Foot and Ankle Pain?
Get Solutions!!

Presented by
Mark Birmingham, DPM, AACFAS
Overview

- My Background
- Podiatry: What it was, What it is today…
- Common Ailments of the Foot and Ankle
- Conservative and Surgical Solutions
- Medical Conditions that Affect the Feet
- Q & A Session
Current Positions

- Orthopedic Department at Boulder Medical Center

- Attending Physician - Highlands/Presbyterian-St. Luke’s Surgical Residency Program

- Advisory Board for Physician’s Practice

- Content Reviewer for American College of Foot & Ankle Surgeons This Week @ ACFAS
Podiatry...Past and Present

- Pre-1980’s: Graduates completed at most 1 year of residency training. Majority did not have residency training. Training focused on the foot only.
- Pre-1990’s: Residency program of 2 years.
- Today: 3 years with focus on surgical training.
  - Includes the lower leg and ankle.
Corns and Calluses

- A small, thickened, circular area on the skin
- Caused by repeated pressure on the skin
Corns and Calluses

- Padding
- Debridement or “Shaving”
- Surgical Correction of the Underlying Problem
  - Hammertoe correction
  - Bone spur removal
Ingrown Toenails

- Toenail edge grows into the skin, causing pain, redness, swelling, and sometimes infection.
Ingrown Toenails

• Removal of the ingrown edge
• “Kill the nail root”
• Done in the office
• No down time
Toenail Fungus

- Thick, discolored
  - Unsightly!
- Medications
  - Topical
  - Pills
- Nail Removal
- LASER
Gout

- A build up of uric acid in the joints
  - Intense pain, redness, and swelling
  - Often at night, or first arising
- Medication, injections
- Diet restrictions
- Fluids
- Immobilization
Gout

Normal foot
Heel Pain

- **Plantar Fasciitis**
  - Inflammation of the largest ligament on the bottom of your foot.
  - Pain when first arising
  - Gets worse with time
- **90% cured conservatively**
  - Stretching
  - Anti-inflammatory medication
  - Arch Support
Achilles Tendonitis

• Immobilization
• Bracing
• Oral anti-inflammatory meds
• Physical Therapy

• Non-invasive repair

• Surgery to repair the tendon and/or remove the heel spur
Morton’s Neuroma

- Pain near the ball of the foot, between the 3rd and 4th toes, caused by thickened nerve tissue
  - “Pebble in my shoe”
  - Tingling, burning, numbness
- Injections
  - Cortisone or Alcohol
- Metatarsal pads
- Rarely needs surgical excision
Morton’s Neuroma
Hammertoes

- Clawing or buckling of the toes
  - Can cause painful corns/calluses near the “knuckles”
  - Can lead to pain in the ball of the foot: “Metatarsalgia”
- Shoes with a deeper toe box
- Accommodative padding
- Surgical correction
  - Tendon lengthening
  - Toe alignment
Extra Depth Shoes
Hammertoe Repair
Bunions

- Bump on the side of the big toe
- Changes in the bony framework
- A progressive disorder
  - Pain often begins in the late stage
- Caused by faulty biomechanics
  - But there is a genetic component
  - Certain foot types are prone
Bunions

- Activity modification
- Change shoegear
- Padding
- Medications
- Ice
- Injections
- Orthotics
- Surgical Correction
Bunions
Flatfoot or “Fallen Arches”

- Collapse of the arch of the foot
  - Caused by inflammation or over-stretching of the tendon that supports the arch
Flatfoot or “Fallen Arches”

- Ice
- Anti-inflammatory medication
- Shoe Modification
- Immobilization
- Orthotics or Braces
- Physical Therapy
- Surgical Correction
Ankle Sprain

• Most common ankle injury that we treat.
• Stretching or tearing of the ankle ligaments
• Associated with many other injuries in the foot
**Arthritis**

- Wearing down of the cartilage in the joint
  - Causes pain and stiffness
  - Gradually becomes worse with time
Arthritis
Arthritis

- Activity & shoe modifications
- Orthotics or Bracing
- Anti-inflammatory medications
- Injections
- Surgical Correction
  - Joint “Clean-up”
  - Joint Fusion
  - Joint Replacement
Prophecy Ankle Implant

- Pre-operative navigation provides custom, patient specific cutting guides
- Allows very precise placement of the implant
- Precision placement = implant longevity
Can shoes cause these problems?
Rheumatoid Arthritis

- Certain cells in the immune system malfunction and attack healthy joints
- Causes pain, swelling, redness, and warmth around joints
- Shoes, Orthotics, Injections, and Surgery
Rheumatoid Arthritis

Normal foot

Dislocation of toes
Leg Swelling

- Venous Insufficiency/DVT
  - Non-invasive vascular tests
  - Compression stockings

![Diagram of normal and faulty venous function](image)
Lymphedema
Peripheral Arterial Disease

- Poor circulation from narrowing of the arteries
  - Can lead to color changes, pain with walking, and delayed healing of wounds.
  - Can be a predictor for heart disease
- Non-invasive tests
  - Vascular specialist referral
Neuropathy

• Disease of the nerves
• Burning, tingling, or numbness in the feet and/or legs
• Can become painful with time
• Many causes of neuropathy
• Medications, Supervitamins, Topical treatments
• Physical Therapy, Surgery
Diabetes

- Affects the nerves, arteries, and immune system
  - Can’t feel minor injuries to the skin
  - Poor blood flow delays wound healing
  - Poor immune system can’t fight infection
- Can develop ulcers (wounds) in the skin that can easily become infected
- Diabetes is the leading cause of amputation in the lower limbs
Diabetic Foot Care

- Check your feet daily
- Wash feet in warm (not hot) water
- Dry between the toes
- Moisturize your feet, but not between the toes
- Don’t trim calluses (NO bathroom surgery!!!)

- Wear clean, dry socks
- Inspect shoes before wearing
- Keep your feet warm, dry
- Don’t walk barefoot
- Manage your glucose
- Don’t smoke
- Get periodic foot checks
Thank You