PODIATRY FOR PRIMARY CARE

You see what you know
PODIATRY FOR PRIMARY CARE

Weeding out Simple from Complex

- Using a Team Based approach
  - Physician Extenders
  - Physical Therapy
  - Prosthetics/Orthotics

Topics Include

- Heel Pain
- Ankle Sprains
- Dermatology
- Trauma
- Overuse Syndrome
- Diabetic Foot
- Pediatrics
HEEL PROBLEMS

- Plantar Fasciitis
- Plantar Fibroma
- Posterior Heel
  - Sever’s disease
  - Achilles Tendinopathies
PLANTAR FASCIA

- Strong Ligament
- Stabilizing to Medial Arch
- Originates–Plantar Tubercle Calcaneus
- Inserts into Plantar Plate of Digits
ETIOLOGY OF PLANTAR FASCIITIS

Biomechanical

- Weight Gain/Loss
- Excessive STJ pronation
  - Flat foot
  - Cavus foot
  - Normal foot

Proximal Etiologies:

- Limb length discrepancy
- Ankle equinus
SIGNS AND SYMPTOMS

- Post-static dyskinesia
  - After-rest, painful motion
  - Sleep or TV or Travel

- Tenderness
  - plantar fascia, esp. at plantar medial calcaneal tubercle

- Pain that Inc. with ankle digital dorsiflexion
TREATMENT OF PLANTAR FASCIITIS
CALCANEAL APOPHYSITIS (SEVER’S)

Achilles Force on Open Apophysis

- Children – Sports – Boys 10–12, Girls 8–10
  - High Impact Sports
  - New Season
  - Poor Shoe Gear

- Pain
  - Lateral COMPRESSION
  - Relieved by Toe Walking

Treatment

- Physical Therapy
- Lower leg stretching on slant board
  - Hamstring to Achilles
- Heel cups/ lifts
- NWB Cast 1–2 Mm–Severe
ACHILLES TENDINOPATHY

- Insertional or Mid-substance degeneration
- Prevalence in Adults 2.35 per 1000
- Athletic Population – 18% of all injuries

Treatment
- Eccentric Exercise – 12 Week Program Alfredson et al 90% Good Results
- ECSWT, Injection Therapy – PRP, Prolotherapy (hypertonic glucose w/Lido), Laser Therapy
- Surgery
POSTERIOR ANKLE

Dancer’s impingement
- Ballet
- Techniques most at risk
- Relevé, Plié, Demi-pliers

Sports/Activities
- Volleyball
- Basketball
- High Jump
PHYSICAL EXAM

Pain on Palpation of Ankle Joint
- Palpate AM, AL, PM and PL
- Diagnostic Injection in area of Posterior Calcaneus relieves pain

FHL Tendinitis  A.K.A. Dancer's Tendinitis

Pain is elicited when Dorsiflexing the Great toe
ANKLE SPRAINS

Common Injury
- Sports, Hiking, Climbing, etc.

Protocol
- Offload–Ace Wrap VS Cam Boot
- Physical therapy
  - Dec Pain, Inc Proprioception

When to refer to Podiatrist
- Multiple Ankle Sprains–Instability
- Likely Surgical, Failed PT etc.
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DERMATOLOGY

-Onychocryptosis (Ingrown Nail)

- Etiology
  - Improper Trimming
  - Abnormal Nail–Plate
  - Trauma
  - Shoe gear
  - Digital deformities
INGROWN TOENAIL
ANTIBIOTIC THERAPY

- 3 Groups (n=154) with infected ingrown
  - A. Abx with chemical matrixectomy
  - B. Abx 1 wk then matrixectomy
  - C. Immediate matrixectomy
    - No decrease in healing time or post-procedure morbidity
    - Healing times 1.9, 2.3 and 2.0 weeks respectively

INGROWN NAIL

- **Treatment**
  - Partial avulsion
  - Partial matrixectomy
    - Chemical
    - Surgical
OTHER NAIL CONCERNS

Mycotic
Pincer
Dystrophic
Ingrown
Tinea Pedis (Athletes Feet)

- **Etiology**
  - Hyperhidrosis
  - Immunopathy
  - Poor Hygiene

- **Types**
  - Acute Inflamatory
  - Chronic Hyperkeratotic
TINEA PEDIS (ATHLETES FEET)

- Clinical/Differential Diagnosis:
  - Dyshydrosis
  - Erythrasma
  - Contact dermatitis
  - Hyperhidrosis
  - Candidiasis
  - Neurodermatitis
TINEA PEDIS (ATHLETES FEET)

