

Understanding Common Running Injuries

PLANTAR FASCITIS



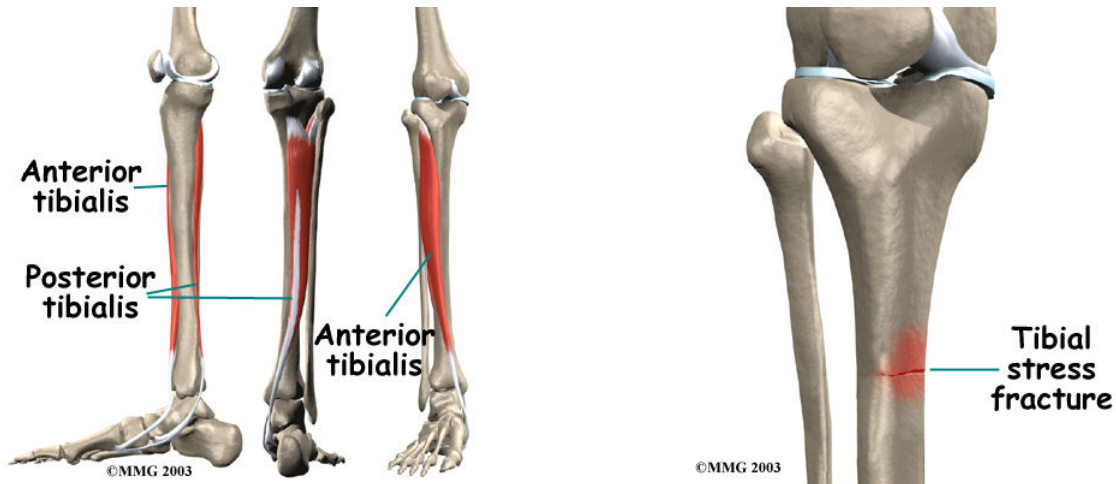
S/Sx:

- Heel or foot pain:
 - First thing in the morning
 - Decreases after warming up
 - After prolonged sitting
- Foot cramps

Cause:

- Tight calves/achilles complex
- Overuse (One of the most common overuse injuries in athletes)
- Improper shoes, or a change in shoe type
- Running on toes, hills, or very soft surfaces
- Excessive pronation
- Heel spurs

SHIN SPLINTS



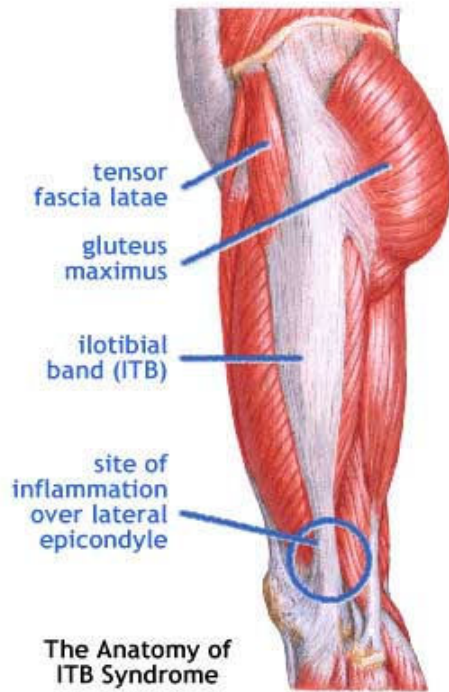
S/Sx:

- Pain on front of lower leg
 - Outside of tibia=Anterior tibialis muscle
 - Inside of tibia=Posterior tibialis muscle
- Dull ache where muscles attach to bone

Cause:

- Overuse injury
- Muscle imbalances in the lower leg (3:1 post/ant compt. ratio)
- Change in training regimen (increase of distance or intensity)
 - Use 10% rule when adding mileage
- Taking up a new activity
- Running down hill
- Running on balls of feet
- Tibial stress fracture (50% of all stress fractures)
 - Disease process/pathology/abnormality
 - Nutritional deficiencies

ILIOTIBIAL BAND FRICTION SYNDROME



S/Sx:

- Pain on outside of knee during, or after, activity
- Pain or tightness along outside of upper leg
 - Can extend from hip to knee

Cause:

- Muscle imbalances in the lower extremities
 - Quad/Hamstring
 - Weak cores
- Improper shoes, or a change in shoe type
- Improper/inadequate stretching
- Over training
- Running hills
- Structural abnormalities
 - Leg length difference
 - Genu varum (bow legged)

RUNNERS KNEE

* Runners knee is a general term used to describe several knee conditions. The two most prevalent are Patellar Tendonitis (PT) and Chondromalacia Patella (CP).



S/Sx:

- Discomfort around knee (CP, PT)
- Tenderness below knee (PT)
- Knee pain when kneeling, or sitting for long periods (PT)
- Grinding sound under patella (CP)
- Pain when running, climbing stairs, going from sitting to standing (CP)

Cause:

- Overuse, or increasing mileage too fast (10% rule)
- Improper/worn out shoes
- Hill training, esp. down hill
- Pronation
- Muscle imbalances in the lower extremities
 - Quad/Hamstring
 - Weak cores
- Direct trauma to the patella (CP)
- Abnormal biomechanical tracking of the patella (CP)

IMPORTANT POINTS TO REMEMBER

- In most cases rest relieves symptoms, it does not fix the underlying issue.
- When icing an area always use a moist barrier (wash cloth) between ice pack and skin. Ice for 20 minutes, no longer.
- Never use dry heat, especially on an acute injury! Dry heat promotes inflammation.
- Bracing and taping provide temporary relief of symptoms. It does not fix the problem.
- A foam roller can be used as a home remedy to decrease muscle spasms, however, it is not designed as a replacement for treatment, or to correct soft tissue injuries.
- Emphasize the importance of core strengthening exercises to all your runners.
- A runner should stop exercise and seek immediate help for an injury if:
 - There is sharp, or burning, pain in the affected area
 - There is a change in gait biomechanics due to an injury
- Aqua jogging is an excellent x-training activity for injured runners who need to keep the mileage up while getting treatment.
- Gait analysis can help pinpoint abnormalities that cause pain/injuries.

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