

- 4.3
77. A 28 year old male presents with pain down the back of his right leg. Which of the following would indicate that the problem is piriformis syndrome and not a lumbar disc?
 A. sudden onset
 B. antalgic posture
 C. lack of true neurological dysfunction
 D. pain upon palpation of sciatic nerve
 ...B...
78. In a patient with hyperabduction syndrome what muscle should you not strengthen?
 a. rhomboids
 b. pectoralis minor
 c. biceps
 d. trapezius
 ...B...
79. The most common anatomical location to find adventitious bursa is?
 A. between cervical transverse processes
 B. between lumbar spinous processes posterior to the nuchal ligament beneath the galea aponeurotica
 C. ...D...
80. Which of the following landmarks is used as the point for measuring jugular venous pressure?
 A. acromioclavicular joint
 B. sternoclavicular joint
 C. cricoid cartilage
 D. sternal angle
 ...D...
81. What is the muscle responsible for opening the mouth?
 A. lateral pterygoid
 B. medial pterygoid
 C. masseter
 D. platysma
 ...A...
82. Which muscle closes the jaw?
 a. buccinator
 b. internal pterygoid
 c. external pterygoid
 d. masseter
 ...D...
83. The xiphoid will be found at what level?
 a. T4
 b. T6
 c. T8
 d. T10
 ...C...
84. Which of the following motions will tear the quadriceps?
 a. forced flexion/extension
 b. forced abduction
 c. internal and external rotation
 d. forced adduction
 ...A...
70. A 14 year old boy presents with history of lower extremity pain and weakness of hip abductors. What gait would be exhibited?
 A. waddling
 B. steppage
 C. ataxic
 D. spastic
 ...A...
71. Which of the following is associated with foot drop?
 a. waddling gait
 b. steppage gait
 c. ataxic gait
 d. spastic
 ...B...
72. Muscle spasm in an acute ankle injury may keep you from initially diagnosing:
 A. ligamentous tear
 B. hematoma
 C. compound fracture
 D. ...A...
73. A patient playing football was hit at the anterior tibia that was displaced from anterior to posterior to the femur while knee flexed. Is likely to sustain an injury to the:
 A. anterior cruciate ligament
 B. posterior cruciate ligament
 C. lateral collateral
 D. medial meniscus
 ...B...
74. A patient with presents with shoulder pain. There is no pain or decreased range of motion with movement of elbow or shoulder. Upon resisted flexion of the arm, the patient has pain in the anterior superior aspect of the humeral head. Which of the following is the likely diagnosis?
 A. subdeltoid bursitis
 B. bicipital tendinitis
 C. brachial neuralgia
 D. polymyositis
 ...B...
75. An avulsion fracture at the anterior iliac superior spine may be due to the action of which muscle?
 A. rectus femoris
 B. sartorius
 C. gluteus medius
 D. hamstrings
 E. psoas
 ...B...
76. A patient with effacement of the longitudinal arch and lateral calcaneus will demonstrate:
 a. pes cavus
 b. pes planus
 c. talipes valgus
 d. talipes varus
 ...B...
64. What modality would you use in a patient with intertrochanteric bursitis?
 a. negative galvanism
 b. deep massage
 c. traction
 d. ice
 ...C...
65. What is associated with isokinetic movement?
 a. torque limiting device
 b. against gravity
 c. constant velocity
 d. self limiting device
 ...C...
66. After gardening, a patient presents with low back and right leg pain to the top of the foot, shooting pain into 2nd, 3rd and 4th toes. There is decreased sensation on lateral aspect of leg and top of foot. Exam reveals a (+) Valsalva, (+) SLR at 30°, (-) WLR, (+) Kemp's and Bechterew's on the right. Achilles and patellar reflexes +2 bilaterally. Pain is decreased when leaning to left. The patient has had this before but not as bad. What muscles are likely to be weak?
 A. plantar flexors
 B. dorsiflexors
 C. toe extensors
 D. knee extensors
 ...C...
67. What disc is probably involved?
 A. L3-4
 B. L4-5
 C. L5-S1
 D. S1-2
 ...B...
68. What type of disc protrusion is suggested?
 A. posterior medial
 B. posterior lateral
 C. sub-rhizal
 D. central
 ...B...
69. A 19 year old college baseball player presents with right shoulder pain. Pain occurred after two long overhand pitches from shortstop to first base. Pain increased with all motion, especially on abduction and external rotation. Which is the likely diagnosis?
 A. bicipital tendinitis
 B. subacromial bursitis
 C. rotation cuff tear
 D. A/C joint separation
 ...C...
56. The dermatome which most closely corresponds to the deltoid region;
 A. C2
 B. C3
 C. C4
 D. C5
 ...C...
57. Proprioception is associated with which area of the nerve system?
 A. posterior columns
 B. cerebellum
 C. extra pyramidal
 D. lateral columns
 ...A...
58. A 17 year old girl has alternating hypostmia and parosmia. What would you use to test cranial nerve function?
 A. pinwheel, cotton swabs
 B. sweet, salty
 C. tuning fork, bell
 D. coffee, peppermint
 ...D...
59. A L5 transitional segment would most affect which disc level?
 A. L5-S1
 B. L4-L5
 C. L3-L4
 D. L2-L3
 ...B...
60. What is your suggested treatment for a patient with myositis ossificans?
 A. heat
 B. massage
 C. ultrasound
 D. ...C...
61. Which of these conditions precludes the use of therapeutic ultrasound?
 A. calcific bursitis
 B. adhesions
 C. vascular insufficiency
 D. ...D...
62. Medium frequency stimulation uses a current designed to maximize:
 A. depth of penetration
 B. polar effects
 C. duration of time
 D. accommodation of electrical current
 ...A...
63. Therapeutic ultrasound is most effective at the;
 a. fat muscle interface
 b. muscle belly
 c. tendon periosteal interface
 d. muscle with tendon
 ...C...

85. What is the most motion that occurs at C0-C1?

- A. flexion
 - B. extension
 - C. rotation
 - D. lateral flexion
- ...A (best) or B...

86. What would you suspect in a case of ascites with increased levels of serum amylase and lipase.

- A. polymyositis
 - B. obstructive bowel
 - C. pancreatitis
 - D. peritonitis
- ...C...

87. Which would show urinalysis with increased protein?

- A. nephrotic syndrome
 - B. nephritic syndrome
- ...B...

88. Beta carotene is a precursor to what vitamin?

- A. A
 - B. K
 - C. D
 - D. E
- ...A...

89. Where is Vitamin C most seen

- A. seeds, nuts and legumes
 - B. milk
 - C. tomatoes, green pepper and cabbage
- ...C...

90. Vitamin E is found in:

- A. yellow vegetables
 - B. fish oils and liver
 - C. wheat germ and legumes
- ...C...

91. A deficiency of what microelement lead to tetany?

- A. CA⁺⁺
 - B. sodium
 - C. potassium
 - D. magnesium
- ...A...

92. Which of the following will burn lipids the best

- a. strength
 - b. endurance
- ...B...

93. A 15 year old female is brought into your office with an asymptomatic 15° scoliosis and there is no aberrant motion. What would be your recommended course of care?

- A. do nothing and re-evaluate in six months
 - B. tell patient that it is normal
 - C. adjust to increase mobility
- ...C...

94. An older male is adjusted and has moderate bladder incontinence and they wet themselves

- A. adjust opposite direction
 - B. refer out
- ...B...

95. A 30 year old male jogger with bilateral leg numbness, bowel dysfunction and bladder incontinence History reveals that he felt 2 days ago while coming home. Based on the available information, what would you do next?

- A. refer to hospital
 - B. adjust
 - C. EMG
 - D. Do orthopedic and neurological exam and re-schedule a consultation
- ...A...

96. A 16 year old female presents with numbness, tingling and decreased strength in arms when held over her head. Case management would be:

- A. x-ray
 - B. refer to neurologist
 - C. passive monitor
 - D. MRI
- ...A?...

97. What is your management for an 8 year old male with Osgood-Schlatters?

- a. limit activity
- ...A...

98. Moderate neck pain headache s and mid thoracic pain in a middle aged male Uncle had AS grand father died of CVA, mother and grandmother had RA. BP is 136/88 and he is slightly obese. What would you NOT do next?

- a. complete musculo-skeletal workup
 - b. adjust with clinical chiropractic trial
 - c. do chiropractic x-rays and analysis
 - d. refer to a rheumatologist for serological
 - e. refer to a cardiologist
- ...C...

99. A 10 year old boy is patient. had a fracture femoral neck 2 weeks ago There is a diagram of his leg with metal rod and screws.



- A. osteosarcoma
 - B. slipped cap epiphysis
 - C. Legg-Calve-Perthe's disease
 - D. fracture of metal rod
- ...B...

100. 30 year old female with low back pain. Upon x-ray saw incidental but significant changes in sacrum, pelvis and proximal femur



- A. osteochochondroma
 - B. fibrous dysplasia
 - C. Paget's
 - D. HME
- ...B...

101. What is the most likely diagnosis?



- A. DJD
 - B. RA
 - C. tabes dorsalis
 - D. gouty arthritis
- ...A...

102. Three x-rays APOM, APLC, lateral extension view.



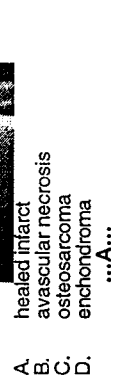
- A. dens fracture with displacement of C1
 - B. rheumatoid arthritis of cervical spine
 - C. agenesis of odontoid
 - D. Os odontoidemum
- ...A...

103. 60 year old male presents with knee pain.



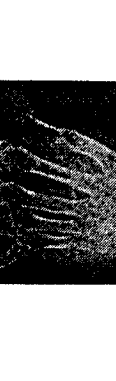
- A. healed infarct
 - B. avascular necrosis
 - C. osteosarcoma
 - D. enchondroma
- ...A...

104. X-ray of hand



- A. RA
 - B. OA
 - C. gout
- ...A...

105. The pictured orthopedic test is checking for involvement of the:



- A. anterior cruciate ligament
 - B. posterior cruciate ligament
 - C. medial collateral ligament
 - D. medial meniscus
- ...C...

107. When a doctor asks a patient, "Who do you live with?", they are looking for:
 A. chief complaint
 B. family history
 C. past medical history
 D. psycho-social history
 ...D...
108. A 16 year old female breaks out with total body hives. Which question is clinically significant?
 A. Do you have blackout spells
 B. Are you sexually active
 C. Is there a family history
 D. Are you taking any prescription drugs?
 ...D...
109. The part of the database that initiates patient evaluation:
 A. history
 B. physical exam
 C. lab tests
 D. scanning procedures
 ...D...
110. A 19 year old female had a car accident 3 days ago. She has headaches and dizziness. What is the most important factor?
 A. no back head rest
 B. car's equal size
 C. looking forward when hit
 D. she was aware it was going to happen
 ...A...
111. A 46 year old male presents with barrel chest and dyspnea. He says leaning on desk helps him breathe. Which is the appropriate question to ask?
 A. exposure to dust or particulate matter
112. A 28 year old woman has hyperlordosis and several degenerative discs. What other information would be relevant?
 A. previous systemic illness
 B. recent trauma
 C. family history of arthritis
 D. dietary habits
 ...C...
113. A man says he has arthritis. What other information do you need in order to diagnose Reiter's syndrome?
 A. other associated complaints
 B. has he had it before
 ...A...
114. A positive Gaenslen's test indicates:
 A. sacroiliac joint lesion
 B. sciatica
 C. disc herniation
 D. tensor fascia lata contracture
 ...A...
115. Which of the following would be done with a patient with anterior pelvic tilt and hyperlordosis?
 A. maintain abdominal tone
 B. strengthen erector spinae
 C. strengthen psoas and hamstrings
 D. strengthen quadriceps
 ...A...
116. Which of the following tests determine the patency of the radial and ulnar arteries?
 A. Bunnel-Littler retinacular test
 B. Adson's
 C. Allen's
 D. Eden's
 ...C...
117. Which of the following exercises are contraindicated in an athletic male with central spinal canal stenosis?
 A. flexion exercises
 B. lumbar extension exercises
 C. abdominal strengthening
 D. hamstring strengthening
 ...B...
118. Which of the following does NOT produce a thoracic kyphosis?
 A. scoliosis
 B. long thoracic nerve paralysis
 C. Pott's disease
 D. Scheuermann's
 ...B...
119. A 15 year old athletically active male presents with anterior leg pain that occurs after 10 minutes of exercise and reoccurs after rest. Which of the following would be most beneficial?
 A. running on a grassy surface
 B. running up hills
 C. vertical jumping for 10 minutes
 D. running 100 yard wind sprints for warm up
 ...A...
120. When a person is in the standing upright position, flexion and extension occur in the plane of motion, and ___ axis.
 A. sagittal, horizontal
 B. sagittal, vertical
 C. horizontal, horizontal
 D. sagittal, vertical
 ...A...
121. Which test best demonstrates nerve root compression?
 A. SLR
 B. well-leg raiser
 C. Bowstring
 D. Lindner's
 ...D...
122. Which of the following pair of tests best differentiates muscle strain and ligament sprain in the cervical area.
 A. Jackson's compression and cervical foraminal compression
 B. maximal cervical compression and George's test
 C. shoulder depressor and Soto Hall resisted ROM and passive ROM
 D. ...D...
123. A young boy presents with open growth plates. You would NOT use a heel lift because:
 A. femoral anteversion
 B. tibial deformity
 C. femoral torsion
 D. anatomical (true) short leg
 ...D...
124. What is the correct sequence for a post traumatic soft tissue injury?
 A. inflammation - regeneration - remission
 B. inflammation - remodeling - remission
 C. reaction - regeneration - remission
 D. reaction - regeneration - remission
 ...B...
125. A 26 year old female presents with right knee pain and decreased range of motion in the last 6 weeks. There is cast for the last 6 weeks. There is quadriceps atrophy and signs of fibrosis. Patella tendon raised with the foot in cephalad position. What is best management to increase range of motion in knee?
 A. quadriceps strengthening
 B. tibial manipulation
 C. hamstring strengthening
 D. femoral manipulation
 ...A...
126. The posterior drawer tests what ligament?
 A. anterior cruciate
 B. medial meniscus
 C. posterior cruciate
 D. medial collateral
 ...C...
127. A 65 year old female has right anterior thigh pain. It has been getting increasingly worse in the last 2-3 years. Upon examination a limp was noted and a right leg 1 inch shorter than left. Orthopedic tests are positive on right. X-rays will most likely reveal:
 A. congenital hip dislocation
 B. fracture of femur due to cancer
 C. sacroiliac arthritis
 D. degenerative hip disease
 ...A...
128. A patient presents with the forearm flexed and supinated. Where is the problem?
 A. biceps tendinitis
 B. rotator cuff
 C. subacromial bursitis
 D. subdeltoid bursitis
 ...A...
129. A 14 year old presents with pain on flexion and a stiff neck. Foraminal compression, shoulder depressor and Kemig's were positive:
 A. nerve root compression
 B. meningitis
 C. muscle strain
 D. disc
 ...B...
130. Beevor's sign is indicative of?
 A. cervico-cranial canal stenosis
 B. sciatica
 C. T7-T10 nerve involvement
 D. low pain threshold
 ...C...
131. A (+) Bechterew's test is accompanied by:
 A. protrusion of intervertebral disc
132. Which of the following orthopedic tests is used to differentiate a medial collateral ligament tear versus a medial meniscus tear?
 A. Screw home
 B. Drawer
 C. Apley's
 D. ...C...
133. The patient is supine and lifts one leg while the other heel is supported in the hand of the doctor. The doctor feels pressure in the other leg. What orthopedic test is described?
 A. Bechterew's
 B. Gaenslen's
 C. Bum's bench
 D. Hoover's
 ...D...
134. A 56 year old female presents with localized low back pain, muscle spasm and high fever. Motion is restricted due to pain. The pain occurred 2 days ago without provocation. A bone scan displays "hot spots" in the lumbar spine. Which of the following obtained in patient history is NOT a factor to her condition?
 A. spinal osteoarthritis
 B. diabetes mellitus
 C. steroid therapy
 D. recent surgery
 ...A...

