Rolled Again

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AOBFP- Family Medicine/OMT
AOBNMM- Neuromusculoskeletal Medicine/OMM
AOBNMM- Sports Medicine/OMM CAQ
• I have no relevant financial disclosures
Physical Exam

• **General:** A&O x3 with no distress; appears well nourished, very fit
• **Skin:** no rashes, no bruising, moist skin
• **Neuro:** Intact sensation lower extremities bilaterally
Physical Exam Ankle

- Tenderness to palpation
- No edema noted ankle – taped
- ROM restricted – taped
- Strength 5/5 bilaterally with pain on resisted eversion ankle
- Drawer/Talar Tilt/Squeeze/Kleiger’s
Ligamentous Anatomy

Standring, Susan, PhD, DSc, FKC - Gray's Anatomy: The Anatomical Basis of Clinical Practice, 1429-1462. 2008.
Physical Exam – Special tests

Drawer Test

Talar Tilt
Physical Exam – Special tests

Squeeze Test

Kleigher’s Test
Focused Sideline Osteopathic Exam Findings:

- Left fibular head posterior
- Left talus posteriorlateral to calcaneus
- Posterior left innominate

https://www.al.com/sports/2013/10/relief_duty_alabama_state_rb_m.html
Osteopathic Treatment:

HVLA Posterior Fibular Head

Talar Tug
Treatment: Day of Presentation

• On sideline:
  • OMT
  • Re-tape ankle

• After game completed:
  • Reassessment
  • Ice
  • Horseshoe compression
  • NSAID’s
Training Room Follow Up

• Therapeutic Exercises with ATC
  • Proprioception
  • Isometrics
  • Icing
  • Manual therapy
  • Pool workouts for cardiovascular conditioning
  • Strengthening

https://lermagazine.com/article/effects-of-targeted-exercise-on-chronic-ankle-instability

Training Room Follow Up: Osteopathic Exam
Findings

• Ribs 9-10 inhaled left
• Left on left sacral torsion
• L5FSIRr
• Left posterior innominate
• Posterior left fibular head
• Restricted left calcaneocuboid joint
• Internally rotated left 1st metatarsal
Training Room Osteopathic Treatment:


Osteopathic Findings Inversion Ankle Sprain

- Posterior Innominate
- Lumbar: $F_{\text{Side}}$ bent towards axis $R_{\text{opposite}}$
- Sacrum: forward torsion on side of injury
- Femur IR
- Anteromedial glide Tibial plateau
- ER tibia
- Talus glides posterolateral
- Navicular glides plantar and medially rotates
- Cuboid glides plantar and lateral
- Foot supinated

OMT for Ankle Sprains

- Reduces edema
- Reduction in perceived pain
- Less need for pain medication
- Earlier restoration of ROM and function
- Increased patient satisfaction
Case: Lateral Ankle Sprain

- **Risk Factors:**
  - Previous ankle sprains, Height and weight, use of ankle braces
- **Etiology:** Inversion/Plantar flexion
- **Imaging:** Xray: AP, Lateral, Mortise views

Treatment/Prevention: Ankle Sprain

- PRICE
  - Protection
  - Relative Rest
  - Ice
  - Compression
  - Elevation
- NSAIDs
- Active ROM when pain allows
- OMT!

- Proprioceptive Training
- Strength Training
- Taping
- High Top Shoes
- Semi-rigid Brace

Return to Play- Lateral Ankle Sprain

• Full active ROM
• Minimal or no swelling
• Ankle strength $\geq$ 90% of uninjured ankle
• 10 toe raises and single leg hop affected side w/o pain
• Sport specific drills without pain
• Restored proprioception
Rehab Exercises

Ankle Sprain Rehabilitation Exercises

- Resisted ankle inversion
- Resisted ankle eversion
- Heel raise
- Step-up
- Balance and reach exercise A
- Balance and reach exercise B
- Side-lying leg lift
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Disneyland

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