

جامعة البما4، عبد الرحمن بن فيصل IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

مستشفى الملك فهد الجامعي King Fahad Hospital The University

Sports Injuries (Knee and Ankle)

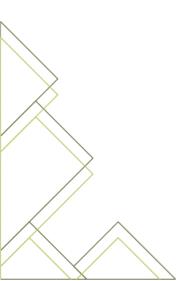


What are the types of knee injuries?

1. Anterior cruciate ligament (ACL) sprain/ tear:

The anterior cruciate ligament (ACL) can sustain sprains or tears through various means, including:

- Sudden changes in direction.
- Abrupt stops.
- Deceleration while running.
- Incorrect landings from jumps.
- Direct contact or collisions, such as those that occur during football tackles.





What are the types of knee injuries?

2. Meniscal tear:

When individuals mention a torn cartilage in the knee, they are typically referring to a torn meniscus.

3. Knee dislocation:

This happens when the knee bones are displaced, either partially or completely, from their normal position.

4. Knee fracture:

The patella is the most commonly fractured bone in the



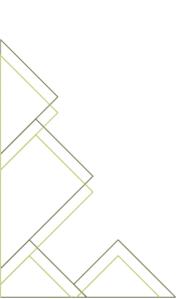
What are the types of ankle injuries?

1. Ankle (sprain / strain):

- Sprains: are the result of the ligaments that connect the bones in the foot and ankle being stretched or torn. Indications of a sprain include experiencing pain, swelling, and difficulty in putting weight on the affected foot.
- Strains: happen when the muscles or tendons in the foot or ankle are stretched or torn. Symptoms of a strain include feeling pain, stiffness, and weakness in the affected area.

What are the types of ankle injuries?

- 2. Fracture of the ankle.
- 3. Tendinitis: is an injury caused by overuse, which leads to inflammation of the tendons in the foot or ankle. This condition can occur due to repetitive movements, such as (running or jumping).





What is first aid for the ankle and knee?

Acute management for knee and ankle injuries involves immediate care aimed at relieving pain, reducing swelling, and preventing further damage. The (RICE) protocol is a recommended approach to expedite recovery:

- 1. Rest: It is crucial to cease any activity and avoid putting weight on the injured ankle or knee immediately.
- 2. Ice: Applying ice to the affected area as soon as possible is beneficial in reducing swelling and alleviating pain. It is recommended to apply ice for 15-20 minutes every 2-3 hours within the first 24-48 hours.

What is first aid for the ankle and knee?

- 3. Compression: Utilizing an elastic bandage or compression wrap to apply compression to the injured ankle or knee aids in reducing swelling and providing support to the affected area.
- 4. Elevation: If feasible, elevating the sprained ankle or knee above heart level by propping it up on pillows or cushions can help reduce swelling by facilitating fluid drainage from the injured area.





What is first aid for the ankle and knee?

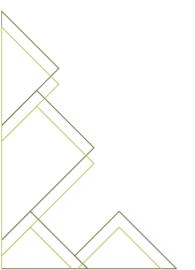
- 5. Pain Relief: Over-the-counter pain relievers such as acetaminophen (Tylenol) or nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen can effectively alleviate pain and reduce inflammation.
- 6. Supportive Measures: Depending on the severity of the ankle or knee injury, additional measures such as using crutches to offload weight from the injured limb or wearing a brace or ankle support for stability and injury prevention may be considered.





When sould I visit the emergency room?

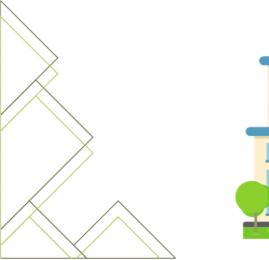
- Severe Pain.
- Visible Deformity: If there is an observable deformity, such as a bone protruding through the skin or a joint appearing dislocated.
- Inability to Bear Weight: If you are unable to put any weight on the injured limb or if attempting to do so causes severe pain, it may indicate a significant injury like a fracture or ligament tear.
- Severe Swelling.





When should I visit the emergency room?

- Numbness or Tingling.
- Excessive Bleeding: If you are unable to control bleeding from a wound or if the bleeding appears severe.
- Joint Locked or Stuck: If a joint, such as the knee,
 becomes locked or stuck in a certain position and
 cannot be moved, it could indicate a significant injury.
 When in doubt, it is always advisable to seek medical evaluation.





Sources and references:

All pictures used are from canva.com

Review and audit:

The content of this booklet has been reviewed by Emergency medicine consultant at King Fahd University Hospital.

Emergency Medicine Department

Health Awareness Unit IAU-24-546