135. A 1 month old baby presents with forceful, projectile vomiting, malabsorption and dehydration. Examination reveals peristaltic waves from left to right and muscle knots in the epigastric region.
 A. pyloric stenosis
 B. Hirschsprung's
 C. hiatal hernia
 D. esophageal atresia
 ...A...
136. A patient with tremors, exophthalmos and tachycardia probably has:
 A. hyperthyroidism
 B. hypoglycemia
 C. diabetes
 D. Cushing's
 ...A...
137. Which of the following is consistent in a patient with tympanites, bowel sounds, abdominal ascites and puffiness of the face?
 A. hepatitis/hepatomegaly
 B. nephrotic syndrome
 C. paralytic ileum/early intestinal obstruction
 D. cholecystitis
 ...B...
138. What clinical factor is involved with a patient with gout and pain in his foot?
 A. steroid injection
 B. dietary extravagance
 C. antibiotic injection
 D. allergy season
 ...B...
139. What diseased organ refers pain to the periumbilical area?
 A. liver
 B. pancreas
 C. small intestine
 D. bladder
 ...C...
140. A 67 year old man with dyspnea and productive chronic cough presents to your office. What other symptom would require a second opinion?
 A. expiratory wheezing
 B. hemoptysis
 C. spinal joint pain
 D. expectoration
 ...B...
141. Which of the following is a slowly progressive metabolic disease characterized by an initial phase of excessive bone resorption and a reactive phase of excessive bone formation?
 A. Paget's
 B. multiple myeloma
 C. osteolytic metastatic carcinoma
 D. hyperparathyroidism
 ...A...
142. A pregnant woman with untreated diabetes mellitus will result with:
 A. myxedema/moniliasis
 B. pubis p... (?)/condylooma
 C. acuminatum
 D. hyperthyroid trichomonas
 ...? Moniliasis?...
143. Which is not a cause of coronary heart disease?
 A. smoking
 B. obesity
 C. chronic bronchitis
 D. hypercholesterolemia
 ...C...
144. Most common cause of hypertension of the general population?
 A. renal
 B. essential
 C. endocrine
 D. neurological
 ...B...
145. Which of the following diseases is endemic to people from the Mediterranean?
 A. hepatitis
 B. yellow fever
 C. thalassemia anemia
 D. Vitamin B12 deficiency
 ...C...
146. Which of the following disease is endemic to the Southwestern United States?
 A. histoplasmosis
 B. coccidioidomycosis
 C. thalassemia anemia
 D. fish tapeworm
 ...B...
147. A 60 year old presents with recurrent upper back pain and neck pain. He is a smoker and heavy drinker. He has an enlarged liver, penumbilical pain and fixations at C5-6 and T2-3;
 A. Hashimoto's
 B. Crohn's disease
 C. abdominal aortic aneurysm
 D. esophageal varices
 ...D...
148. What test do you use to diagnose Crohn's disease and ulcerative colitis?
 A. stool ova study
 B. sigmoidoscopy
 ...B...
149. During auscultation what sounds are heard in the periphery?
 A. bronchial
 B. vesicular
 C. bronchovesicular
 ...B...
150. Which part of the physical may reveal the cause of chronic hypertension in a distal extremity?
 A. palpate abdomen
 B. bilateral blood pressure
 C. percuss thorax
 D. funduscopic
 ...B...
151. A patient presents with an expectorant producing cough for more than 2 years. What is most likely diagnosis?
 A. viral tracheobronchitis
 B. bacterial bronchopneumonia
 C. aspiration pneumonia
 D. chronic bronchitis
 ...C...
152. Papilledema is most commonly caused by:
 A. increased intraocular pressure
 B. increased intracranial pressure
 C. decreased intraocular pressure
 D. decreased intracranial pressure
 ...B...
153. People with migraine headaches should avoid:
 A. red wine
 B. vodka
 C. lemonade
 D. ice tea
 ...A...
154. A 62 year old female presents with resting tremors and bradykinesia that has progressed over the past few years. What is the likely area affected?
 A. posterior column disease
 B. cerebellum
 C. lateral spino-thalamic
 D. extrapyramidal
 ...D...
155. Which of the following is the most likely to cause bradycardia?
 A. hyperthyroidism
 B. acute fever
 C. increased intracranial pressure
 D. diabetes mellitus
 ...C...
156. What condition may have a persistent severe pain?
 A. hiatal hernia
 B. gall bladder obstruction
 C. pancreatitis
 ...C...
157. A patient presents with palpable mass around the umbilical area and acute pain at the midline of the abdomen. He also has hepatomegaly.
 A. hepatitis
 B. dissecting aortic aneurysm
 C. hematoma
 ...B...
158. A patient has edema of the posterior calf down to the foot with a localized red, warm and tender area. This most likely indicates:
 A. myxedema
 B. nephrotic syndrome
 C. congestive heart failure
 D. deep vein thrombosis
 ...D...
159. An obese 22 year old male presents with acute dyspnea of one hour duration with left-sided chest pain. He has a recent history of an emotionally stressful event. Exam reveals a high blood pressure, left lower chest pain, decreased excursion on the left and no breath sounds in the lower left field. This is most suggestive of:
 A. spontaneous pneumothorax
 B. asthma
 C. viral pneumonia
 D. acute bronchitis
 ...A...
160. Which of the following would predispose a patient to pneumothorax?
 A. hypertension
 B. thrombophlebitis
 C. chronic bronchitis
 D. obesity
 E. bronchiectasis
 ...C...
161. A 50 year old male presents with neck and back pain that began after playing golf yesterday. During exam the pupils dilate and constrict in response to accommodation but they do not respond to direct or indirect light reflex. Based on this information, what would your suspicion be?
 A. diagnosis of diabetes mellitus
 B. recent cholecystectomy
 C. current influenza
 D. exposure to sunlight and failure to wear sunglasses
 ...A...
162. Which of the following defects is characterized by a sternum which protrudes from a narrow thorax like a keel of a ship, with an increased anterior to posterior diameter?
 A. barrel chest
 B. pectus carinatum
 C. dowager hump
 D. pectus excavatum
 ...B...
163. A recently married 19 year old female is experiencing early morning nausea. She never had this before. What is the cause?
 A. peritonitis
 B. pregnancy
 C. liver disease
 D. thoracic subluxation
 ...B...

164. A 69 year old male with prolonged expiration, hyperresonance in the lung fields, mild wheezing, scattered rhonchi suggests possible;
 A. upper lung carcinoma
 B. congestive heart failure
 C. COPD
 D. pneumonia
 ...C...
165. A 63 year old male patient complains of thoracic pain that feels like weight on chest. He has a history of chronic sinusitis/bronchitis. There is no fever, productive cough and hemoptysis;
 A. ulcer
 B. musculoskeletal pain
 C. pneumothorax
 D. bronchiectasis
 E. carcinoma
 ...C...
166. Which of the following would least likely be seen upon visual inspection?
 A. myxedema
 B. acromegaly
 C. pheochromocytoma
 D. Parkinson's
 ...C...
167. A patient was able to pinpoint the area of pain.
 A. acute hepatitis
 B. peptic ulcer
 C. diverticulitis
 D. intestinal obstruction
 E. peritonitis
 ...C...
168. A 40 year old male patient who drinks and smokes presents with masculine facies most likely indicates;
 A. migraine
 B. tension
 C. hypoglycemia
 D. cluster
 ...D...
169. A 38 year old male presents with low back pain for the third time in two years. He also has recurrent headaches, blurred vision and extreme lateral deviation of the eye, and he gets myopia;
 A. MS
 B. myasthenia gravis
 C. ALS
 ...A...
170. If the external jugular vein is distended in the supine position, what position could you diagnose the cause?
 A. sitting up
 B. prone
 C. on left side
 D. on right side
 ...A...
171. Which of the following may cause absent femoral and popliteal pulses?
 A. acrocyanosis
 B. atherosclerosis
 C. Leriche's syndrome
 D. embolism
 ...C...
172. Which of the following is characterized by a generalized lack of pigment in the skin, hair and eyes?
 A. vitiligo
 B. albinism
 C. tinea versicolor
 D. nephrotic syndrome
 ...B...
173. Which of the following skin pathology is bluish?
 A. cherry angioma
 B. spider angioma
 C. venous star
 D. wheal
 ...C...
174. Which of the following is characterized by painful vesicles on the lip?
 A. aphthous stomatitis
 B. herpetic labialis
 C. basal cell carcinoma
 ...B...
175. A young boy is punched in the face. The black eye is called:
 A. contusion
 B. fracture
 ...A...
176. A female presents with acute abdominal pain, a midline abdominal bulge and pain for the last 12 hours. She is hypotensive, has a weak, rapid pulse and cool, moist skin.
 A. biliary obstruction
 B. appendicitis
 C. dissecting aneurysm
 D. hepatoma
 ...C...
177. Which of the following is a cause of iatrogenic hypertension?
 A. acute glomerulonephritis
 B. oral contraceptives
 C. coarctation of the aorta
 D. hypervitaminosis C
 ...B...
178. The signs and symptoms of vertebrovascular ischemia do not include which of the following?
 A. nausea, vertigo, vomiting
 B. difficulty walking, incoordination of extremities
 C. decreased deep tendon reflexes, muscle fasciculations
 D. visual problems, tinnitus, speech problems
 ...C...
179. A girl goes to school having skipped breakfast. At 10 AM she has a headache. This is most typical of which headache type?
 A. hypoglycemic headache
 ...A...
180. If you have an ectopic impulse that is not from the sino-atrial node, how will it affect the heart?
 A. arrhythmia
 B. extrasystole
 C. sinus tachycardia
 D. palpitations
 ...B...
181. A young boy says he is experiencing fluttering of his heart. What is his most likely diagnosis?
 A. atrial flutter
 B. sinus fibrillation
 C. palpitation
 D. arrhythmia
 E. vasovagal syncope
 ...C...
182. A 19 year old male presents with right knee pain for two weeks with unknown onset. His mother notices he has had a right sided limp for one month. Patrick's test increases the pain but there is no joint tenderness in the knee. What is your proper case management?
 A. x-ray both hips
 B. x-ray both knees
 C. manipulate right knee and hip
 D. right knee icing and ultrasound
 ...A...
183. What types of pain is this?
 A. somato-somatic reflex
 B. viscerosomatic reflex
 C. psychosomatic reflex
 D. somato-visceral reflex
 ...A...
184. What is most likely the cause of the pain?
 A. Osgood-Schlatter's
 B. patellar-femoral dislocation
 C. slipped femoral capital epiphysis
 D. patellar bursitis
 ...C...
185. To whom should you refer the patient?
 A. neurologist
 B. orthopedist
 C. osteopath
 D. psychologist
 ...B...
186. A 63 year old female presents with headaches and temporal pain. To whom would you refer?
 A. oncologist
 B. neurologist
 C. vascular specialist
 D. rheumatologist
 ...C...
187. A 28 year old male presents with a one year history of morning stiffness with bilateral S-I pain. He now has steepled posture, lumbar pain and limited respiratory excursion. What would the appropriate case management be:
 A. refer to a rheumatologist
 B. refer to an oncologist
 C. chiropractic care and refer to an oncologist
 D. chiropractic care and refer to a rheumatologist
 ...D...
188. What would be recommended in a male patient presenting with blurred difficult vision, severe persistent migraine headache, stiff neck with resisted cervical and head motion and photosensitivity?
 A. MRI and CT
 B. ortho exam
 C. fundoscopic exam
 D. adjust
 ...B or C...
189. To whom would you refer a patient with chest pain that is relieved by taking antacid?
 A. gastroenterologist
 B. cardiologist
 C. psychologist
 D. ...A...
190. A 63 year old female presents with fatigue, neck pain, chest weakness and frequent dyspnea and right upper quadrant pain. Exam reveals hepatomegaly, ankle edema, cyanosis of finger, nails and toes. What is the proper treatment and case management?
 A. refer to cardiologist immediately
 B. refer to internist for examination
 C. adjust neck and re-evaluate
 D. perform U/A and blood test
 ...B...
191. An older female presents with neck pain and spells of dizziness. She has edema in the feet, right ventricular hypertrophy and mild cyanosis in the fingers. What is recommended on the patient?
 A. refer to cardiologist
 B. refer to an internist
 C. adjust the lumbar
 D. do more blood tests
 ...A...

