Prevention & Treatment of Athletic Injuries

Injuries occur for a variety of reasons. *Traumatic injuries* occur when contact or force is too much for your muscles, joints or bones to absorb. A sprained ankle, a twisted knee, a fall off your bicycle or a collision at second base are examples of this type of injury. *Overuse injuries* are a gradual breakdown of body structures. They can often be prevented and are generally caused by any one or combination of the following:

- not enough strength for the activity
- not enough flexibility for the activity
- inappropriate activity or intensity (too much, too soon!)
- improper or faulty equipment
- change in exercise surface (different running terrain or exercise floor)
- poor biomechanics or technique

Pain is an indication that something is wrong, so listen to your body. As your injury progresses, pain will increase and/or occur earlier during exercise. Swelling, redness or warmth-to-the-touch are also signs of injury and inflammation. Seek medical attention to begin your road to recovery.

**How do you prevent injuries?**
1. Do some pre-season conditioning for your sport or activity. Get strong. Become flexible.
2. Make training changes gradually.
3. Always warm up. Warm up should include 5-10 minutes of low-level cardiovascular activity, stretching and movement patterns to mimic your sports activity.
4. Start your first practices or workouts gently and slowly. Work up gradually to more aggressive play or training.
5. Use proper equipment in good condition.

**If you get injured, when should you see a doctor?**
- if you have severe or prolonged pain (more than 48 - 72 hours)
- loss of function (you have difficulty performing work or daily activities)
- if you heard a “popping sound” when the injury occurred
- an injury to a joint
- any infection
First Aid for Musculoskeletal Injuries

R  REST
Don't be a hero! Stop whatever you are doing if you get injured. If you continue to exercise, you'll create more tissue damage and be out of action longer.

I  ICE
Apply an ice pack to the injured area for about 20 minutes. Wet cold penetrates faster than dry cold, so place a wet washcloth between your skin and the ice pack. If you don't have crushed ice readily available, a bag of frozen peas or corn works nicely! Apply the ice pack 3-4 times per day as long as pain and swelling are present (before work, after work and before bed). Ice helps prevent swelling and slows down tissue metabolism to reduce damage.

C  COMPRESSION
Applying pressure helps prevent swelling. The more swelling that occurs during the initial injury, the longer your recovery time. Use an ace wrap to secure the ice to the injured area with some pressure. Watch for blue skin or cool skin temperature below the injury site. Your wrap may be too tight.

E  ELEVATION
Raise the injured area at or above heart level so the force of gravity won’t contribute to fluid accumulation at the injury site.

What can you do to speed the healing of an athletic injury?

• The primary concern of an injured athlete is to maximize the healing process and reduce lost time from exercise. When the injury occurs, you can take an important first step by following the RICE first aid principles.

• Ask your doctor for a physical therapy referral. Rehabilitation from an injury involves three phases: “active rest”, reconditioning and practical movement training.

  ⇒ Active rest: During this phase your goal is to reduce the effects of the injury, including pain and swelling, return normal motion to the injured part, keep the non-injured muscles active through strength and flexibility training, and maintain cardiovascular fitness through aerobic activities that do not involve the injured area.

  ⇒ Reconditioning: The goal of this phase is to correct deficits created by the injury using strengthening, stretching, body awareness training and cardiovascular conditioning.

  ⇒ Practical Movement Training: After you have developed a basic level of conditioning in your injured muscle or joint, the next step is to gradually train your body to perform sport-specific movements such as jumping, sprinting and agility drills.

• Anti-inflammatory drugs may help alleviate swelling. Your doctor can advise you about medication.

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