# Top 8 Spors Medicine Diagnoses in Your Office

## Objectives

- 1. List common sports-related injuries you might see in your office
- 2. List pearls for diagnosis, management, and treatment of common pediatric sportsrelated injuries
- 3. Initiate initial treatment of pediatric sports-related injuries

#### **Pediatric Fractures**

- 1. Buckle fractures
  - a. Velcro wrist brace x 4 weeks
  - b. No need for follow-up x-ray
- 2. Toddler's fractures
  - a. CAM walking boot x 3 weeks
- 3. Apophyseal avulsion fractures
  - a. Pelvis (misdiagnosed as groin strain)
  - b. Distal fibula (misdiagnosed as ankle sprain)
    - i. CAM walking boot x 4 weeks

## Ligament sprains (knee)

- 1. MCL
  - a. No effusion
    - i. Dimples on either side of patellar tendon
    - ii. Symmetric quad bulk
  - b. Hinged knee brace x 4 weeks
  - c. PT x 4-6 weeks
  - d. Continue hinged brace for all sports activities x 3 months after injury

#### Patellar Dislocations

- 1. Patellar stabilization brace x 4 weeks
  - a. Continue to wear with all physical activity >20 minutes in future
- 2. Physical therapy to strengthen medial quads
- 3. Stretching of lateral structures (IT band)
- 4. If large effusion, recommend x-rays with Merchant view to evaluate for associated fracture

# Overuse injuries

- 1. Apophysitis
  - a.
- 2. Bone stress injuries
  - a. Medial tibial stress syndrome (shin splints)
    - i. Imaging for any focal areas of pain
    - ii. Immobilize and rest x 2 weeks and repeat imaging
      - 1. Most initial imaging is negative
  - b. Stress reaction
  - c. Stress fracture
    - i. Gymnast wrist
    - ii. Little league shoulder
    - iii. Spondylolysis

# Institutional guidelines for prevention of overuse injuries

- 1. Limiting 1 sporting activity to no more than 5 days per week
- 2. Minimum of 1 day off from organized physical activity
- 3. Focus on practice over competition 2:1 ratio
- 4. Participate in age appropriate play
- 5. Emphasis on free play
- 6. 2 to 3 months rest per year
- 7. Be a multisport athlete
- 8. One sport per season
- 9. Total training volume should not increase by more than 10% per week
- 10. Preseason core conditioning program 6-8 weeks before
- 11. Proper mechanics instruction