192. A 28 year old woman has a headache. She has difficulty maintaining balance and experience weakness of lower limbs. Radiograph indicates no pathological findings. Treatment?
 A. physiotherapy and traction
 B. refer to neurologist
 C. adjust and give exercises
 D. refer to internist
 ...B...
193. A patient comes in after a car accident, can't move her neck and has headaches. What would your next step be?
 A. full range of motion
 B. flexion-extension cervical view
 C. non-kinetic lateral cervical
 ...C...
194. A 36 year old female presents with back pain which she states started at work (she is a secretary). The patient resisted all orthopedic testing. She was sweating profusely, very nervous and grimacing throughout the physical examination. What should be your next course of care?
 A. do neurological exam
 B. do orthopedic exam
 C. refer psychological care
 D. adjust lumbar
 ...C...
195. An athlete presents with paresthesia, numbness, muscle weakness and decreased range of motion in cervical spine. Which of the following procedures should be performed with a diagnosis of brachial strain?
 A. specific cervical adjustments
 B. neuro exam and radiological study
 C. ice and traction cervical spine
 D. assess dietary deficiencies
 E. cervical collar
 ...B...
196. A 14 year old male is brought into your office. He is disoriented, hyperventilating, and cyanotic with contusions superficially. His mother said he was beaten up by other children.
 A. sit down and relax until patient is calm
 B. check him into the hospital (ER)
 C. x-ray
 D. refer to social services
 E. adjust mid-thoracic
 ...B...
197. When a patient has confirmed diffuse idiopathic skeletal hyperostosis (D.I.S.H.), what should they also be checked for?
 A. hypothyroidism
 B. diabetes mellitus
 C. Crohn's disease
 D. cholecystitis
 ...B...
198. Which of the following is a benign, frequently calcified lung tumor that is composed of tissue of the organ it is in and is described as a coin lesion in the lung?
 A. hamatoma
 B. hematoma
 C. teratoma
 D. parenchymal lipoma
 ...A...
199. You notice a calcified abdominal aorta on a film, its size must be at least ___ to indicate an aneurysm?
 A. 10 mm
 B. 20 mm
 C. 30 mm
 D. 40 mm
 ...D...
200. To view SI joints, what is the correct angle with a 40 inch FFD?
 A. 5° caudal
 B. 30° caudal
 C. 15° cephalad
 D. 30° cephalad
 ...C...
201. A 74 year old female presents with two week history of back pain. She also complains of fatigue and malaise. A-P, lateral lumbar and thoracic x-rays reveal compression fracture of T6 and L3 with marked generalized osteopenia. Elevated levels of which of the following indicate the poorest prognosis?
 A. serum calcium and phosphorus
 B. uric acid and calcitonin
 C. serum protein and sedimentation rate
 D. serum glucose and bilirubin
 ...C...
202. Which of the following is relieved by aspirin?
 A. osteomyelitis
 B. osteoid osteoma
 C. osteochondroma
 D. unicameral bone cyst
 ...B...
203. Lateral spinal stenosis from posterior degenerative changes, can best be evaluated on:
 A. lateral extension cervical
 B. lateral flexion cervical
 C. lateral neutral cervical
 D. cervical obliques
 ...D...
204. A 75 year old male fell on his buttocks. He had pain on trunk movement and neurological signs/feels are normal. He has a large hyperkyphosis. X-ray findings may show:
 A. ruptured disc
 B. anterior compression fracture
 C. facet imbrication
 F. muscle tear
 ...B...
205. Rib notching on the inferior border of rib;
 A. osteopenia
 B. coarctation of the aorta
 C. emphysema
 ...B...
206. A radiolucent cleft is noted and is caused by a separation of the cartilage from the anterior body. What is the best view to diagnose this?
 A. flexed lateral cervical
 B. extended lateral cervical
 C. neutral lateral cervical
 D. A-P open mouth lateral cervical
 ...B...
207. Apophysitis and osteoporosis are differentiated by:
 A. age
 B. weight
 C. height
 D. sex
 ...A...
208. In an acceleration-deceleration accident, you would have a hyperextension injury with:
 A. axial compression
 B. hyperflexion
 C. axial
 ...B...
209. A woman with increased blood calcium and alkaline phosphatase shows resorption with calcium density of the distal clavicle on radiograph. Which of the following is suggested?
 A. tuberculosis
 B. hyperparathyroidism
 C. hypocalcemia
 D. nephrotic syndrome
 ...B...
210. The most common spinal condition associated with ulcerative colitis is;
 A. scoliosis
 B. sacroiliitis
 C. spondylololsthesis
 D. spinal canal stenosis
 ...B...
211. Osteochondritis dessicans affects which of the following;
 A. lateral femoral condyle
 B. medial femoral condyle
 C. medial tibial condyle
 D. lateral tibial condyle
 ...B...
212. The normal hematocrit for healthy adult male is:
 A. 19.0
 B. 27.0
 C. 47.0
 D. 82.0
 ...C...
213. Which normocytic anemia has a decreased hematocrit but an increased reticulocyte count?
 A. hemolysis
 B. polycythemia vera
 C. pernicious anemia
 D. iron deficiency anemia
 E. cholestasis
 ...A...
214. Which of the following lab values is the first to rise within a few hours after a myocardial infarct?
 A. LDH
 B. SGOT
 C. CPK
 D. SGPT
 ...C...
215. What is the most appropriate lab test for insidious pain in the great toe.
 A. uric acid
 B. creatinine
 C. thyroxine
 D. alkaline phosphatase
 ...A...
216. In a patient with hepatic dysfunction, what test would you run?
 A. BUN (possible answer)
 ...B...
217. The sensory portion of the corneal reflex is via the _____ nerve.
 A. VII
 B. V
 C. IV
 D. I
 ...B...
218. The physical findings of L5 radiculopathy most closely resembles;
 A. tarsal tunnel syndrome
 B. peroneal nerve paralysis/injury
 C. tibial neuritis
 D. Guillain-Barré syndrome
 ...B...
219. Which of the following is related to Klumpke's paralysis?
 A. hyperabduction syndrome
 B. brachial plexus neuropathy
 C. costoclavicular syndrome
 ...B...
220. Which of the following is characteristic of an UMNLL?
 A. spastic paralysis
 B. hyporeflexia
 C. atrophy
 D. hypotonia
 ...A...

221. Which of the following is the most accurate sign of a mechanical nerve root lesion?
 A. sharp and shooting pain
 B. radiating pain
 C. unilateral hyporeflexia
 D. a positive straight leg raise
 ...B...
222. What produces stabbing or knife like pains?
 A. reflex esophagitis
 B. tic douloureux
 C. Bell's palsy
 D. myositis
 ...B...
223. Klumpke's Palsy is caused by injury to which plexus?
 A. cervical
 B. brachial
 C. lumbar
 D. sacral
 ...B...
224. A 26 year old female comes into the office with neck pain, stiffness, and a positive Lhermitte's. What is the condition?
 A. strain of cervical musculature
 B. multiple sclerosis
 C. meningitis
 D. rheumatoid arthritis
 ...B...
225. A 68 year old male presents with a history of a stiff neck, an ataxic gait and (+) Rombergs. He complains that it is difficult to walk in the dark. He is able to do the finger to finger test with eyes open.
 A. lateral spinal tract
 B. posterior column
 C. cortical spinal tract
 D. cerebellar
 ...B...
226. A patient has weakness of wrist flexion and a depressed triceps reflex. What nerve root is suspected?
 A. C6
 B. C7
 C. C8
 D. T1
 ...B...
227. A 28 year old male with 2 weeks of severe headache, right periorbital pain with lacrimation that wakes him up after 2 to 3 hours of sleep. He had similar episodes 3 months ago.
 A. brain tumor
 B. Bell's palsy
 C. cluster headaches
 D. migraine headache
 ...C...
228. Which of the following cranial nerves is exclusively motor?
 A. vagus
 B. facial
 C. trigeminal
 D. optic
 ...no answer A best?...
229. Which cranial nerve is not tested with the cardinal fields of gaze?
 A. III
 B. IV
 C. V
 D. VI
 ...C...
230. Which of the following is the most appropriate management for a balanced lumbar major scoliosis of 30° in a 36 year old patient?
 A. body cast
 B. kinetic brace
 C. chiropractic adjustment
 D. prescribe aerobic exercises
 ...C...
231. Which therapy is contraindicated for acute cervical pain?
 A. cryotherapy within 48 hours
 B. ultrasound after 48 hours
 C. passive range of motion after 48 hours
 D. hydrocollator within 48 hours
 ...D...
232. During a diathermy session the patient should feel ____ throughout the session.
 A. no sensation
 B. a mild warmth
 C. a "hot" feeling
 D. alternating chills and fever
 ...B...
233. Which is contraindicated for ice?
 A. muscle contusion
 B. acute bursitis
 C. local circulation decreased
 ...C...
234. Cervical traction is contraindicated in which of the following:
 A. osteoporosis
 B. multiple sclerosis
 C. canal stenosis
 ...A...
235. A 42 year old male has right shoulder pain of 2 months duration. There was no etiology of the pain, and the pain was of gradual onset. He has moderate pain with decreased range of motion. MRI reveals adhesive capsulitis. What would be contraindicated in this case?
 A. shoulder brace
 B. passive range of motion
 C. hot packs
 G. manipulation
 ...A...
236. What is the greatest range of motion at the coxofemoral joint?
 A. flexion
 B. extension
 C. abduction
 D. adduction
 ...A...
237. What muscle is located superficially to the midshaft of the clavicle?
 A. pectoralis minor
 B. trapezius
 C. deltoid
 D. platysma
 ...D...
238. Which position of the foot will the posterior tibial tendon be best palpated?
 A. dorsiflexion, inversion
 B. plantar flexion, inversion
 C. dorsiflexion, eversion
 D. plantar flexion, eversion
 ...B...
239. When the sternoclavicular joint dislocates, what position is the head of the clavicle in:
 A. superior, medial
 B. anterior, medial
 C. lateral, inferior
 D. lateral, superior
 ...A...
240. Which of the following muscles are responsible for hip flexion?
 A. quadriceps
 B. iliopsoas
 C. adductor magnus
 D. sartorius
 ...B...
241. What muscles are the primary hip flexors?
 A. iliopsoas
 B. sartorius
 C. rectus femoris
 D. gracilis
 ...A...
242. Which is the strongest atlanto-axial ligament?
 A. alar
 B. transverse
 C. apical
 D. inferior cruciate
 ...B...
243. Which structure limits anterior motion of atlas on axis?
 A. transverse ligament
 B. alar ligament
 C. anterior longitudinal ligament
 D. apical ligament
 ...A...
244. The normal vertebral motor unit has ____ number of motions.
 A. 4
 B. 5
 C. 6
 D. 7
 ...C...
245. The caudal portion of thyroid cartilage is palpated at what level?
 B. C3
 C. C5
 D. C7
 ...C...
246. What muscle is involved in the extension of the shoulder?
 A. deltoid
 B. infraspinatus
 C. supraspinatus
 D. pectoralis
 ...A...
247. Which muscle is a 1° internal rotator of the shoulder?
 A. infraspinatus
 B. teres minor
 C. latissimus dorsi
 D. posterior deltoid
 ...C...
248. What muscle does external rotation of the shoulder involve?
 A. rhomboids
 B. infraspinatus
 C. pectoralis major
 D. posterior deltoid
 ...B...
249. Which food has the lowest caloric value?
 A. butter
 B. spinach
 C. chocolate
 D. white bread
 ...B...
250. What vitamin aids in healing and is an antioxidant?
 A. vitamin A
 B. thiamin
 C. vitamin C
 D. vitamin D
 ...C...
251. Which foods are rich in vitamin D?
 A. legumes and wheat germ
 B. green leafy and red palm oil fish liver oil
 C. ...C...
252. Which vitamin helps with the absorption of calcium and iron.
 A. ascorbic acid
 B. thiamine
 D. pyridoxine
 ...A...

