

## Helping Hand<sup>™</sup>

Health Education for Patients and Families

# Sports Medicine: Apophysitis of the 5<sup>th</sup> Metatarsal (Iselin's Disease)

Iselin's disease is pain and swelling of the growth plate (apophysis) of the 5<sup>th</sup> metatarsal. The 5<sup>th</sup> metatarsal is the bone that is located on the outside of the foot. A muscle called the peroneus brevis attaches to this growth plate at the base of the 5<sup>th</sup> metatarsal. The growth plate is an area of weakness, especially during growth spurts. Injury to the apophysis can occur because of repeated stress or a specific injury to the outside of the foot. This condition occurs most often in children between the ages of 9 and 13.

#### Signs and Symptoms

- Tender area on the outside of the foot (5<sup>th</sup> metatarsal)
- Often swelling on the outside of the foot

#### **Increased Risk**

- Growth spurts, especially in those ages 9 to 13
- Injury that causes the ankle to roll or direct contact to the outside of the foot

- Pain with activity, especially running, cutting, and jumping
- Limping due to pain
- Poor physical conditioning (strength and flexibility
- Wearing tight fitting or narrow shoes such as cleats or spikes
- Sports that require cutting and changes of direction (soccer, basketball, football)

### Treatment

- Medicine
  - Anti-inflammatory medicines, such as ibuprofen (Motrin<sup>®</sup> or Advil<sup>®</sup>) or naproxen (Aleve<sup>®</sup>), may be recommended. Take these as directed by your doctor or health care provider.
  - Other minor pain relievers, such as acetaminophen (Tylenol<sup>®</sup>).

Continued...

- Use of cold and heat
  - Cold should be applied for 10 to 15 minutes every 2 to 3 hours and after any activity that makes symptoms worse. Use ice packs or an ice massage.
  - Heat may be used before doing stretching and strengthening activities prescribed by your doctor, health care provider, or athletic trainer. Use a heat pack or a warm soak. Apply for 10 to 15 minutes.
- Orthopedic aids
  - A brace or walking boot may be advised to provide support and decrease pain.
- Rest
  - Rest, especially from the activity that caused the problem, will aid in healing. Exercises can also be done at home for more severe cases.
- Exercises
  - Exercises to improve flexibility and strength of the muscles around the foot will be important. These can be done at home but often a referral to a physical therapist or athletic trainer may be recommended by your doctor or health care provider.

#### How to Prevent

- Do correct warm-up and stretching before practice or competition.
- Avoid fast or extreme changes in training or activity.
- Exercise carefully, avoid extremes.
- Wear properly fitting shoes.
- Maintain suitable conditioning, strength, flexibility, endurance, and cardiovascular fitness.

#### When to Call the Doctor

Call your doctor, health care provider, or the Sports Medicine team at (614) 355-6000 if:

- Symptoms get worse or do not improve in 4 weeks, despite treatment.
- New, unexplained symptoms develop.

To schedule an appointment with Sports Medicine, visit NationwideChildrens.org/Sports MedicineScheduling or scan this code with your camera phone.

