A 25-year-old recreational volleyball player presents with anterior shoulder pain that is worse with overhead activities. You determine that his symptoms occur as a result of subacromial impingement syndrome. On exam you notice that the inferomedial border of the scapula is prominent on the affected side while the patient is at rest. A cause for this prominence of the scapula includes inflexibility of the:

(a) pectoralis major.
(b) latissimus dorsi.
(c) pectoralis minor.
(d) serratus anterior.

Ref: In Educational Activity 1.1

Superior labral cysts associated with posterior glenoid labral tears can dissect to the spinoglenoid notch. If the nerve traversing this notch is impinged by the cyst then weakness can occur in which of the following muscles?

(a) Supraspinatus and infraspinatus.
(b) Supraspinatus only.
(c) Infraspinatus only.
(d) Subscapularis only.


An 18-year-old baseball pitcher presents with posterior elbow pain that is worse during throwing. A differential diagnosis for the patient’s elbow pain includes:

(a) flexor-pronator muscle tendinopathy.
(b) trochlear chondromalacia.
(c) ulnar collateral ligament insufficiency.
(d) distal biceps tendonitis.


The most frequently dislocated joint in the hand is the:

(a) distal interphalangeal joint.
(b) metacarpophalangeal joint.
(c) proximal interphalangeal joint.
(d) interphalangeal joint of the thumb.


Which factor is an intra-articular cause of painful snapping hip?

(a) Subchondral cysts.
(b) Iliopsoas tendon moving over lesser trochanter.
(c) Femoral acetabular impingement.
(d) Iliotibial band.

Ref: In Clinical Activity 2.1
Clinical Activity 2.2
7. Which strategy has been demonstrated to prevent non-contact injuries to the anterior cruciate ligament?
   (a) Proprioceptive exercises done on wobble boards.
   (b) Playing on the new artificial turf installed for American football.
   (c) Prophylactic knee bracing.
   (d) Shoes with shorter cleats.
Ref: In Clinical Activity 2.2

Clinical Activity 2.3
8. Which factor predisposes a triathlete to knee pain during cycling?
   (a) Excessive subtalar pronation.
   (b) Bike seat positioned too low.
   (c) Hip abduction weakness.
   (d) Inappropriate footwear.
Ref: In Clinical Activity 2.3

Educational Activity 2.4
9. Which statement about Achilles tendon rupture is TRUE?
   (a) It is most common in older men.
   (b) It occurs during noncompetitive jogging.
   (c) It usually occurs just at the calcaneal insertion.
   (d) It results in an inability to perform a single heel raise.
Ref: In Educational Activity 2.4

Educational Activity 2.5
10. Medial tibial stress syndrome is best described as
    (a) overload pathology involving tibialis posterior, medial soleus, and tibial periosteum.
    (b) eccentric overload of the anterior leg muscles.
    (c) longitudinal split tears in the peroneal tendons.
    (d) chronic exertional compartment syndrome.
Ref: In Educational Activity 2.5

Clinical Activity 3.1
11. Which finding is an indication for immediate transport to a hospital following a concussion?
    (a) Loss of consciousness for more than 1 minute.
    (b) Equal pupil size.
    (c) Severe headache.
    (d) Confusion for 15 minutes.

Educational Activity 3.2
12. What outcome can an athlete experiencing a grade 2 Seddon nerve injury expect?
    (a) Complete recovery.
    (b) Mild, permanent damage to sensory nerves.
    (c) Variable rate of recovery with significant improvement.
    (d) Little neurologic recovery.

Clinical Activity 3.3
13. Which statement most closely applies to focal dystonia?
    (a) It results in motor incoordination while performing difficult movements.
    (b) It is usually painless.
    (c) It occurs less frequently in males.
    (d) It peaks in incidence in the second decade.

Clinical Activity 3.4
14. Risk factors for entrapment neuropathies in musicians include
    (a) large hand size.
    (b) joint capsular tightness.
    (c) routine practice schedules.
    (d) improper hand position.