253. Diarrhea, flatulence, glossitis and cheilosis are classic of _____ deficiency.

- A. Vitamin A
- B. Vitamin C
- C. folic acid
- D. pantothenic acid

...C...

254. Fiber is highly recommended in diet because:

- A. cures hemorrhoids
- B. massages alimentary canal
- C. blocks mineral absorption
- D. fully digested

...B...

255. Which of the following aid in the management of carpal tunnel syndrome?

- A. B1
- B. B3
- C. B6
- D. B12

...C...

256. What microelement encourages liver production of the glucose tolerance factor?

- A. zinc
- B. selenium
- C. chromium
- D. magnesium

...C...

257. The technique of carbohydrate loading is used most effectively to:

- A. rapid weight loss before an athletic event
- B. increased muscle strength
- C. increased recovery time after an athletic event
- D. increased muscle endurance

...D...

258. Which mineral is indicative in an Immune deficiency?

- A. zinc
- B. selenium
- C. Vitamin D
- D. Vitamin C

...A...

259. Which of the following are signs and symptoms of Vitamin A toxicity?

- A. hyperkalemia, psychosis, and GI disorders
- B. headache, hepatomegaly, peeling skin
- C. anorexia, renal failure, metastatic carcinoma.
- D. hypothermia, coma

...B...

260. A patient with low back pain has scoliosis with a left convexity and a left posterior transverse of L5 is fixated on extension. What is the proper pisiform contact correction.

- A. left thenar contact on right mamillary process
- B. left pisiform contact on left mamillary process
- C. right pisiform on right mamillary process
- D. right pisiform contact on left mamillary process

...D...

261. In an acute phase what is the most appropriate initial treatment?

- A. adjust as many times to increase nerve flow
- B. at different phases do to allow the body to heal itself

...B?...

262. To adjust a left convexity scoliosis with a right prominent transverse process using a double thenar contact the patient should be;

- A. combination
- B. supine
- C. prone

...D...

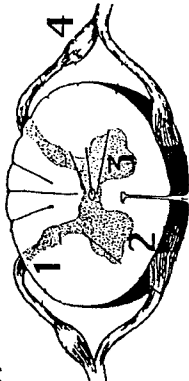
263. What diversified listing would most likely correlate with the diagram above?



- A. superior
- B. inferior
- C. posterior
- D. anterior

...B...

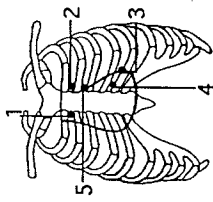
264. Which one represents direct pyramidal tract?



- A. 1
- B. 2
- C. 3
- D. 4

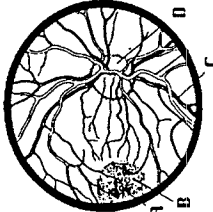
...B...

265. Normally the S1 sound is best heard at which location?



- A. 1
- B. 2
- C. 3
- D. 4

266. Where is the fovea located at?



- A. 1
- B. 2
- C. 3
- D. 4

267. Which picture shows a transverse section of thoracic vert?



...B...

268. Identify the radiographic condition;



- A. unilateral calcification of iliolumbar ligament
- B. sacroiliitis
- C. unilateral sacralization of L5
- D. facet tropism

...A...

269. A 12 year old female patient presents complaining of one month low back pain and fatigue. There was no history of trauma. Exam reveals tenderness and muscle spasm at L1. X-Ray shows flattened L1, IVD was normal, UA and ESR \ normal.



- A. AS
- B. TB
- C. infection
- D. eosinophilic granuloma

...D...

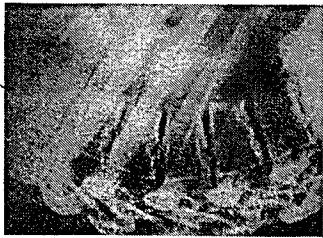
270. A 45 year old male presents with bilateral leg numbness and pins and needle sensation. Based on the information and the radiograph which of the following would be next in your course of care;



- A. flexion-extension film
- B. adjust patient prone
- C. stretching and strengthening exercises
- D. refer for surgery

...C...

271. Identify the following condition;



- A. infection
B. osteoporosis
C. Scheuerman's disease
D. TB

...C...

272. A 24 year old male presents with a 2 month history of a warm, swollen painful left knee. He also has a two year history of general stiffness, and a two week history of right ankle pain. Which would be most significant?

- A. WBC < 11,000
B. ESR: 28
C. Uric acid:3
D. HLA-B27 is present

...B...

273. The patient's probable diagnosis is;

- A. rheumatoid arthritis
B. gout
C. ankylosing spondylitis
D. psoriatic arthritis

...B...

274. A 25 year old female presents with fatigue and a history of right knee pain for six weeks. Her right knee is warm and effused. She has had back pain and stiffness over the past two years. She cannot fully flex her lumbar spine. She has pitting of several fingernails and an erythematous scaly plaque near the umbilicus. She has swelling and pain in her wrist and hand. The PIP and DIP joints of her right ring finger are swollen. Which is a likely cause of the back pain and stiffness?

- A. lateral entrapment syndrome
B. disc protrusion
C. spondylitis
D. spondyloilsthesis

...C...

275. The above condition is best classified as?

- A. dermatomyositis
B. nonarticular rheumatoid arthritis
C. neurogenic arthropathy
D. seronegative spondyloarthropathy

...D...

276. What would be the best diagnosis?

- A. gout
B. Reiter's
C. psoriatic arthritis
D. rheumatoid arthritis

...C...

277. What would her hand x-ray show?

- A. "pencil in a cup" deformity
B. soft tissue calcification
C. rheumatoid nodules
D. tophi

...A...

278. A 35 year old postal worker says when he walks, he has shaky hands and feet. He also presents with nystagmus and scanning speech. He has a positive Babinski bilaterally and has hyperreflexia. He is unable to perform movements. Which diagnosis can be eliminated?

- A. too many symptoms to be from one lesion
B. chronic progressive disease
C. lesion is above the tentorium
D. cerebellar lesion

...C...

279. What diagnosis is most likely?

- A. ALS
B. polio
C. multiple sclerosis
D. ...D...

280. A 19 year old presents with pain in right knee for a two week duration. His mother states he has had a right sided limp for the past month. Patrick's test is negative but patient feels pain in the knee during the test. Upon digital palpation of the knee, there was no pain elevated.

- A. x-ray both hips
B. x-ray both knees
C. ...A...

281. Which is the most likely diagnosis?

- A. Osgood Schlatter
B. slipped capital epiphysis
C. congenital hip dysplasia
D. Legg-Calve-Perthe's

...B (if 9years old)...

282. The type of pain is likely to be;

- A. somatosomatic
B. viscerosomatic
C. somatovisceral
D. psychosomatic

...A...

283. A 55 year old male presents with mid-thoracic pain. X-ray shows no fractures or pathological processes. After two weeks, he has numbness from his knees down and more acute thoracic pain. Your best clinical impression is:

- A. muscular tear
B. costochondral separation
C. metastatic carcinoma
D. thoracic radiculitis

...C...

284. What is representative of ventricular depolarization?

- A. ST segment
B. QRS wave
C. inverted T wave
D. Q wave

...B...

285. What is the most common finding on examination of acute otitis media?

- A. pain on slight tugging of auricles
B. loss of light reflex
C. edema of external canal
D. ...B...

286. Pain in tongue and hard palate relieved by taking nitroglycerin is suggestive of?

- A. angina pectoris
B. MI
C. ...A...

287. A nine year old boy presents with fever and a macular rash. This most suggests;

- A. rubella
B. scarlet fever
C. rheumatic fever
D. ...C?...

288. Upon ophthalmoscopic exam, normal pulsations may be seen where in the retina?

- A. arteries only
B. veins only
C. both arteries and veins
D. only in capillaries

...B...

289. A cough which is better when patient sits up may be seen in;

- A. lung abscess
B. TB
C. pleural effusion
D. pulmonary embolism

...C...

290. Pain referred from the epigastrium to the tip of the right shoulder would most indicative of?

- A. acute appendicitis
B. duodenal ulceration
C. cholecystitis
D. renal lithiasis

...C...

4. 1.1

300. A patient presents with headache, fever, posterior cervical muscle spasm, tachycardia, weakness and irritability. The best diagnosis is?

- A. migraine headache
B. meningitis
C. middle ear infection
D. cluster headache

...B...

301. Orthopnea is most likely seen with which condition?

- A. reflux esophagitis
B. emphysema
C. angina pectoris
D. left sided heart failure

...D...

302. A 42 year old male presents with swelling in a single metacarpal joint with tenderness, redness and decreased range of motion. What condition would this NOT be?

- A. RA
B. septic arthritis
C. acute gout
D. osteoarthritis

...D...

303. In auscultating breath sounds at the 1st and 2nd intercostal spaces anteriorly, and at the interscapular region, the sounds are:

- A. broncho-vesicular
B. vesicular
C. tracheal
D. bronchial

...A...

304. What is most suggested in a patient with a chief complaint of fatigue, can't sleep, and diffuse pain?

- A. emphysema
B. fibromyalgia
C. hypertension
D. pulmonary effusion

...B...

305. A 50 year old female with round, raised, irregular brown and blue expansile lesion of the skin?

- A. malignant melanoma
B. fungoides
C. Tinea versicolor

...A...

306. Spider angiomas are best characterized as being?

- A. more prevalent on lower extremities
B. bluish in color
C. a malignant melanoma precursor
D. a normal variant

...D...

307. Which of the least likely cause of osteoporosis?

- A. heparin replacement
B. corticosteroids
C. hepatitis
D. Cushing's

...C...

308. A boxer has had mid thoracic and right shoulder pain since a fight two days ago. Which of the following is not likely to be a cause of his pain pattern?
 A. bruised liver
 B. rib fracture
 C. subluxation
 D. stomach injury
 ...D...
309. Which of the following presents the greatest risk of heart disease?
 A. stress
 B. blood triglycerides
 C. tobacco smoking
 D. inactivity
 ...B...
310. Severe, recurrent dizziness lasting 5 to 15 seconds after a person goes from lying down to sitting or standing is characteristic of:
 A. transient ischemic attacks
 B. vertebral artery insufficiency
 C. Meniere's syndrome
 D. benign positional vertigo
 ...D...
311. Which of the following conditions would be found primarily in older individuals and not young ones:
 A. trigeminal neuralgia
 B. migraine headache
 C. tension headache
 D. paranasal sinusitis
 ...A...
312. Which condition may be caused by mid-thoracic compression fractures;
 A. Klippel-Feil syndrome
 B. gibbus
 C. ...C...
313. A 12 year old presents complaining of pinching in the right inguinal region. Upon examination, a small mass was noted. Light digital pressure causes the mass to retract into the abdominal cavity. Which of the following is the most dangerous complication that can result?
 A. systemic infection
 B. onset of necrosis
 C. inguinal pain
 D. internal bleeding
 ...B...
314. Which would most likely lead to splenic rupture?
 A. congenital heart failure
 B. acute appendix mononucleosis
 C. acute cholecystitis
 ...C...
315. Which test would you use initial for a patient with dizziness?
 A. Romberg's
 B. Rinne
 C. Weber
 ...A...
316. In performing a Gonstead sitting chair adjustment with a laterally fixated atlas the patient's head should be:
 A. rotated 45° to the side of contact
 B. rotated 45° opposite the side of contact
 C. slightly laterally flexed to the side of contact
 D. slightly laterally flexed opposite the side of contact
 ...C...
317. What palpation landmark is located at the level of the 5th cervical vertebra?
 A. carotid tubercle
 B. hyoid bone
 C. first cricoid ring
 D. lower portion of the thyroid cartilage
 ...D...
318. What is the best technique for the case management of a patient with low back pain which increases with rotational stress?
 A. lumbar pull
 B. flexion-distraction
 C. side lying
 D. sitting
 ...B...
319. What would be indicated on a subluxated L3 with increased shearing and hyperlordotic lumbar curve;
 A. double thenar on high low
 B. pisiform unsupported abdominal
 C. push/pull on bench type
 ...A?...
320. During what stage of life does syringomyelia develop?
 A. infancy
 B. first decade of life
 C. 30-40
 D. 50-60
 ...A if onset, (C if symptoms)...
321. What nerve supplies the posterior aspect of the heel?
 A. tibial
 B. obturator
 C. femoral
 D. deep peroneal
 ...A...
322. Which of the following is not associated with CN V?
 A. palpation of masseter muscles
 B. corneal reflex (wisp of cotton)
 C. gag reflex
 D. sensation to face
 ...C...
323. A patient has loss of two-point discrimination, but proprioception and light touch are still present. Which is likely to be the affected lobe?
 A. temporal
 B. parietal
 C. occipital
 D. frontal
 ...B...
324. A patient with an 8 year history of multiple sclerosis would most likely relate that they were taking which of the following prescription medications?
 A. histamine
 B. cortisone
 C. barbiturates
 D. muscle relaxers
 ...B...
325. The sensory innervation of T2 will be found?
 A. lateral upper arm
 B. first two digits
 C. axilla
 D. nipple
 ...C...
326. A patient shows weakness upon dorsiflexion with inversion of the foot. Plantar flexion with eversion is strong. Which is the involved nerve?
 A. tibial
 B. common peroneal
 C. deep peroneal
 D. L5 nerve root
 ...C...
327. An 83 year old female patient presents with resting tremor, cogwheel motion in passive movement, and generally slow movement. She is likely suffering from?
 A. hepatolenticular degeneration
 B. Huntington's chorea
 C. paralysis agitans
 D. multiple sclerosis
 ...C...
328. Which of the following is not innervated?
 A. peristoleum
 B. meniscus
 C. tendon
 D. ligament
 ...B...
329. What is the most likely pupillary finding in a patient that presents with headaches, neck pain, and a recent history of a stab wound on the right side of the neck that completely interrupted the cervical sympathetic chain?
 A. dilated right
 B. constricted right
 C. dilated bilaterally
 D. constricted left
 ...B...
330. Most characteristic of Parkinson's disease is:
 A. slapping tremor
 B. intention tremor
 C. hand shakes all the time
 D. tremors while asleep
 ...D...
331. A 60 year old female runner logs 60 miles a week. She recently hurt her hip with a mis-step off a curb. Medical x-rays in recumbent position are negative. Three adjustments to the left ilium has not reduced the problem. What would you do?
 A. standing A-P and lateral lumbo/pelvic CT
 B. bone scan
 C. HLA B-27
 D. ...A...
332. A patient hurt his back lifting a 150 lb. box. He has pain in low back and SI joint. X-ray shows subluxation of L4 and left SI as well as a grade II anterolisthesis of L5. What is the worst sign to prevent conservative care?
 A. + Valsalva
 B. + straight leg raiser
 C. hypoesthesia over lateral leg (L5)
 D. ...C...
333. Which of the following would a person with chronic lumbar facet syndrome be least able to do?
 A. abdominal crunches
 B. stationary bicycle
 C. hamstring stretches
 D. leg raises
 ...D...
334. 65 year old female presents with severe cervical and thoracic pain. She is 4'9" tall, 98 pounds and last saw a chiropractor six years ago. The most appropriate management of this patient is?
 A. refer for anti-inflammatory and drug treatment
 B. rest in bed with ice for two weeks
 C. take x-rays and adjust if appropriate
 D. refer for neurosurgical consult
 ...C...
335. A patient has a history of migratory joint pain. Which test would you order first?
 A. blood chemistry
 B. radiographs
 C. CT
 D. MRI
 ...A...
336. A patient has pain in his anterior shoulder that doesn't go away. Your next step would be:
 A. x-ray of chest
 B. check shoulder arm syndrome
 ...no answer...

