- 1. 70-year-old female presents to the chiropractor with persistent pain around the base of her right thumb after falling on her outstretched hand two weeks ago. The chiropractor finds that the anatomical snuffbox has localized tenderness. What would be the proper management for this patient?
  - A. a course of ultrasound to the wrist
  - B. advise on home cryotherapy
  - C. mobilizations to the hand and wrist
  - D. obtain radiographs of wrist
- 2. A 56-year-old male is currently under a program of care for costovertebral pain. He has been attending the clinic for several weeks and his treatment is almost complete. Each time he comes into the office he makes inappropriate comments to the clinic staff which makes them uncomfortable. At a clinic meeting, the office staff and practitioners are trying to decide on a course of action to deal with the patient and his comments, including: have the staff directly talk to the patient about their complaints; have the treating chiropractor address the issues with the patient at the next treatment; refuse to the see the patient when he next returns; and do nothing as he will be discharged soon. What course of action should be taken in this situation?
  - A. as his treatment plan is almost complete, do nothing
  - B. have the staff directly talk to the patient about their complaints
  - C. have the treating chiropractor address the issues with patient at the next treatment
  - D. refuse to see the patient when he next returns
- 3. A 13-year-old girl is having intense pain in the front of both of her knees. She plays hockey but has been unable to play because of the symptoms. On examination, the chiropractor notices swelling over the tibial tuberosities, and when palpating the structures, she experiences marked tenderness and pain. The chiropractor finds that her quadriceps muscles are also tight. The remaining examination is unremarkable. As part of the assessment, the chiropractor obtains radiographs of the knees. What diagnosis did the chiropractor formulate that lead him to obtain the radiographs to help confirm his clinical impression?
  - A. dislocated patella
  - B. fractured patella
  - C. Osgood-Schlatter disease
  - D. Sever's disease
- **4.** A 22-year-old woman was rear-ended two weeks ago as she delivered pizzas during a shift at work. A few days later, she developed pain and aching in her neck, fluctuating headaches, and achy pain throughout her shoulders that radiates into her arms. She has been taking over the counter anti-inflammatories since the symptoms began; however, cannot find anything that relieves the achiness and pain. Based on the history, what is the chiropractor's working diagnosis?
  - A. cervical radiculopathy
  - B. fibromyalgia
  - C. malingering
  - D. whiplash associated disorder

- 5. A 10-year-old boy has been experiencing periodic pain on the bottom of his left foot for the past three weeks. When the boy walks into the room with his father, the chiropractor observes a slight limp when the boy steps on his left foot. Upon questioning, the boy and father state that the soreness is mainly in the morning when he first gets out of bed, then eases off through the day. The condition has not been progressing but the father is wondering if treatment will help. On examination, the boy has tenderness when the chiropractor palpates the medial process of the calcaneal tuberosity. The chiropractor also elects to obtain a foot radiograph, which reveals a sclerotic and fragmented calcaneal tuberosity. Which of the following conditions fits with the radiographic findings?
  - A. Kienbock's disease
  - B. Osgood-Schlatter disease
  - C. Osteochondritis dessicans
  - D. Sever's disease
- **6.** A 62-year-old male is having difficulty standing for long periods of time. He can stand for approximately 10 minutes before he starts to get numbness and tingling down the back of his left leg. He had x-rays of the low back and his medical doctor told him there is a lot of arthritis in his back. Upon further questioning, the chiropractor learns that the patient can find relief by changing his body position. Which of the following activities relieves the patient's complaint?
  - A. leaning backwards
  - B. sitting
  - C. standing and shifting side-to-side
  - D. walking
- 7. A 21-year-old man has been experiencing sudden recurring onsets of pain in the left lower thoracic region, making it difficult for him to sit still or find a comfortable position. He first noticed the symptoms three weeks ago, but over time the symptoms have become more severe and frequent. He describes the pain as coming in waves, lasting about 20 minutes, beginning on his left side and shooting into his lower back, groin and testicles. Which of the following conditions is causing his symptoms?
  - A. appendicitis
  - B. kidney stone
  - C. L1 radicular pain
  - D. pyelonephritis
- **8.** A 58-year-old man is at the chiropractic office with complaints of constant generalized back pain that he feels extends into his ribs. He is also feeling fatigued and unwell. The symptoms have been gradually progressing over the course of the past year and have now become constant and daily. He finds that even at night his back and ribs are generally achy. He remarks that he has noticed himself losing weight for no particular reason, and is concerned about this. He has never smoked, and generally has a good diet. He used to walk regularly, but now he finds that he does not have the energy to, or when he does his back and ribs ache worse. On examination, the chiropractor finds some motion palpation restrictions in the lumbar and thoracic spine, along with some tender and tight points along the spinal erectors; otherwise, his examination was unremarkable. What kind of pathology does this patient likely have?
  - A. cancerous
  - B. infectious
  - C. musculoskeletal dysfunction
  - D. visceral

