

ACFAS INTERMEDIATE LEARNING PATHWAY: Trauma 2 – Rearfoot: Soft tissue, Navicular, Calcaneus, & Talus

Learning Objectives of this Pathway:

- Describe fractures/dislocations of the <u>navicular</u> including etiology, anatomy, clinical workup, common patterns/classifications, surgical approach(es), fixation, and unique complications.
- Describe fractures/dislocations of the <u>calcaneus</u> including etiology, anatomy, clinical workup, common patterns/classifications, surgical approach(es), fixation, and unique complications.
- Describe fractures/dislocations of the <u>talus</u> including etiology, anatomy, clinical workup, common patterns/classifications, surgical approach(es), fixation, and unique complications.
- Describe <u>soft tissue</u> injuries and areas of particular risk of the rearfoot including the anatomy, surgical approach(es), specific complications.
- Understand the significance of soft-tissue assessment and management in surgical timing and specific surgical technique(s) used to decrease risk of complication.
- Understand patient comorbidities and risk factors relevant to surgical decision making.

Day 1: Soft Tissue

Clinical Sessions:

Deltoid Ligament-When and How Do We Repair?

Surgical Techniques:

None

Podcasts:

Deltoid Ligament Injuries

E-Book Chapters:

Trauma eBook

Ch 2: Soft-Tissue Envelope: Assessment and Timing

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The learning pathways are divided into basic, intermediate, and advanced categories.

Pathways have been organized into specific topics that have a variety of educational materials from the ACFAS On Demand course content.

They also include journal articles with links primarily from the Journal of Foot and Ankle Surgery (JFAS).

Journal Articles:

- Compartment Syndrome of the Foot: An Evidence-Based Review
- Sequelae of Underdiagnosed Foot Compartment Syndrome after Calcaneal Fractures

Outside Journal Articles:

- The Pathophysiology, Diagnosis and Current Management of Acute Compartment Syndrome
- Vascularity of the Lateral Calcaneal Flap: A Cadaveric Injection Study
- Fracture Blisters: Clinical and Pathological Aspects
- Blisters Associated with Lower-Extremity Fracture: Results of a Prospective Treatment Protocol

Day 2: Navicular

Clinical Sessions:

None

Surgical Techniques:

Open Reduction Internal Fixation of Navicular Fracture (Tuberosity and Body)

Podcasts:

None

E-Book Chapters:

Trauma eBook

Ch 8: Navicular Fractures

Journal Articles:

- Navicular Stress Fracture Outcomes in Athletes: Analysis of 62 Injuries
- Results of Treatment of 22 Navicular Stress Fractures and a New Proposed Radiographic Classification System
- <u>A Unique Procedure for Treatment of Osteochondral Lesions of the Tarsal Navicular: Three Cases in Athletes</u>
- Complete Medial Dislocation of the Tarsal Navicular without Fracture: Report of a Rare Injury
- Relationship of the Dorsalis Pedis Artery to the Tarsal Navicular
- Navicular Body Fractures: Computerized Tomography Findings and Mechanism of Injury
- Vascularized Scapular Free Bone Graft after Nonunion of a Tarsal Navicular Stress Fracture: A
 Case Report
- Custom-Made Total Talonavicular Replacement in a Professional Rock Climber

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Day 3: Talus (excluding OCDs - see separate topic)

Clinical Sessions:

Talar Neck Fractures: Pitfalls in Treatment

Surgical Techniques:

Open Reduction Internal Fixation of Talar Neck Fracture

Podcasts:

None

E-Book Chapters:

Trauma eBook

Ch 9: Osteochondral Fractures and Injuries of the Talus

Journal Articles:

- (Encourage to Review) <u>JFAS Collections: Talus Fracture</u>
- Talar Body Fractures
- Talar Neck Fractures and Rates of Avascular Necrosis
- Lateral Process Fracture of the Talus: A Case Series and Review of the Literature
- Open Talus Fractures: Early Infection and Its Epidemiological Characteristics
- Talar Neck Fractures Treated Using a Highly Selective Incision: A Case-Control Study and Review of the Literature
- The Results of Physical, Radiologic, Pedabarographic, and Quality-of-Life Assessments in Patients with Surgically Treated Intraarticular Calcaneus Fractures
- Operatively Treated Talus Fractures: Complications and Survivorship in a Large Patient Sample
- Complications of Talar Neck Fractures by Hawkins Classification: A Systematic Review

Day 4: Calcaneus

Clinical Sessions:

Calcaneal Fracture: Decision Making

Surgical Techniques:

Open Reduction Internal Fixation of Calcaneal Fracture

Podcasts:

- <u>Calcaneal Fracture</u>
- Calcaneal Fracture Management Open vs Closed

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E-Book Chapters:

Trauma eBook

Ch 10: Calcaneal Fractures

Journal Articles:

- (Encourage to Review) ACFAS Classic Article Series: Calcaneal Fractures
- (Encourage to Review) <u>JFAS Collections: Calcaneal Fracture</u>
- <u>Lateral Extensile Approach Versus Minimal Incision Approach for Open Reduction and Internal Fixation of Displaced Intra-articular Calcaneal Fractures: A Meta-Analysis</u>
- Radiographic Union Scoring Scale for Determining Consolidation Rates in the Calcaneus
- Open Calcaneus Fractures and Associated Injuries
- Screw Placement Relative to the Calcaneal Fracture Constant Fragment: An Anatomic Study
- <u>Early Clinical and Radiographic Outcomes after Treatment of Displaced Intra-articular</u> Calcaneal Fractures Using Delta-Frame External Fixator Construct
- The Treatment of Intra-articular Calcaneus Fractures with Severe Soft Tissue Damage with a Hinged External Fixator or Internal Stabilization: Long-term Results
- Open Versus Closed Operative Treatment for Tongue-Type Calcaneal Fractures: Case Series and Literature Review

Outside Journal Articles:

- Open Tongue-Type Calcaneal Fracture Treated with the External Fixation Bent Wire Technique
- Early Weight Bearing of Calcaneal Fractures Fixated with Locked Plates: A Radiographic Review

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