337. A young female presents with pain in her hand and tender nodules at the end of her digits that are irritated by cold and emotional stress. She occasionally has red ulcers. What question would you ask to help you make diagnosis?
 A. How much alcohol do you drink?
 B. How much do you smoke?
 C. Do you work with your wrist flexed?
 D. Do you urinate a lot?
 ...B...
338. What is not appropriate for the management of fibromyalgia?
 A. light aerobic exercise such as walking
 B. home cryotherapy
 C. evaluation of person's depression state
 D. develop better sleep patterns
 ...B...
339. 25 year old male presents with fever, chills and right knee pain. On examination, the right knee is swollen, warm and tender. Radiographs reveal a distended joint capsule. What would be the next procedure?
 A. motion palpation
 B. trial manipulation
 C. aspiration
 D. arthroscopy
 ...C...
340. A 36 year old male presents with foot/ankle pain after hiking the previous weekend. There is tenderness in the third metatarsal. Radiographs were negative for both fracture and pathology. What is your initial treatment?
 A. MRI
 B. retake radiographs in two weeks
 C. manipulate the foot
 D. ...B...
341. Which would you NOT do in a patient with a torn or stretched Achilles tendon?
 A. tape ankle in dorsiflexion
 B. 1/4 inch heel lifts bilaterally
 ...A...
342. The chest x-rays of a patient with chronic emphysema would not exhibit which of the following?
 A. prominent retrosternal space
 B. highly arched diaphragm on the lateral projection
 C. hyperlucent lung fields
 D. enlarged pulmonary artery
 ...B...
344. A patient's chest film demonstrated a solitary lesion with an air fluid level. What is the diagnosis?
 A. abscess
 B. mitral stenosis
 C. asthma
 D. chronic bronchitis
 ...A...
345. Which of the following would cause left sided straightening, atrial enlargement and pulmonary artery enlargement?
 A. mitral stenosis
 B. tricuspid stenosis
 C. pulmonary regurgitation
 D. aortic regurgitation
 ...A...
346. In patient presenting with Down's syndrome, ankylosing spondylitis, rheumatoid arthritis, psoriatic arthritis or Reiter's syndrome, which of the following x-rays would be taken before initiating cervical adjustments?
 A. pillar view
 B. cervical oblique
 C. flexion lateral cervical
 D. extension lateral cervical
 ...C...
347. Brain stem symptomatology may be commonly associated with the abnormal position of the odontoid superior to ___ line.
 A. Ferguson's
 B. Chamberlain's
 C. atlas plane
 D. George's
 ...B...
348. Approximately what percent of gallstones are visible and readily identifiable on a plain film radiograph?
 A. 1
 B. 10
 C. 50
 D. 90
 ...B...
349. In a T2 weighted magnetic resonance image, the cerebro-spinal fluid and healthy intervertebral discs have a high intensity signal and will appear:
 A. dense
 B. white
 C. black
 D. blurred
 ...B...
350. What is the most common site of elbow fracture in children?
 A. supracondylar
 B. epicondylar
 C. intercondylar
 D. condylar
 ...A...
351. A 26 year old male presents with swelling of right knee. X-ray reveals erosion of the femoral-tibial articulation. What could account for the etiology?
 A. anterior cruciate rupture
 B. medial collateral tear
 C. extensive use of knee brace
 D. arthroscopic surgery
 ...D...
352. Pain in the ankle while walking down stairs or downhill is problem in ___ joint?
 A. mortise (talotibial)
 B. talofibular
 C. tarsal
 D. ...A...
353. Which ligament restricts rotation of the head?
 A. alar
 B. transverse
 C. capsular
 D. apical
 ...A...
354. When associated with anemia, which of the following would indicate hemolytic anemia?
 A. uremia
 B. jaundice
 C. waxy skin
 D. pica
 ...B...
355. What effects the yellow color in urine?
 A. specific gravity
 B. blood
 C. glucose
 D. ketones
 ...B...
356. A 74 year old male presents with a recent onset of throbbing headaches in the parieto-temporal region. He also has had recurrent joint pain, visual disturbances and has felt ill for the last two weeks. In addition to a CBC, what other test would complete the profile?
 A. UA
 B. LE prep
 C. ESR
 D. ...D...
357. What test is used to determine the rate of absorption of B-12?
 A. Benedict's
 B. Coombs
 C. Dick
 D. Schilling
 ...D...
358. A patient presents with cheilosis and angular stomatitis. The patient may benefit from which of the following nutritional therapies?
 A. essential fatty acids
 B. riboflavin
 C. vitamin C
 D. vitamin D
 ...B...
359. A patient with goiter should be advised to avoid the following foods:
 A. cabbage, soybeans
 B. milk, eggs, cheese
 C. liver, kidney, other organ meats
 D. wheat, corn, barley
 ...A...
360. Which modality will most likely cause endorphin release?
 A. 3-5 Hertz interferential
 B. 120-130 Hertz
 C. pulsed galvanic
 D. ...A...
361. Which of the following modalities has bactericidal effects?
 A. ultrasound
 B. infrared
 C. cold quartz ultraviolet
 D. hot quartz ultraviolet
 ...C...
362. Which of the following techniques would be used to increase joint range of motion by contacting the specific muscle and allowing the antagonist muscle to relax.
 A. reciprocal inhibition
 B. proprioceptive neuromuscular facilitation
 C. ...C...
 D. petrissage
 ...B...
363. A male presents with a quadriceps contusion. What would be most therapeutic?
 A. stretch quadriceps
 B. exercise quadriceps
 C. brace affected knee
 D. ...A...
364. Which of the following depicts a median sagittal view of a thoracic vertebra?

 A. ...
 B. ...
 C. ...
 D. ...
 Identify the fracture in the diagram below.

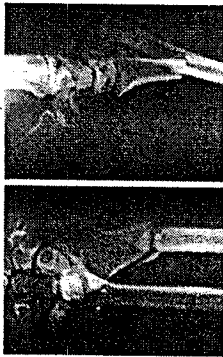
 A. intercondylar fracture
 B. compaction fracture
 C. Monteggia fracture
 D. comminuted fracture
 ...C...

366. A 52 year old female presents with low back and bilateral leg pain. The x-rays suggest possible;



- A. TB of pelvis
- B. multiple myeloma
- C. osteolytic metastatic carcinoma
- D. fibrous dysplasia
- ...C...

367. Radiographs of a man who fell on his outstretched hand reveal;



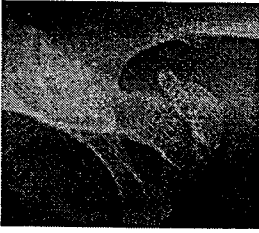
- A. Galeazzi fracture
- B. perilunate dislocation
- C. Colles fracture
- D. scaphoid fracture
- ...A...

368. A 50 year old male presents with low back pain of six months duration and urinary incontinence for the last 6 weeks. His lateral lumbar x-ray suggests what condition?



- A. metastatic carcinoma
- B. Paget's disease
- ...A...

369. A 30 year old female presents in your office with a history a hamstring injury 8 years ago. What is your diagnosis based on this information and the radiographs below;



- A. ischial tuberosity avulsion fracture
- B. gout
- C. non-union of ischium 2° to Paget's

370. Which technique uses a knee-chest table?
Gonstead
...A...

370. Which of the following is the most common cause of hypocalcemia?
486. renal tubule dysfunction
487. parathyroidectomy
488. obstructive bowel syndrome
489. malnutrition
...B...

371. Which of the following does not occur when the right SCM contracts?
A. right head rotation
B. left head rotation
C. extension of the head
D. right lateral flexion of the head
...A...

372. The cephalic portion of thyroid cartilage will be found at which vertebral level;
A. C2
B. C4
C. C6
D. T1
...B...

373. Which of the following muscles attaches to the pes anserine bursa?
a. adductor longus
b. piriformis
c. semitendinosus
d. vastus medialis
...C...

374. Which of the following is an external rotator of the shoulder?
A. teres major
B. infraspinatus
C. latissimus dorsi
D. trapezius
...B...

4. 1 4
383. Which is an appropriate cervical adjustment?
A. double thenar push
B. double transverse
C. side lying pull
D. modified rotary break
...D...

384. What is the adjustment of choice for a rotation only correction?
A. transverse pisiform
B. transverse pisiform with torque
C. double pisiform with torque
...A...

385. Which technique is concerned with the level of the disc?
A. Thompson
B. S.O.T.
C. Gonstead
D. Grostic
...C...

386. Which of the following is contraindicated for a spondyliolsthesis;
A. traction
B. flexion exercises
C. side posture
D. knee chest
...D...

387. Diffuse idiopathic skeletal hyperostosis is synonymous with which of the following:
A. Behçet's syndrome
B. Sjögren's syndrome
C. Forrester's disease
D. Heberden's nodes
...C...

388. Which view best demonstrates the fovea capitis?
A. L/S spot
B. AP pelvis
C. frog leg hip
...B...

389. What does the "s" in the "abc's" of x-ray analysis stand for?
A. symmetry
B. skeletal structure
C. soft tissue
D. swollen
...C...

390. What is used in x-ray filtration?
A. tin
B. copper
C. lead
D. aluminum
...D...

391. The fovea capitis is best demonstrated by the following view:
A. A-P pelvis
B. P-A chest
C. tunnel knee
D. lateral sacrum
...A...

375. Cervical extension is limited by all except?
A. nuchal ligament
B. superior articular process contacting inferior articular process
C. anterior longitudinal ligament
D. spinous contact
...A...

376. Adjustment of which area is most likely to affect splenius capitis muscle?
A. occiput
B. C2
C. C3
D. T3
...A...

377. Regarding an L5 adjustment, which would be contraindicated for an L5 spondyliolsthesis?
A. hand pisiform on Hi-Lo table
B. hand pisiform on knee-chest table
C. side posture push (pisiform) on flat bench
D. side posture pull on a flat bench
...B...

378. A crossed bilateral pisiform adjustment is appropriate for which segmental level?
A. C5
B. T6
C. L3
D. sacrum
...B...

380. Which of the following is contraindicated for spinal traction technique?
A. degenerative disc disease
B. lower limb vascular insufficiency
C. spondyliolsthesis
D. lateral recess stenosis
...B...

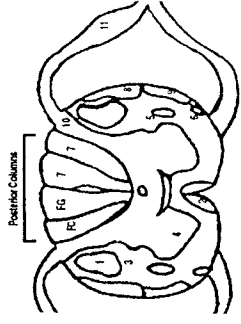
381. A 56 year old male patient presents with low back pain. He has pain and numbness in both legs. Upon examination a 15% spondyliolsthesis of the L4 vertebra is noted. What is the proper course of treatment?
A. adjust and prescribe corrective exercises
B. adjust on pelvic bench with pisiform push
C. adjust on pelvic bench with pull move refer to surgeon
D. ...D...

382. Which of the following should be observed when using an adjustive technique which utilizes shoulder drop?
A. elbow slightly bent
B. elbow straight
C. episternal notch above contact point
D. line of drive through the opposite shoulder
...A...

