## **Pond Place Pediatrics**

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# **Sprains and Strains**

A strain is a stretched or torn muscle or tendon. A sprain is a stretched or torn ligament. Sprains occur most often in ankles, knees or fingers, although any joint can be sprained. Sprained joints can function, but usually with pain.

## Why do these injuries occur?

Strains are usually associated with overuse injuries. Sprains usually occur secondary to trauma (ex: fall, twisting injury, automobile accident). The ankle is injured most often because of its anatomical weakness, its exposed position and the stress it sustains in athletic and recreational activities. It is sometimes difficult to differentiate sprains from strains.

#### **Risk Increases with:**

- Obesity.
- Previous trauma.
- Excessive exercise.
- · Poor conditioning.
- · Poor fitting shoes.
- Fatigue.

### What to Look For

- Pain or tenderness in the area of injury; severity varies with the extent of injury.
- Swelling of the affected area.
- Redness or bruising in the area of injury, either immediately or several hours after injury.
- Loss of normal mobility in the injured area.

#### **On-Site Treatment**

**RICE** therapy (rest, ice, compression, elevation).

- **REST.** Do not try to work through the pain. The body needs time to heal before resuming activities.
- Apply **ICE** to the injured area during the first 48 hours. Place ice in a plastic bag and separate it from the skin with a thin towel. Hold it against the area with your hand or an elastic bandage. Keep the ice pack on the area for 20 minutes every 3-4 hours.
- COMPRESSION with an elastic (Ace) bandage.
- Whenever possible, **ELEVATE** the area (especially while sleeping) so fluid can drain and diminish swelling.

#### Medication

You may use non-prescription pain relievers such as acetaminophen or ibuprofen. If the sprain is severe, a stronger pain reliever may be prescribed. Avoid aspirin in children and teeenagers.

For severe injuries, diagnostic tests may include X-rays or CT scan or MRI of the injured area. Crutches are sometimes needed. Surgery may be necessary to repair badly torn ligaments. A cast or brace may be necessary for severe sprains or following surgery. Following cast removal, you may need to wear support bandages for a while.

For all injuries, allow the area to rest 1 or 2 days. Then begin exercising the area gently, without putting weight on it. Rehabilitation may be recommended to regain strength and normal use of the joint. With appropriate treatment and rest, allow about 6-8 weeks for full recovery. Recovery may take longer depending on severity of the injury. Permanent weakness or arthritis is possible if the sprain is severe or a joint is sprained repeatedly.

### **Prevention**

- Maintain a good level of physical fitness.
- Stretch muscles before and after exercise.
- Strengthen weak muscles with rehabilitative exercises to prevent a recurrence.
- Accident-proof your home.
- Dress appropriately for the sport.
- Avoid running or walking on uneven surfaces.

Adapted from www.wellsphere.com.