Educational Activity 3.5
15. Sacroiliac joint pain is
    (a) reliably identified by palpation.
    (b) provoked by Patrick and Gaenslen tests.
    (c) reproduced by the slump maneuver.
    (d) associated with bowel symptoms.
Educational Activity 4.1

16. What is the leading cause of cardiac-related death in younger athletes?
   (a) Dysrhythmia.
   (b) Coronary artery disease.
   (c) Idiopathic hypertrophic subaortic stenosis.
   (d) Valvular disease.


Clinical Activity 4.6

20. For a patient with exercise-induced bronchoconstriction, a short-acting bronchodilator should be given
   (a) 60 minutes before exercise.
   (b) 30 minutes before exercise.
   (c) 15 minutes before exercise.
   (d) at onset of exercise.


Clinical Activity 5.1

21. A 70-year-old athletic man presents with painful osteoarthritis of the knee. Initial exercise recommendations at this stage should include
   (a) isometric quadriceps strengthening.
   (b) leg press and squat training.
   (c) eccentric, closed kinetic-chain exercises.
   (d) seated knee extension exercises.


Educational Activity 5.2

22. An indication for exercise stress testing in a 54-year-old man would include
   (a) recent change in resting electrocardiogram.
   (b) recent complicated myocardial infarction.
   (c) systolic blood pressure of 210 in a hypertensive patient.
   (d) male older than 45 years with total cholesterol of 245mg/dL.


Clinical Activity 5.3

23. A 12-year-old boy presents to your office limping because of unilateral thigh and knee pain. The limb is externally rotated, and passive hip rotation is poorly tolerated. After confirming the diagnosis of slipped capital femoral epiphysis with plain radiographs, you advise his mother that the most likely treatment would be
   (a) open reduction and internal fixation of the hip.
   (b) protected weight bearing on the affected limb.
   (c) valgus osteotomy of the hip.
   (d) early total hip arthroplasty.

Educational Activity 5.5

24. A 16-year-old gymnast presents with shin pain, disordered eating, and amenorrhea. The diagnosis of stress fracture is confirmed via bone scan. Your pharmacologic treatment recommendation would consist of

(a) bisphosphonates.
(b) supplemental calcium.
(c) oral contraceptive pills.
(d) hormone replacement therapy.


Clinical Activity 5.6

25. An appropriate recommendation for initiating a new exercise program during pregnancy includes

(a) short duration, low intensity exercises.
(b) supine exercises in the third trimester.
(c) avoidance of weightlifting.
(d) no plan to increase exercise intensity.


Educational Activity 6.1

26. Which finding would suggest a diagnosis of tendinosis rather than tendonitis?

(a) An acute injury preceding symptom onset.
(b) Symptoms that are self-limited.
(c) Histological absence of inflammatory cells.
(d) Pain with resisted isometric contraction.


Clinical Activity 6.2

27. A patient with rotator cuff tendinopathy would be expected to have imaging findings of

(a) hypoechoic rim surrounding the tendon on ultrasound.
(b) hypovascularity of the tendon tissue on color Doppler imaging.
(c) low signal intensity of the tendon on magnetic resonance imaging.
(d) linear hyperechoic areas with posterior acoustic shadowing on ultrasound.


Clinical Activity 6.3

28. Which treatment modality for lateral epicondylitis has the strongest evidence for short-term benefit?

(a) Iontophoresis with dexamethasone.
(b) Low level laser therapy.
(c) Deep friction massage.
(d) Extracorporeal shock wave therapy.


Clinical Activity 6.3

29. Initial pharmacologic treatment for pain resulting from sports-related soft tissue injury should include preferential consideration for use of

(a) an opioid pain medication.
(b) acetaminophen.
(c) a glyceryl trinitrate patch.
(d) corticosteroid injection.


Clinical Activity 6.3

30. Use of corticosteroid injection can result in which effect?

(a) Improvement in Achilles tendinopathy.
(b) Postinjection pain flare in rotator cuff tendinopathy.
(c) Long-term improvement in stenosing tenosynovitis (trigger finger).
(d) Hyperpigmentation of skin in lateral epicondylitis.