392. X-ray shows necrotic area in upper lobe of kidney. What would you suspect?
 A. TB
 B. nephroblastoma
 C. adenocarcinoma
 ...A...
393. Which would not be included in a differential diagnosis in a case with a solitary ivory vertebra?
 A. osteoblastic metastasis
 B. hyperparathyroidism
 C. Hodgkin's lymphoma
 D. Paget's disease
 ...B...
394. Transverse ligament integrity is best demonstrated on which x-ray?
 A. cervical oblique
 B. cervical flexion/extension
 C. base posterior
 D. A-P odontoid
 ...B...
395. What is the most dense on x-ray?
 A. bone
 B. gas
 C. water
 D. air
 ...A...
396. What does not cause thoracic kyphosis?
 A. Scheuermann's
 B. scoliosis
 C. Pott's
 D. long thoracic nerve paralysis
 ...D...
397. Which will not cause or affect ligament laxity in cervicals
 A. psoriasis
 B. RA
 ... NO ANS...
398. A 30 year old patient presents with low back pain. X-rays reveal a poorly developed lamina with a decreased interpedicular distance of L4. The pedicle is short and thick. These findings would indicate:
 A. lamina hypertrophy
 B. pedicle hypertrophy
 C. relative stenosis
 D. disc protrusion
 ...C...
39. Which of the following conditions has the potential for the worse complication;
 A. diabetes mellitus type I
 B. diabetes type II
 C. diabetes insipidus
 D. gestational diabetes
 ...A...
400. Prolonged and repeated intake of which of the following drugs will be least likely to increase the risk of a cerebrovascular accident due to a cervical manipulation?
 A. acetaminophen
 B. aspirin
 C. coumadin
 D. oral contraceptives
 ...A...
401. What abnormality most often accompanies a congenital scoliosis?
 A. gastrointestinal
 B. respiratory
 C. genitourinary
 D. cardiovascular
 ...B...
402. A 32 year old presents with a chief complaint of cervical pain, he has a previous diagnosis of ankylosing spondylitis. Although his lumbar are fused, he can almost bend over to touch his toes.
 A. misdiagnosis
 B. normal hip mobility
 ...C...
403. Which condition causes reddish flushing of the face?
 A. insipidus
 B. polycythemia vera
 C. hemolytic anemia
 D. pernicious anemia
 ...B...
404. Which of the following symptoms would a patient with classic migraine say yes to and no to in a case of common migraine?
 A. visual hallucinations
 B. photophobia
 C. nausea
 D. prodrome phase
 ...A...
405. A 3 year old child presents with dry, barking cough and inspiratory stridor suggests;
 A. croup
 B. asthma
 C. acute bronchitis
 D. pneumonia
 ...A...
406. Where would you check for peripheral hypertension?
 A. peripheral pulses
 B. eye
 ... NO ANS...
407. In examination of the external auditory canal of an adult, you pull the ear,
 A. up and back
 B. down and back
 C. down and out
 D. up and out
 ... A...
408. Abdominal pain that is exacerbated by recumbency is most likely caused by
 A. pancreatitis
 B. urethritis
 C. intervertebral disc prolapse
 D. duodenal ulcer
 ...A...
409. Which of the following symptoms revealed during case history is most likely to suggest a male with spontaneous pneumothorax?
 A. dull, achy chest pain
 B. productive cough
 C. dyspnea
 D. pleural friction rub
 ...C...
410. The development of leukoplakia is from the consumption of
 A. alcohol
 B. tobacco
 C. fatty foods
 D. cheese-whiz
 ...B...
411. A male patient presents with epigastric pain. What questions should you ask?
 A. Have you been on NSAIDs
 B. does it wake you up at night
 ...A...
412. Which of the following is the most common lung condition to cause cyanosis?
 A. pulmonary arteriovenous fistula
 B. 1° mediastinal tumor
 C. chronic bronchitis
 D. superior vena cava syndrome
 ...C...
413. Which of the following would be the most likely cause of a person with halitosis?
 A. lung abscess
 B. ...A...
414. Foot or ankle swelling in a patient with a history of hypertension indicates which condition?
 A. angina pectoris
 B. myocardial infarct
 C. congestive heart failure
 D. diabetes mellitus
 ...C...
415. Which of the following is the most effective physical exam procedure to gauge the effects of chronic hypertension on distal vascular structures and tissues?
 A. abdominal palpation
 B. serial blood pressure measurement
 C. thoracic percussion
 D. funduscopy
 ...D...
416. A 7 year old boy presents with stiff neck, headache, low grade fever and a (+) Kernig's. The most likely diagnosis?
 A. acute cervical myofasciitis
 B. acute acquired torticollis
 C. cervical lymphadenopathy
 D. acute viral meningitis
 ...D...
417. A young patient presents with chronic diffuse pain and signs frequently during your interview. This is most likely to be;
 A. depression
 B. acute asthma
 C. cardiac disease
 D. chronic bronchitis
 ...A...
418. A 38 year old female presents with lack of coordination in her right upper and lower extremities. Physical examination reveals "shock-like" pain upon cervical flexion. The most likely diagnosis is:
 A. poliomyelitis
 B. Parkinson's disease
 C. multiple sclerosis
 D. spinal meningitis
 ...C...
419. During physical exam a patient has acute stomach pain, hypotension, weak, rapid pulse, cool moist skin. Which condition below is most likely?
 A. acute UTI
 B. shock
 C. regional ileitis
 D. abdominal tumor
 ...B...
420. A 40 year old male patient presents with pinkish, red blisters on his chest wall. The lesions are well defined, clear in the middle. This is most characteristic of?
 A. pityriasis rosacea
 B. herpes simplex
 C. intertrigo
 D. impetigo
 ...B...
421. A 12 year old male presents with blood in his right ear. What cause would be least likely?
 A. serous otitis media
 B. otitis externa
 C. foreign body
 D. ruptured ear drum
 ...A...
422. What would a patient with cellulitis present with?
 A. pain, redness, swelling and lack of function
 B. no pain, bluish in color, function numbness from shoulder down to fingers
 C. ...A...
 D. pain in abdominal region

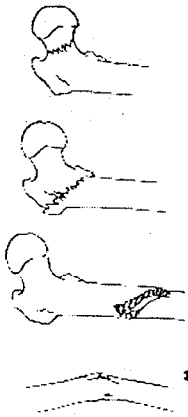
423. 35 year old Jewish male smoker with chest pain;
 A. Buerger's
 B. saddle thrombus
 ...A...
424. In which would a family history be most contributory?
 A. bronchitis
 B. TB
 C. viral pneumonia
 ...B...
425. Which of the following is the most likely diagnosis young male left lower quadrant pain?
 A. diverticulitis
 B. appendicitis
 C. peritonitis
 ...C...
426. Distension of the abdomen with the absence of bowel sounds suggests?
 A. aortic aneurysm
 B. ascites
 ...B...
427. A person with a pulmonary embolism is least likely to have;
 A. pleural friction rub
 B. tachypnea
 C. tachycardia
 D. hyperresonance
 ...D...
428. A 54 year old male train conductor presents with inability to lift his arm above his head. Reflexes are slightly decreased with weakness of the upper extremity muscles. There is no tenderness to palpation. What is the likely diagnosis?
 A. biceps rupture
 B. cerebro vascular accident
 C. supraspinatus
 D. infraspinatus
 ...C...
429. Which of the following organs is least likely to refer pain to the back?
 A. heart
 B. gallbladder
 C. testicle
 D. pancreas
 E. liver
 ...C...
430. Bilateral saddle paresthesia of lower limbs with intermittent claudication suggests;
 A. Brown-Sequard's
 B. coarctation of the aorta
 C. tethered spine
 D. cauda equina syndrome
 ...D...
431. The end bulbs of Krause detect;
 A. pain
 B. heat
 C. cold
 D. touch
 ...C...
432. Occlusion of either the vertebral artery or the posterior cerebellar artery with subsequent loss of pain and temperature sensations on one side of the face and entire opposite half of the body is known as?
 A. Quinquad's sign
 B. Shy-Dragger syndrome
 C. hemiballismus
 D. Wallenberg's syndrome
 ...D...
433. A herniated C5-C6 disc will most likely impinge on which nerve root?
 A. C4
 B. C5
 C. C6
 D. C7
 ...C...
434. The Achilles reflex tests the integrity of the _____ nerve.
 A. L4
 B. L5
 C. S1
 D. S2
 ...C...
435. Imbalance to the sympathetic nervous system including tinnitus, vertigo, nasal disturbances, pharyngeal paresthesia most commonly resembles
 A. Guillian-Barre
 B. Barre-Lieou
 C. Klippel-Feil
 D. basilar invagination
 ...B...
436. With a lesion of the neurological level L5, which muscle action is most likely affected?
 A. knee extension
 B. foot plantar flexion
 C. foot dorsiflexion
 D. hip adduction
 ...C...
437. Which of the following conditions most commonly causes foot drop?
 A. anterior compartment syndrome
 B. femoral neuritis
 C. peroneal tendonitis
 D. Osgood Schliater
 ...A...
438. Which would be "most normal" on the Wexler scale for reflexes?
 A. 1+
 B. 2+
 C. 3+
 D. 4+
 ...B...
439. 35 year old Jewish male smoker with chest pain;
 A. Buerger's
 B. saddle thrombus
 ...A...
440. Which nerve root applies to the brachioradialis reflex?
 A. C5
 B. C6
 C. C7
 D. C8
 ...B...
441. A herniated disc at L4-L5 will most likely produce weakness of which of these muscles?
 A. adductor magnus
 B. vastus lateralis
 C. flexor digitorum longus
 D. extensor digitorum longus
 ...D...
442. What type of electric stimulation has a peaked current with narrow peak width and a high peak intensity?
 A. high volt galvanic
 B. low volt galvanic
 C. Russian stimulation
 D. interferential
 ...A...
443. What would give relief of pain using the mechanism of the gate theory
 A. interferential 5000 Hz
 B. TENS 1-5
 C. TENS 80-100
 D. ultrasound
 ...C...
444. McKenzie exercises are contraindicated in the management of which of the following conditions?
 A. central protrusion
 B. post lateral protrusion
 C. lumbar canal stenosis
 D. interspinous ligament (type 1 sprain)
 ...C...
445. Which of the following is the most important exercise therapy goals for a patient with rheumatoid arthritis?
 A. decrease muscle size
 B. increase muscle/fat ratio
 C. increase aerobic endurance
 D. decrease flexion contractures
 ...D...
446. What type of ultrasound do you use in chronic myofasciitis?
 A. continuous high frequency
 B. continuous low frequency
 C. pulsed high frequency
 D. pulsed low frequency
 ...A...
447. What muscle exercise is considered negative?
 A. concentric
 B. isometric
 C. eccentric
 D. isokinetic
 ...C...
448. Therapeutic heat should be applied to an acute grade I/II ankle sprain approximately _____ after injury.
 A. 12 hrs
 B. 24 hrs
 C. 3 days
 D. 5 days
 ...C...
449. What has the sequelae of a high eosinophilic count?
 A. bronchial asthma
 B. viral pneumonia
 C. bacterial pneumonia
 ...A...
450. Methylolyte iodide test for parasitic ova requires a _____ sample.
 A. stool
 B. sputum
 C. spinal fluid
 D. urine
 ...A...
451. What would most likely be increased in a patient with hepatitis?
 A. BUN
 B. AST
 C. alkaline phosphatase
 D. CPK
 ...C...
452. Serum calcium will be increased with
 A. multiple myeloma
 B. osteoporosis
 C. hyperparathyroidism
 D. hypoadrenalism
 ...C...
453. Increased TSH levels indicate?
 A. hyperpituitarism
 B. hyperthyroidism
 C. hyperparathyroidism
 D. hypothyroidism
 ...D...
454. Serum uric acid level necessary to produce gout like symptoms?
 A. 2
 B. 4
 C. 6
 D. 10
 ...D...
455. What is the normal thrombocyte count?
 A. 10,000-20,000
 B. 40,000-60,000
 C. 50,000-100,000
 D. 150,000-300,000
 ...D...