Treatment

- **Acute inflammatory**
  - Wet to dry dressing

- **Chronic**
  - Topical agent
  - Lotrimin
  - Lamisil
  - Loprox
  - Micatin
  - Tinactin
Dyshidrotic eczema
- Clear vesicles on a none erythematous base
- Nervous, hyperhidrotic patients
- More common in summer months

Treatment
- Topical Steroid Cream
FIRST MPJ PATHOLOGY

- **Types**
  - Hallux Valgus (Bunion)
  - Hallux Limitus/Rigidus
  - Sesamoids
    - Sesamoiditis
    - Fracture
    - Osteochondritis
  - Flexor tendonitis
HALLUX VALGUS

- Etiology
  - Hereditary
  - Biomechanical
  - Pronation
  - Metabolic
  - Traumatic
FIRST MPJ PATHOLOGIES

- **Treatment**
  - Shoe Modification
    - Orthotics
    - Rollbar
  - Surgery
MORTON’S NEUROMA

- Commonly Female
- Paresthesia plantar forefoot
- Pain reproduce by palpation of IS
- Mulder’s Click
Morton's Neuroma

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MORTON’S NEUROMA

- Treatment
  - Padding
  - Injection
  - Excision
LESSER METATARSAL DISORDERS

Metarsalgia/Capsulitis/Bursitis

Treatment

- Tapping/Strapping
- Immobilization
- NSAIDs
- Injection
- Orthotics
STRESS SYNDROME

- **Etiology**
  - Mechanical
    - Pronation
    - Constant low grade stress
  - Anatomical
    - Limb Length Discrepancy
    - Poor Foot Alignment

www.healthychildren.org
TRAUMA
TRAUMA
DIABETIC FOOT EXAM

Yearly, Now by PCP

- Derm:
  - Dry Skin—Leads to Infection
  - Hypertrophic—Skin Breakdown

- Vasc: Poor Perfusion—Poor Healing

- Neuro: No Sensation—Unseen Damage

- MSK: Deformities—Pressure

To Prevent
DIABETIC FOOT

Yearly, Now by PCP

- **Derm:**
  - Check Turgor, Texture

- **Vasc:**
  - DP/PT Pulses, CFT, Atrophy signs

- **Neuro:**
  - Light touch, vibratory, Semmes–Weinstein

- **MSK:**
  - Joint ROM, irritation points.
Flat foot
Club foot
Brachymetatarsia
Juvenile bunion
PESPLANOVALGUS

- **Rigid**
  - Tarsal Coalition
  - Vertical Talus
  - Arthrogryposis

- **Flexible**
  - Lig. Lax
  - Hereditary
  - Anatomic
  - Syndromal
PES PLANOVALGUS

- **Rigid**
  - Tarsal Coalition
  - CN > MFSTJ > TN
  - Vertical Talus
  - Genetic Abnormalities
  - Trauma

- **Evaluation**
  - Stress XR, CT
  - Resupination, ROM
PESPLANOVALGUS

- Surgery—
  - Pain/Behavior Chngs despite all conservative Methods
  - Being Carried

- Pes Plano Valgus
  - can be physiologic spontaneously resolve?

- Ankle Medial to Foot
PES PLANOVALGUS

- **Non Surgical**
  - Orthoses
  - Custom Shoes
  - Monitoring
  - 99% >> 25%

- **Surgical**
  - Fusions/Realignment/Soft Tissue
ARTHROERESIS

12y M Pre-op

3m post op
CLUBFOOT
NEGLECTED CLUBFOOT
CLUBFOOT
BRACHYMETATARSIA

Etiology:
- Premature closure of epiphyseal plate
- Trauma
- Tumors

Prevalence:
- F > M
BRACHYMETATARSIA

Treatments

- Benign Neglect
- Acute Correction
- Gradual Correction
- Surgery usually held until physis is closed.
BRACHYMETATARSIA
JUVENILE HAV

- **Etiology**–
  - Anoxic–CP
  - Hereditary
  - Chromosomal–T21
- Female > Male
- Frequently Associated with Pes planovalgus
JUVENILE HAV

- **Surgical Tx**
  - Wait until skeletal maturity
  - If Patient having pain refer to Surgeon
LATERAL HEMIEPIPHYSIODESIS (LHE)

- Guided Growth –
  - 1st Described in knee, initially for Blount’s Dz
  - Growth charts (Nelson’s), skeletal age, length multipliers
Together we can climb Mountains
Thank You Any Questions?
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