- **9.** An 18-year-old monthly maintenance patient books a treatment today. He relates that he was playing in an aggressive hockey game last night and was checked into the boards. He woke up this morning with some nausea, slight dizziness, a headache and a feeling of pressure in his head. How should the chiropractor examine the patient to help determine the origin of the patient's complaint?
  - A. a complete chiropractic exam including a neurological examination
  - B. a cursory cervical orthopedic examination only
  - C. perform cervical spine radiographs
  - D. have the patient complete a nutritional questionnaire
- 10. A 17-year-old female gymnast has had varying degrees of low back pain for the past several years. Her primary symptoms involve periodic low back pain that radiates into both buttocks. Ever since she started to train more seriously, her back has become more bothersome. She finds the symptoms to subside with reduced activity and rest. On examination, the chiropractor notes that she stands with a hyperlordotic posture. There were no abnormalities noted on the neurological examination. There was some discomfort provoked with posterior-to-anterior compression of the lumbar spine. Palpation revealed tight lumbar spine erector spinae muscles and hamstrings bilaterally. What is the best next step in the proper management for this patient?
  - A. a course of electrostimulation to lumbar spine
  - B. adjustments and mobilizations to the lumbar spine
  - C. advise on home cryotherapy
  - D. obtain radiographs of the lumbar spine
- 11. A 43-year-old female has had a total left hip replacement when she was 30 due to a dysplastic hip. Her hip has been feeling tight for the past week and was wondering if chiropractic care can help loosen it. After the examination, the chiropractor found that there were no contraindications to treatment and placed her on a treatment plan. Which of the following would be an appropriate treatment plan for the patient?
  - A. instruction on home stretches only
  - B. lumbar and pelvis adjustments with aggressive stationary cycling for rehabilitation
  - C. pelvic adjustments, soft tissue therapy and home stretches
  - D. targeted hip adjustments and long axis traction
- 12. A 24-year-old male carpenter presents with a constant dull achy pain on outside of his left elbow and forearm after finishing roofing a house yesterday. Upon examination, there is point tenderness at the lateral elbow and proximal forearm muscles. Resisted wrist extension reproduced his pain. Resisted elbow flexion and finger extension was 5/5, but provoked some mild tightness and discomfort. Based on his presentation and physical findings, which of the following muscles should the chiropractor target for myofascial therapy?
  - A. anconeus
  - B. brachioradialis
  - C. extensor digitorum
  - D. extensor carpi radialis brevis
- 13. A mother brings her 1-month-old son into the office. She tells the chiropractor that her son is having difficulty breast-feeding because he cannot turn his head to the left very well. During the assessment, the chiropractor passively turns the infants head to the pain free side. The arm on that side straightens and the opposite arm bends. Which of the following pediatric reflexes did the chiropractor just assess?
  - A. Galant reflex
  - B. Moro reflex
  - C. rooting reflex
  - D. tonic neck reflex

- **14.** A chiropractor is reviewing the A-P lumbar spine radiograph of his 40-year-old male patient with chronic low back pain. On the radiograph, the chiropractor notices a mass of solid segmented densities surrounded by a radiolucent halo. These densities overly the pubic rami and extend into the pelvis. What are these densities?
  - A. air-fluid levels
  - B. blowout metastasis
  - C. expansile soft tissue mass
  - D. fecal matter
- 15. A 34-year-old pregnant female is experiencing achiness and numbness in the lower part of her left medial thigh, which becomes especially bothersome if she has to stand at work for long periods of time. Her symptoms came on gradually over the course of her pregnancy, and are becoming more bothersome as she comes closer to her due date. On resisted hip ranges of motion, her chiropractor discovers 4/5 strength in a group of leg muscles that coincides with her symptoms. In which of the following resisted tests did the chiropractor note the strength findings?
  - A. abduction
  - B. adduction
  - C. extension
  - D. flexion
- 16. A 35-year-old male bodybuilder has been experiencing a sharp burning pain around the middle of his left clavicle which has been affecting his training. On examination, the chiropractor also notes atrophy of the left infraspinatus muscle and weakness with left arm abduction and shoulder external rotation. The chiropractor diagnosed the patient with a nerve entrapment. Where did the chiropractor suspect that the nerve responsible was entrapped?
  - A. along the supracondylar process
  - B. around the spinoglenoid ligament
  - C. in the suprascapular notch
  - D. in the quadrangular space

## Station 1: Questions 17 to 19







A chiropractor is reviewing the thoracic spine radiographs of his 17-year-old male patient. The patient has been experiencing fluctuating pain and stiffness in the mid-back region for the past year. He related that his back is sore and tired after a day of sitting at school. On the examination, the chiropractor discovered a hyperkyphotic posture, various thoracic facet joint restrictions, thoracic spine stiffness with posterior-to-anterior compression and tight thoracic spinal erector spinae muscles.

- **17.** Which of the following findings is present on the radiographs?
  - A. irregular end plates
  - B. pancake vertebra
  - C. rugger jersey spine
  - D. shiny corner sign
- **18.** What, if any additional testing should be done to confirm the diagnosis?
  - A. diagnositc ultrasound
  - B. MRI scan
  - C. no additional testing is needed
  - D. protein electrophoresis
- **19.** Which of the following is an appropriate rehabilitation exercise to prescribe to the patient?
  - A. abdominal curl ups
  - B. hanging knee lifts
  - C. push ups
  - D. scapular retraction

## **ANSWER KEY**

- **1**. D
- **2**. C
- **3**. C
- **4.** D
- **5**. D
- **6.** B
- **7.** B
- **8**. A
- **9**. A
- **10**. D
- 11. C
- **12.** D
- **13.** D
- **14**. D
- **15.** B
- **16**. C
- **17**. A
- **18.** C
- **19.** D