456. What age would there be high levels of serum alkaline phosphatase?
 A. 10-14
 B. 20-35
 C. 35-40
 D. 50-65
 ...A...
457. A young patient is unable to straighten her knee. Which would be the most likely diagnosis?
 A. meniscus tear
 B. posterior cruciate
 C. Osgood Schlatter's
 D. lateral collateral ligament
 ...A...
458. How long do you have the patient hold their head for the vertebro-basilar maneuver?
 A. 5 seconds
 B. 10 seconds
 C. 30 seconds
 D. 2 minutes
 ...C...
459. A woman presents having fallen on her knee with foot in forced plantar flexion. What structure is most likely to be injured?
 A. anterior cruciate
 B. posterior cruciate
 C. medial collateral
 D. Achilles tendon
 ...B...
460. The McMurray's test determines the integrity of which structure?
 A. posterior cruciate
 B. anterior cruciate
 C. medial meniscus
 D. medial collateral
 ...C...
461. Lhermitte's sign is characterized by sharp radiating pain down the spine and into the upper or lower extremities is caused by:
 A. dural plaques
 B. dentate ligament torsion
 C. dural sleeve adhesions
 D. meningeal irritation
 ...B...
462. Which orthopedic test best differentiates sciatic pain and disk herniation from another source?
 A. Hibb's
 B. Valsalva
 C. SLR
 D. Bowstring
 ...D...
463. Which of the following should be given to a child who has longer than normal healing time and leukopenia?
 A. vitamin A
 B. vitamin E
 C. selenium
 D. zinc
 ...D...
464. What symptom would you find in a person with milk intolerance?
 A. diarrhea
 B. vomiting
 C. constipation
 ...A...
465. A diet high in natural fiber is desirable because:
 A. massages the alimentary tube
 B. reduces mineral absorption
 C. it is completely digested
 D. cures hemorrhoids
 ...A...
466. What gives you the most amount of essential fatty acids?
 A. wheat (whole grain and cereals)
 B. vegetable seeds
 C. organ meat
 D. vegetable oil
 ...D...
467. Person has problem with glucose metabolism. What element are they likely to be deficient in?
 A. tin
 B. selenium
 C. copper
 D. chromium
 ...D...
468. What is contra-indicated in a patient recovering from intervertebral disk syndrome?
 A. swimming
 B. walking
 C. prolonged bed rest
 D. stretching
 ...C...
469. What nutritional advice is contraindicated for a 65 year old woman with mild to moderate osteoporosis?
 A. increased exposure to sunlight
 B. reduce simple carbohydrate intake (increased refined carbohydrates in diet)
 C. reduce fat intake (increased fats in diet)
 D. increase fiber intake
 ...B...
470. A 60 year old woman presents with a three week history of pain localized in the right sacroiliac area. She states that the pain is dull and achy exacerbated by activity and alleviated by rest. The pain intensity has not changed. Past history includes a mastectomy ten years ago and no history of recent trauma. Initial x-rays of the area are unremarkable. After two weeks of treatment the patient's condition has not improved. Which of the following is the most appropriate next step in the case management?
 A. continue to treat her for two weeks
 B. order a CT of the lumbar spine
 C. order an MRI of the pelvis
 D. order bone scan
 ...D...
471. A 30 year old male farm worker has acute phase of upper trapezius strain. Which of the following would be the proper initial case management?
 A. bed rest
 B. rehab exercises
 C. avoid forward bending
 D. avoid pushing, pulling, lifting
 ...C...
473. A 15 year old female goes to the high school nurse. Her examination reveals a 15° scoliosis. Objective findings are normal with no aberrant motion. Which would be the most reasonable course of action?
 A. refer to orthopedic consult
 B. nothing is wrong
 C. adjust to remove curve and increase motion
 D. re-evaluate at regular intervals
 ...D...
474. Which of the following would you do for a young female with lumbar hyperlordosis?
 A. strengthen abdominal muscles
 B. strengthen hamstrings and decrease ilioosoa
 ...B...
475. A man injures his arm playing racquetball when he hit the wall with an outstretched hand. There is no tenderness at the scaphoid, but there is pain and clicking upon movement. Which exercises would you not suggest?
 A. wrist flexion, ulnar deviation
 B. wrist flexion, radial deviation
 C. dorsiflexion, radial deviation
 D. dorsiflexion, ulnar deviation
 ...C...
476. An affirmative answer to which of the following history questions most indicates malignancy?
 A. Do you smoke cigarettes?
 B. Do you eat a lot of fatty foods?
 C. Is your pain aggravated by movement?
 D. Is your pain aggravated by rest?
 ...D...
477. Which information obtained from the patients personal history most likely indicated metastatic bone disease?
 A. change in bowel habits
 B. pain aggravated at rest
 C. waking up to urinate more than one time at night
 D. wake up stiff
 ...B...
478. 62 year old male presents to your office with constant, dull low back pain that does not increase with exertion. Low blood pressure that is not relieved by exercise. He has bilateral saber shin deformity and his wife notes an increase in his hat and shoe size over the past few years. Radiographs reveal cortical thickening and osteoporosis circumscripta. Which of the following procedures would support your diagnosis?
 A. orthopedic tests
 B. laboratory studies
 C. EMG
 D. neurological tests
 ...B...
479. What is the most likely x-ray presentation?
 A. concave vertebral endplates
 B. pencil thin outline
 C. ivory vertebra
 D. platyspondyly
 ...C...
480. What is the least likely complication of this diagnosis?
 A. osteosarcoma
 B. basilar invagination
 C. multiple myeloma
 D. otosclerosis
 ...C...
481. What is the most likely diagnosis?
 A. achondroplasia
 B. osteitis deformans
 C. osteogenesis imperfecta
 D. osteomyelitis
 ...B...
482. Identify anterior corticospinal tract.

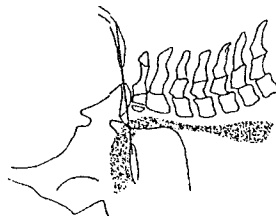


- A. 1
 B. 2
 C. 3
 D. 4
 ...B...

483. Identify a Greenstick fracture



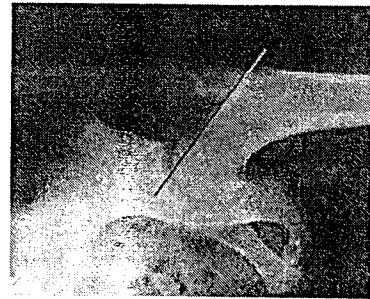
484. The line in the diagram represents:



- A. Chamberlain's
- B. McRae's
- C. Ferguson's
- D. Bowman's
- ...A...

485. Identify the line in the radiograph used for slipped capital femoral epiphysis;

- A. Shenton's line
- B. McNabb's
- C. Kohler's
- D. Klein's line



... D ...

486. A 52 year old female complains of chronic left shoulder pain. What is the most likely etiology of the abnormal finding in her affected shoulder.



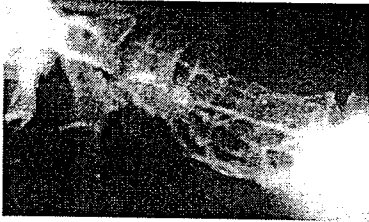
- A. rotator cuff calcific tendinitis
- B. healed bone infarct of the proximal humerus
- C. avascular necrosis of the proximal humerus
- D. enchondroma of the proximal humerus
- ...B...

487. A 29 year old male stepped off curb and now presents with back pain.



- A. transitional segment
- B. L5 fracture
- C. ankylosing spondylitis
- D. spina bifida occulta
- ...D...

488. A 35 year old male with decreased cervical ROM.



- A. surgical block C4-7
- B. congenital block C4-7
- C. RA
- D. AS
- ...B...

489. Which of the following adjuvante techniques utilizes a quick tricep thrust while the trunk of the adjuster remains stationary?

- a. Gonstead
- b. Grostic
- c. toggle recoil
- d. S.O.T.
- ...B...

490. A female patient presented with diffuse pain that began in the upper abdominal area. The symptoms most resemble;

- a. ruptured appendix
- b. ruptured ectopic pregnancy
- c. perforated duodenal ulcer
- d. renal lithiasis

491. Pain in the left lower quadrant would most likely be due to involvement of?

- a. appendix
- b. bladder
- c. diverticula
- d. stomach
- ...C...

492. What is the average heart rate of a newborn infant?

- a. 70
- b. 90
- c. 130
- d. 170
- ...C...

493. Which vital sign does not increase in a normal child?

- a. pulse
- b. temperature
- c. respiration

d. blood pressure
...D...

494. Vincent's angina is an inflammatory process of the ___?

- a. bladder
- b. stomach
- c. kidney
- d. mouth
- ...D...

495. In a patient suspected of having a hearing problem, what would be performed initially?

- a. Rinne's test
- b. ticking watch test
- c. audiometry (talking)
- d. caloric irrigation (labyrinthine test)
- ...B...

496. What is the most likely diagnosis of an apparently healthy 25 year old female with generalized pruritis, recurrent night sweats, and recent 15 pound weight loss. What is the most likely diagnosis?

- a. multiple myeloma
- b. pregnancy
- c. Maigne's syndrome
- d. Hodgkin's lymphoma
- ...D...

497. A 42 year old male presents in your office with right knee dysfunction accompanied by atrophy of the calf muscles. There is very little pain or swelling of the knee. What is the diagnosis?

- a. tuberculosis
- b. traumatic synovitis
- c. Sudeck's bone atrophy
- d. gonococcal arthritis
- ...C...

498. A 22 year old male presents in your office complaining of pain and morning stiffness for the past two years. In the last 6 months he has also had bouts of knee swelling and tenderness which went away. He now has a swollen, hot and tender ankle. Lab reveals; arthritis tests were negative; RBCs, lymphocytes and ESR were elevated; and a serum uric acid level was 7.5. What is the best diagnosis?

- a. ankylosing spondylitis
- b. acute RA
- c. gonococcal arthritis
- d. gout
- ...D...

499. A 45 year old male presents with allergic rhinitis. Regardless of the causative factors, which of the following would he have an increased susceptibility to?

- a. upper respiratory infection
- b. electrolyte imbalance
- c. temporal neuralgia
- d. irritable bowel syndrome
- ...A...

500. With lung impairments, what is the most accurate measurement of lung function?
 a. inspiratory capacity
 b. expiratory reserve volume
 c. vital capacity
 d. total lung capacity
 ...C...
501. A male with brief unilateral severe headaches occurring several times daily for several weeks, with long periods of remission is indicative of which headache type?
 a. cluster
 b. tension
 c. temporal arteritis
 d. common migraine
 ...A...
502. What type of pain is associated with a myocardial infarct?
 a. knife-like and stabbing
 b. squeezing and pressing
 c. ripping and tearing
 ...B...
503. A blood pressure which is 15 mm Hg higher on the right arm than on the left indicates:
 a. pathology in the low arm
 b. pathology in the high arm
 c. abdominal aneurysm
 d. aortic bifurcation
 ...A...
504. Which of the following are characteristics of a non-malignant breast tumor?
 a. hard and firm
 b. non-tender mass
 c. freely moveable tender mass
 d. single, irregular shape
 ...C...
505. General bluish of the skin coloration and oral mucosa suggests:
 a. central cyanosis
 b. peripheral cyanosis
 c. CO poisoning
 d. polycythemia vera
 ...A...
506. A twelve month old child previously healthy presents with a red maculopapular rash on the trunk and a fever for 3 days suggests;
 a. rubella
 b. rubella
 c. roseola infantum
 d. erythema infectiosum
 ...C...
507. Central loss of vision may be due to;
 a. cataracts
 b. macular degeneration
 c. glaucoma
 d. papilledema
 ...B...
508. An 8 year old male presents with pain, spasms and stiffness in the neck; he noticed it when he woke up in the a.m.
 a. he knows the reason he has it.
 ...NO ANS...
509. A 56 year old male presents with low back pain radiating into the medial thigh. Which of the following would indicate the onset of acute prostatitis?
 a. pain occurred while lifting heavy boxes for several hours
 b. pain occurred when climbing up and down a ladder to put things on a shelf
 c. awakened with pain at 1 a.m. without any precipitating factors
 d. pain occurred suddenly after sitting for several hours then standing
 ...C...
510. Which of the following would relieve a condition of acute pancreatitis?
 a. no position is comfortable
 b. lying on side with knees to chest
 c. supine with the knees bent
 d. lying prone
 ...B...
511. Which of the following would show similar characteristics as acute prostatitis?
 a. urinary tract infection
 b. carcinoma of the prostate
 c. carcinoma of the stomach
 ...A...
512. Pain during and after urination suggests;
 a. prostate hyperplasia
 b. kidney infection
 c. bladder inflammation
 d. ureter obstruction
 ...C...
513. Which of the following would be least indicative of chronic prostatitis upon digital palpation?
 a. slightly enlarged, boggy and non-tender
 b. hard, irregular mass
 c. scattered, firm areas of fibrous enlarged, soft, boggy and tender
 ...B...
514. What is the best position for a patient with pancreatic pain?
 a. sitting
 b. supine
 c. fetal position
 d. standing
 ...A...
515. What position best relieves the symptoms in a patient with spinal stenosis?
 a. seated
 b. flexion
 c. extension
 d. supine
 ...A...
516. A 26 year old male patient presents with epistaxis after prolonged physical activity. After a history is taken you might conclude the problem is due to;
 a. the patient is underweight
 b. the patient lives in a humid (high altitude) climate
 c. the patient is a mild hemophilic
 d. the patient is hypotensive
 ...C...
517. A 73 year old female presents with anemia and uremia. What following tests should you perform?
 ...NO ANS...
518. A 39 year old female presents with right leg weakness, tingling of the right arm and leg with occasional dizziness. She would most likely have which of the following additional symptoms;
 a. a change in the stool color
 b. visual disturbances
 c. hypemenorrhea
 d. skin rash
 ...B...
519. Which of the following first starts with myalgia and skin lesions, then weeks to months later may show cardiac and neurological findings?
 a. syphilis
 b. Reiter's
 c. Lyme disease
 d. ...D...
520. A tanned, slender woman presents with weakness, nausea, vomiting and a BP of 80/50. She also complains of dizziness upon sitting up from a supine position. The most likely diagnosis is;
 a. reactive hypoglycemia
 b. liver cirrhosis
 c. adenal cortical insufficiency
 d. acute viral infection
 ...C...
521. Which of the following is a cause of ascites?
 a. cholecystitis
 b. pancreatitis
 c. cirrhosis
 d. pyogenic peritonitis
 ...C...
522. A 48 year old male presents with chest pain on exertion, radiating to the left side of the neck. Which of the following questions will help you to attain a workable diagnosis?
 a. Do you have pain voiding urine?
 b. Do you have weakness in the extremities?
 c. How long does the pain persist after you stop to rest?
 d. Do your parents have cancer?
 ...C...
523. When a patient complains of knee pain, the doctor should determine the duration of the pain to differentiate a ___ from ___.
 a. disease process ; injury
 b. malignancy ; non-malignancy
 c. ligament ; tendon
 d. chronic ; non-repairing
 ...A...
524. Hyper-reflexia, convulsions, unilateral facial spasms when tapping over the parotid gland and a choked disk on ophthalmological exam all indicate;
 a. hypocalcemia
 b. hypercalcemia
 c. hypothyroidism
 d. hyperthyroidism
 ...A...
525. Hyperkalemia may cause;
 a. coma, confusion
 b. GI atony, psychosis
 c. paralysis, chest pain
 ...C...
526. Which of the following is a cause of hypokalemia?
 a. acute trauma
 b. nephrotic syndrome
 c. diabetes mellitus
 ...B...
527. What neurological level supplies the sensory innervation to the middle finger?
 a. C5
 b. C7
 c. T1
 d. T3
 ...B...

