FP Essentials
Call for Authors – May 2026

Acute Lower Extremity Injuries

We are seeking an author or author group to write a manuscript for this edition of *FP Essentials* on the topic of acute lower extremity injuries. This edition will cover four topics:

1. Ankle
2. Hip
3. Knee
4. Principles of Splinting, Bracing, and Casting

The main text of the manuscript should be approximately 10,000 words in length, divided into four sections of approximately 2,500 words each, plus an abstract of approximately 200 words for each section. In addition, there should be key practice recommendations, a maximum of 15 tables/figures total, and up to 200 references to provide support for all recommendations and factual statements in the manuscript. References must be numbered sequentially by section, with each new section starting over at "1."

This edition should focus on what is new in each topic and should answer the key questions listed for each section. Each section should begin with an illustrative case, similar to the examples provided, with modifications to emphasize key points; each case should have a conclusion that demonstrates resolution of the clinical situation. The references provided here include information that should be considered in preparation of this edition of *FP Essentials*. However, these should be used only as a starting point in identifying the most current guidelines and references to include in the edition.

Needs Assessment

Family physicians are often the first point of contact for acute lower extremity injuries, yet many report a lack of confidence in differentiating between minor and more serious conditions. With musculoskeletal complaints accounting for nearly 15% of primary care visits, there is a need for a streamlined diagnostic resource. Current gaps in clinical practice include inconsistent application of decision rules (eg, the Ottawa Ankle Rules) and a declining proficiency in immobilization techniques. This monograph will address these needs by providing targeted updates on ankle, hip, and knee pathologies, while offering a practical guide to the principles of bracing, splinting, and casting to ensure optimal patient outcomes and functional recovery.

Section 1: Ankle

Example Case

SR is a 24-year-old soccer player who presents with intense pain above the ankle joint following a collision in which his foot was planted and forcibly externally rotated. He reports pain during weight-bearing and a sensation of instability. Examination reveals minimal swelling over the lateral ligaments but significant tenderness over the anterior inferior tibiofibular ligament. Both the squeeze test and the external rotation stress test elicit sharp pain in the distal syndesmosis. You suspect a high ankle sprain and consider what imaging test would be most helpful for assessing this injury.

Key Questions to Consider

Overview

- What are the most common acute ankle sprains and fractures seen by family physicians?
- What less common but important acute ankle injuries should family physicians be able to recognize?
- What history and physical exam components are recommended for patients with acute ankle injuries (ie, standard physical exam)?
- What are the indications for X-ray, point of care ultrasound, computed tomography, and magnetic resonance imaging?
- What are the Ottawa Ankle Rules, how accurate are they, and how should family physicians use them?
- What serious ankle injuries may be misdiagnosed as simple strains or sprains but require different management (eg, Maisonneuve fracture, talar fracture, base of the 5th metatarsal fracture)?
- What red flag symptoms and signs should prompt urgent management and/or specialist referral for acute ankle injuries? Consider creating a table for this.

Specific Injuries

Address the following questions in separate subsections for (1) lateral and syndesmotic ("high ankle") ankle sprains, (2) lateral malleolus, bimalleolar, and trimalleolar fractures, and (3) Achilles tendon rupture.

- How is this injury defined? How is it differentiated from similar injuries (eg, lateral malleolus vs bimalleolar fracture)?
- How common is this condition? Describe differences in incidence by age and sex if applicable.
- What is the typical mechanism of injury? How do patients usually present?
- What physical exam findings support or refute the diagnosis? How can physical exam findings direct appropriate radiographic imaging or offer reassurance that radiographic imaging is not necessary?
- What clinical decision rules are useful for assessing this condition?
- What diagnostic imaging tests are recommended? What radiographic findings support or refute the diagnosis? When should weight-bearing views be obtained? Provide original images if possible.
- What are the recommended initial and definitive management?
- What is the recommended follow-up?

- When is repeat imaging indicated? What are the expected findings?
- What are the prognosis and typical recovery time? What criteria should guide return to work or play?
- What complications may occur with this injury?
- When is referral to a sports medicine or orthopedic specialist indicated?

Initial References to Consider

Ankle Sprains

- Wu V, Padilla CA MD, Smith NA. Management of acute ankle sprains: common questions and answers. *Am Fam Physician*. 2025;112(6):609-617.
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Ankle Fractures

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Achilles Tendon Rupture

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Section 2: Hip

Example Case

EJ is a 27-year-old female marathon runner who presents with progressive, deep-seated groin pain that now occurs during rest. She recently increased her mileage and reports a history of irregular menses. Examination reveals pain with internal rotation and a positive log roll test. Plain radiographs of the hip appear unremarkable, with no visible callus or fracture line. Due to high clinical suspicion, you consider advanced diagnostic imaging.

Key Questions to Consider

Overview

- What are the most common acute hip injuries in younger and older adults? Which injuries are more common in athletes vs non-athletes?
- What less common but important acute hip injuries should family physicians be able to recognize?
- What history and physical exam components are recommended for patients with acute hip injuries (ie, standard physical exam)?
- What are the indications for X-ray, point of care ultrasound, computed tomography, and magnetic resonance imaging?
- What serious hip disorders may be misdiagnosed as simple strains but require different management (eg, avascular necrosis, septic arthritis)?
- What red flag symptoms and signs should prompt urgent management and/or specialist referral for acute hip injuries? Consider creating a table for this.

Specific Injuries

Address the following questions in separate subsections for (1) adductor (groin) and hip flexor (iliopsoas) strains, (2) femoral neck, intertrochanteric, and occult stress fractures, and (3) acetabular labral tear and femoroacetabular impingement.

