased activity
- First step heel pain that gets better after 15 minutes then worse at the end of the day
- Not due to heel spurs
Physical Examination

Tenderness at the insertion of the...
Plantar Fasciitis

- **Treatment Modalities-initial phase**
  - Plantar fascial/achilles stretching
  - Orthotics
  - Dorsiflexion night splint
  - NSAID’s
Plantar Fasciitis

- Treatment Modalities-
  secondary phase
  - Physical therapy modalities
  - Casting
  - Corticosteroid injection
    - May worsen problem
    - Improvement usually temporary
    - Risk of rupture- 25-40%

Refer if no better in 3 months
Retrocalcaneal Pain

• **History**
  • Pain located behind ankle above the heel
  • Aggravated with activity and shoewear
  • Pain can persist after activity
  • +/- Swelling around the heel
Retrocalcaneal Pain

• Physical exam
  • +/- Swelling in retrocalcaneal bursa
  • Pain with medial and lateral compression
  • Generally a bony prominence can be palpated
Retrocalcaneal Pain

- Treatment
  - Heel lifts
  - NSAIDS
  - Silipos sock
  - Surgery for recalcitrant patients
IPOS Heel Sleeve
Obesity

- Foot is a lever
- For every pound lost, 7 pounds are off foot and ankle
In the year 2004 estimated 100 billion dollars in American healthcare costs due to the diabetic foot.
The diabetic foot
Pathophysiological Processes

- Neuropathy
- Vasculopathy
- Infection
Treatment - Diabetic foot neuropathy

- **Protective**
  - Identify patients at risk
  - Close observation of feet: callous, corns, deformities
Amputations in Diabetics

- 14 to 24% of patients with an ulcer will require a major amputation.
- Once a patient has an ulcer - 8 times increased chance of an amputation.
Treatment - Diabetic foot neuropathy

- **Protective**
  - Appropriate shoe wear
  - Skin care
Diabetic foot:
Take Home

- Need good diabetic control
- Adequate healing requires good nutritional status
- The patient has to take part in his/her disease (compliance)
- Prevention is the key to treatment
Special Note on Charcot

- Initial xrays may be negative (Stage 0 Charcot)
- Wtbearing xrays may be helpful
- Even with negative xrays, refer-refer-refer
- We would rather have many patients referred without true Charcot rather than miss one
Special Note on Charcot
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