ANKLE PAIN INJURY, ARTHRITIS OR MORE

Jay Christensen D.P.M.
Advanced Foot and Ankle of Wisconsin

ANKLE INJURIES

- Ankle Sprains are the most common Orthopedic and Emergency room visit reason. 45% basketball, 31% soccer and 24% volleyball most common injury.
- 80% are inversion injuries caused by excessive inversion and plantarflexion.
- ATF is most common injured ligament

ANKLE SPRAIN

- Signs and Sx
  - 1st Degree- ATFL minor discomfort, point tender, little or no swelling or instability.
  - 2nd Degree- CFL portion of one or more ligaments is torn. Pain, swelling, point tender, loss of normal ROM. Slight laxity and athlete unable to walk normal.
  - 3rd Degree- PFL complete tear of at least one ligament resulting in joint instability. Loss of function, rapid swelling, possible fx.

ANKLE SPRAIN

- Treatment
  - RICE-Rest, Ice, Compress, Elevate
  - Rest for at least 24 hours with a compressive wrap and ice every few hours
  - Don’t hesitate for Xray

ANKLE SPRAIN

- Rest for 2 weeks, NSAIDS, Ice and Elevate
- Rehabilitation
  - First start ROM exercises.
  - AROM-PROM-ROM
  - Stretching is important during this time in a pain free range.
  - Strengthening should start as soon as it is tolerated, usually within 2 weeks

SPECIAL TESTS

- Anterior Drawer Test (for the Ankle)- Test the laxity of the ATF ligament
- Talar Tilt Test- Test the laxity in the CF ligament
HIGH ANKLE SPRAIN

- Tibiofibular ligament stretch or tear
- Tough ligament keeping the ankle stable
- Pain with end ROM dorsiflexion and squeeze test between the tibia and fibula

ACHILLES TENDON RUPTURE

- Typically middle aged men and “weekend warriors”
- Causes include poor conditioning, overexertion, chronic history of tendinitis or direct trauma
- Typically 1 year before return to activity
- Typically rupture 2 inches above insertion.

ACHILLES SPECIAL TEST

- Thompson Test – Achilles Tendon Rupture

MEDIAL TIBIAL STRESS SYNDROME

- AKA Shin Splints
- A result of tight calves, excessive pronation and an overworked tibialis anterior.
- Usually occurs at beginning of season or with change in workout.
- More painful in AM when soft tissue has tightened overnight.

MEDICAL TIBIAL STRESS SYNDROME

- Treatment
  - Ice after practice
  - Stretching of the posterior leg.
  - Orthotics to correct biomechanical problem
  - Anti-inflammatory
  - Strengthening muscle imbalances
  - Taping or braces

ANKLE ARTHRITIS COMMON CAUSES

- Post-traumatic
  - Articular Fracture –
  - Non-articular fracture –
  - Cumulative trauma (Lateral ankle instability)
- Age Related Attrition
  - Cartilage loses capacity to repair –
  - Decreased response to cytokines and mechanical stimuli
- Inflammatory Arthropathy
  - RA
  - Infiltrative Processes
    - Gout
    - PVNS
ANKLE ARTHRITIS TREATMENT

- NSAIDs and PO steroids
- Meloxicam, Voltaren Gel
- Physical Therapy
- Steroid injections
- Bracing

POSTERIOR TIBIAL TENDON PAIN

- Pain medially in early stages as well as fatigue and planter pain
- Swelling on the course of the Posterior Tibial tendon
- Later stages the pain becomes lateral as the fibula impinges against the calcaneum

POSTERIOR TIBIAL TENDON TREATMENT

- Orthotics for arch supports and NSAIDs as needed initially
- Bracing of the ankle and the foot
  - Arizona brace
- Once the ankle is involved and bracing becomes ineffective, surgical intervention is necessary

FRAC TURES

- There are 28 bones in the foot that can be fractured as well, the tibia and fibula, an XRAY is easy and quick
- Fractures can be subtle, mild pain
- Ligament ruptures can mimic fractures

WHEN IS IT MORE THAN JUST ANKLE PAIN

- A patient is unable to walk comfortably more than a few steps
- A major deformity is apparent
- The pain with no resolve with PO meds or injection therapy

THANK YOU