- How is this injury defined? How is it differentiated from similar injuries (eg, femoral neck vs intertrochanteric fracture)?
- How common is this condition? Describe differences in incidence by age and sex if applicable.
- What is the typical mechanism of injury? How do patients usually present?
- What physical exam findings support or refute the diagnosis? How can physical exam findings direct appropriate radiographic imaging or offer reassurance that radiographic imaging isn't necessary?
- What clinical decision rules are useful for assessing this condition?
- What diagnostic imaging tests are recommended? What radiographic findings support or refute the diagnosis? When should weight-bearing views be obtained? Provide original images if possible.
- What are the recommended initial and definitive management options?
- What is the recommended follow-up?
- When is repeat imaging indicated? What are the expected findings?
- What are the prognosis and typical recovery time? What criteria should guide return to work or play?
- What complications may occur with this injury?

- When is referral to a sports medicine or orthopedic specialist indicated?

Initial References to Consider

Overview

- Chamberlain R. Hip pain in adults: evaluation and differential diagnosis. *Am Fam Physician*. 2021;103(2):81-89. Erratum in: *Am Fam Physician*. 2021;103(5):263.

Hip Strain

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Hip Fracture

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Acetabular Labral Tear and Femoroacetabular Impingement

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Section 3: Knee

Example Case

DL is a 19-year-old female basketball player who presents after a noncontact injury involving a sudden pivot and an audible "pop." She experienced immediate swelling and was unable to continue playing. Examination reveals a significant joint effusion and a positive Lachman test with a soft endpoint. Plain radiographs reveal a subtle Segond fracture at the lateral tibial plateau.

Key Questions to Consider

Overview

- What are the most common acute knee injuries in younger and older adults? Which injuries are more common in athletes vs non-athletes?
- What less common but important acute knee injuries should family physicians be able to recognize?
- What history and physical exam components are recommended for patients with acute knee injuries (ie, standard physical exam)?
- What are the indications for X-ray, point of care ultrasound, computed tomography, and magnetic resonance imaging?
- What are the Ottawa Knee Rules, how accurate are they, and how should family physicians use them?
- What serious knee injuries may be misdiagnosed as simple strains or sprains but require different management (eg, osteochondral injury, tibial plateau stress fracture)?
- What red flag symptoms and signs should prompt urgent management and/or specialist referral for acute knee injuries? Consider creating a table for this.

Specific Injuries

Address the following questions in separate subsections for (1) anterior cruciate ligament tear, (2) meniscal tear, and (3) patellar instability.

- How is this injury defined? How is it differentiated from similar injuries?
- How common is this condition? Describe differences in incidence by age and sex if applicable.
- What is the typical mechanism of injury? How do patients usually present?
- What physical exam findings support or refute the diagnosis? How can physical exam findings direct appropriate radiographic imaging or offer reassurance that radiographic imaging isn’t necessary?
- What clinical decision rules are useful for assessing this condition?
- What diagnostic imaging tests are recommended? What radiographic findings support or refute the diagnosis? When should weight-bearing views be obtained? Provide original images if possible.
- What are the recommended initial and definitive management?
- What is the recommended follow-up?
- When is repeat imaging indicated? What are the expected findings?
- What are the prognosis and typical recovery time? What criteria should guide return to work or play?
- What complications may occur with this injury?
- When is referral to a sports medicine or orthopedic specialist indicated?

Initial References to Consider

Overview

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Anterior Cruciate Ligament Tear

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- Lukas S, Putman S, Delay C, et al. Knee ligament sprains: diagnosing anterior cruciate ligament injuries by patient interview. development and evaluation of the Anterior Cruciate Ligament Injury Score (ACLIS). *Orthop Traumatol Surg Res*. 2022;108(3):103257.
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Meniscal Tear

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Patellar Instability

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Section 4: Principles of Splinting, Bracing, Casting

Example Case
JB is a 42-year-old patient who twisted his ankle while stepping off a curb. He has marked swelling, ecchymosis, and inability to bear weight. X-rays show a minimally displaced distal fibular fracture without mortise widening. His neurovascular exam is intact. You recommend a posterior short-leg splint with a stirrup component to accommodate swelling, nonweight-bearing, and follow-up in 3 to 5 days to reassess stability and determine the need for further casting, bracing, or orthopedic referral.

Key Questions to Consider
- What are the indications and contraindications for splinting, bracing, and casting in acute lower extremity injuries?
- How should clinicians decide between splinting, bracing, casting, or early functional management in the acute setting?
- What are the common types of splints, braces, boots, and casts used for acute lower extremity injuries? What are their advantages, disadvantages, and injury-specific applications? Use tables. Provide original photos if possible.
- How should physicians perform and document an appropriate neurovascular exam before and after immobilization?
- What are the proper application techniques for common lower extremity splints and casts (eg, posterior leg splint, short leg cast, walking boot, ankle stirrup brace)? Provide videos if appropriate.
- What steps should be taken to reduce complications during application (eg, padding techniques, joint positioning, molding principles, avoiding pressure points)?
- What is the optimal approach to weight-bearing progression and duration of immobilization based on current evidence? What is the role of standard and pneumatic medical walking (eg, controlled ankle motion) boots?
- When should patients transition from initial immobilization to rehabilitation exercises? What are the key components of a functional recovery program?
- What are the common complications of immobilization (eg, compartment syndrome, deep vein thrombosis, skin injury, stiffness, muscle atrophy)?
- What are the early warning signs of compartment syndrome and other limb-threatening complications of immobilization, and how should they be managed in outpatient settings?
- What patient education should be provided after splinting or casting to improve adherence, safety, and functional recovery?
- What documentation practices reduce medicolegal risk and support quality care in acute immobilization?

Initial References to Consider

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- Wu V, Padilla CA MD, Smith NA. Management of acute ankle sprains: common questions and answers. *Am Fam Physician*. 2025;112(6):609-617.

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