528. What innervates the hypothenar area;
- median nerve
 - radial
 - ulnar
 - musculoscutaneous
- ...C...
529. Innervation of the axilla is via;
- C6
 - C7
 - T2
 - T4
- ...C...
530. What disorder involves the anterior horn?
- myasthenia gravis
 - multiple sclerosis
 - poliomyelitis
 - tabes dorsalis
- ...C...
531. Which of the following muscle gradations indicates a lack of muscle contractibility;
- 0
 - 1
 - 2
 - 5
- ...A...
532. What is the most likely cause of a steppage gait?
- neurosiphilis
 - muscular dystrophy
 - Parkinsonism
 - peroneal muscle paralysis
- ...D...
533. Cranial neuropathy commonly seen with facial hemiparalysis and associated with the second stage of A.I.D.S.;
- CN III
 - CN IV
 - CN V
 - CN VII
- ...D...
534. Numbness in the lower extremities is due to;
- LeRiche's syndrome
 - Guillain-Barre syndrome
 - myasthenia gravis
- ...B...
535. A 56 year old presents with a 23 history of shooting pain down both legs. For the past month until the present, he has had difficulty walking in the dark. Upon neurological examination, he shows a decreased patellar and Achilles reflexes. The exam reveals that the eye accommodates but does not react to light. The patient presented to the office with a wide based ataxic gait. What type of brain lesion does this suggest?
- thalamic
 - cerebellar
 - posterior column
- ...C...
536. What blood test would be indicated?
- CBC
 - acid phosphatase
 - VDRL
 - UA
- ...C...
537. What condition is suggested by the symptoms?
- tabes dorsalis
 - Parkinson's
 - cauda equina syndrome
 - brain tumor
- ...A...
538. The piriformis muscle is likely to affect the;
- femoral
 - sciatic
 - posterior femoral cutaneous
 - lateral femoral cutaneous
- ...B...
539. Piriformis syndrome most resembles;
- osteomyelitis
 - canal stenosis
 - nerve root compression
 - meralgia paresthetica
- ...C...
540. A person with Parkinson's disease will have which of the following;
- tics
 - athetosis
 - chorea
 - tremors
- ...D...
541. Which exercise would least likely cause an asthmatic attack?
- jogging
 - playing tennis
 - swimming
 - running
- ...C...
542. A patient presented with low back pain, negative SLR, and normal reflexes. After two months of chiropractic care the back pain is gone but now he has a positive SLR. What is the next course of action?
- refer for surgery
 - treat for two more months and re-evaluate
 - chiropractic care exacerbated the problem
 - do trigger point and electrical stimulation therapy
- ...C...
543. A patient comes into your office with pain of 2-3 weeks duration. He has pain with compression, coughing, during chest inflammation and trunk rotation. He also has sternal border. What would you do?
- finish the exam and treat as needed
 - refer to a cardiologist immediately
 - refer to a respiratory specialist
- ...A...
544. A 72 year old female presents with sudden thoraco-lumbar pain after sneezing. What would be the best treatment plan;
- adjust point of pain in seated position
 - refer for a CT scan
 - recommend ice and NSAIDs
 - x-ray before treatment
- ...D...
545. A 56 year old female presents with intermittent low back pain. History reveals a knee surgery and an appendectomy. X-rays demonstrate DJD throughout the lumbar decreased lordosis, and staples are noted in the right lower quadrant. What would be your next course of care?
- adjust the lumbar spine
 - take additional x-rays
 - request a CBC
 - ice and ultrasound of the lumbar region
- ...A...
546. A 35 year old female presents with wrist and hand pain which has been diagnosed as carpal tunnel syndrome. She has been under conservative care for two months. She now displays a greater weakness in grip strength, but experiences slightly less pain. Which of the following case management procedures are appropriate at this time?
- re-take cervical and wrist x-rays
 - introduce wrist strengthening exercises
 - continue care for an additional month then re-evaluate
 - refer for surgical consultation
- ...B...
547. To whom would you refer a 65 year old male with urinary incontinence, dyspnea and edema of the lower leg?
- oncologist
 - urologist
 - cardiologist
 - neurologist
- ...C...
548. What do you do for a patient with meralgia paresthetica?
- trigger points
 - tell her to lose some weight
- ...B...
549. When treating an obese female with meralgia paresthetica using interferential current, you should place the padover which area?
- over the L5 paraspinial lumbar musculature
 - over the L2 paraspinial lumbar musculature
 - over the gluteal muscles
 - over the iliotibial band
- ...B...
550. Proper placement for therapeutic UV is best accomplished at _____ from the skin surface?
- 30°
 - 45°
 - 60°
 - 90°
- ...D...
551. The best modality to use with an acute ankle sprain?
- contrast baths
 - low volt galvanic
 - ice
 - heat
- ...C...
552. What form of electromagnetic energy has the shortest wavelength?
- heat
 - sound
 - visible light
 - ultraviolet
- ...D...
553. What is the best setting for interferential to help reduce edema in an ankle sprain?
- 0-10
 - 80-120
 - 120-150
 - 160-250
- ...A...

554. A 40 year old man was chopping wood 2 days ago. He presents with elbow pain, and your exam reveals a diagnosis of acute lateral epicondylitis. Which procedure would be contraindicated?
 a. immobilize the elbow
 b. continuous ultrasound
 c. battery powered TENS
 d. fluoromethane vapo-coolant spray
 ...A...
555. What modality should not be operated near water?
 a. SW diathermy
 b. high volt galvanic
 c. ultrasound
 d. microwave diathermy
 ...A...
556. Which muscle crosses 2 joints?
 a. rectus femoris
 b. vastus lateralis
 c. vastus medialis
 d. vastus intermedius
 ...A...
557. Which muscle is the primary stabilizer of the patella during the last 15° of leg extension?
 a. rectus femoris
 b. vastus lateralis
 c. vastus medialis
 d. vastus intermedius
 ...C...
558. Palpatory tenderness at the left pelvic brim and the lateral femoral condyle on the left is most likely due to?
 a. biceps femoris tendinitis
 b. popliteal tenosynovitis
 c. lateral cruciate tendinitis
 d. iliotibial band fasciitis / friction
 ...D...
559. What muscle provides the most strength for closing the jaw;
 a. medial pterygoid
 b. platysma
 c. temporalis
 d. omohyoides
 ...C...
560. The posterior tibial pulse can best be palpated?
 a. posterior and inferior to the medial malleolus
 b. anterior and superior to the lateral malleolus
 c. posterior and inferior to the lateral malleolus
 d. anterior and superior to the medial malleolus
 ...A...
561. The hook of the hamate and the pisiform form the:
 a. volar tunnel
 b. tunnel of Guyon
 c. carpal tunnel
 ...B...
562. Which line goes along the inferior neck of the femur and connects through the superior aspect of the obturator foramen?
 a. Skinner's line
 b. Shenton's line
 c. Klein's line
 d. Mickulicz' angle
 ...B...
563. What is the best method of measuring the amount of anterior slippage of an anterolisthesis?
 a. Eisenstein's method
 b. Meyerding's method
 c. Van Akkervekan's method
 d. center edge angle
 ...B...
564. Which of the following would most likely cause a Jones fracture?
 a. forced eversion
 b. forced inversion
 c. direct trauma to the base of the 5th metatarsal
 d. direct trauma to the calcaneus
 ...B...
565. Jones fracture most commonly occurs from
 a. plantar flexion and inversion
 b. plantar flexion and eversion
 c. dorsiflexion and inversion
 d. dorsi flexion and eversion
 ...A...
566. Which of the following fractures will have posterior displacement?
 a. Pott's
 b. Smith's
 c. Colle's
 d. ...C...
567. Which of the following causes calcification of the articular cartilage?
 a. pseudogout
 b. Reiter's syndrome
 c. Still's disease
 d. systemic lupus erythematosus
 ...A...
568. A young man presents with an elevated ESR, hip redness and swelling. The proximal femur had metaphysis expansion with cortical destruction. This most suggests;
 a. osteomyelitis
 b. fibrosarcoma
 c. Ewing's sarcoma
 d. osteosarcoma
 ...D...
569. A 50 year old male presents with acute thoraco-lumbar pain. He stated there was no recent trauma, but he has been experiencing recent episodes of fatigue. Radiographs reveal a recent compression fracture of T10. Which of the following would indicate the least favorable condition?
 a. step defect
 b. decrease anterior vertebral height
 c. decreased posterior vertebral height
 d. osteopenia
 ...C...
570. What diagnostic tool would best differentiate an old versus a new compression fracture?
 a. MRI
 b. bone scan
 c. diagnostic ultrasound
 d. dual photon absorbtion
 ...B...
571. Who would be the best specialist for referral?
 a. neurosurgeon
 b. oncologist
 c. nutritionist
 d. ...B...
573. What is the most common location for osteochondritis dessicans?
 a. tibial tuberosity
 b. femoral head
 c. medial femoral condyle
 d. lateral femoral condyle
 ...C...
574. Multiple myeloma primarily affects which cell type?
 a. lymphocytes
 b. monocytes
 c. plasmocyte
 d. neutrophils
 ...C...
575. All of the following conditions shows up after the age of 40 except?
 a. psoriatic arthritis
 b. scleroderma
 c. gout
 d. ankylosing spondylitis
 ...D...
576. What is the most commonly injured area of the cervical spine?
 a. C1-2
 b. C3-4
 c. C5-6
 d. C7-T1
 ...C...
577. A lateral radiograph reveals a radiolucent line on the posterior arch of atlas. The spinolaminar line is intact.
 a. AP-CL and APO-M radiographs
 b. take a full cervical series
 c. take the patient to the hospital
 ...A...
578. A 26 year old male presents with pain and paresthesia on a small area of the anterior thigh and entire medial leg. He states that the pain sometimes goes to the medial foot. The Achilles reflex is normal. He has weakness upon resisted dorsiflexion and inversion on the right foot. He is able to heel walk. Which of the following muscles would be weak?
 a. extensor digitorum
 b. extensor hallucis longus
 c. peroneus lingus
 d. tibialis anterior
 ...D...
579. Which disc level is affected in this condition?
 a. L3-4
 b. L4-5
 c. L5-S1
 d. L2-L3
 ...A...
580. If, after specific lumbar adjustments there is no change in the patient symptoms, which of the following should be done?
 a. corrective adjusting for 4 weeks
 b. refer for further diagnosis and re-evaluate
 c. ...C...
581. Which of the following is best for a medial meniscus problem?
 a. valgus stress
 b. anterior drawer
 c. Mc Murray's test
 d. Apley's distraction
 ...C...
582. Which of the following exacerbates a medial meniscus tear the most?
 a. full extension
 b. flexion past 90°
 c. accessory rotation movements
 d. posterior to anterior tibial shear
 ...C...
583. A patient has pain upon abducting his arm and shoulder at 60-120°;
 a. adhesive capsulitis
 b. rotator cuff
 c. supraspinatus tendinitis
 d. ...C...

584. Muscle contraction with no change in the length is known as?
 a. isokinetic
 b. isometric
 c. isotonic
 d. dynamic
 ...B...

585. Patrick's test involves ____ and ____ rotation of the hip.
 a. flexion, abduction, external
 b. flexion, adduction, external
 c. extension abduction, internal
 d. extension, adduction, internal
 ...A...

586. Mill's maneuver is done for what purpose?
 a. stretch a ligament
 b. stretch a tendon
 c. strengthen a muscle
 ...B...

587. Lateral condylitis pain is reproduced with which of the following actions?
 a. wrist flexion
 b. wrist extension
 c. elbow flexion
 d. elbow extension
 ...B...

588. A supine patient flexes his head forward as the doctor pushes on his sternum;
 a. Valsalva's
 b. Kernig's
 c. Dejerine's
 d. Soto-Hall'
 ...D...

589. Most rotation of the cervical spine occurs at:
 a. occiput-C1
 b. C1-C2
 c. C4-5
 d. C6-7
 ...B...

590. Vertebro-basilar syndrome during extension and lateral flexion involves which of the following segments;
 a. occiput and C1
 b. C1-C2
 c. C2-C3
 d. C3-C4
 ...B...

591. What does the basilar artery supply?
 a. cerebellum
 b. sensorimotor cortex
 c. sensory cortex
 d. paravertebral motor cortex
 ...A...

592. Constriction of the axillary artery occurs in which test?
 a. Adson's
 b. Eden's
 c. Wright's
 d. Allen's
 ...C...

593. Which of the following causes compression of the subclavian artery during Adson's test?
 a. scalenus anticus
 b. trapezius
 c. pectoralis minor
 d. teres minor
 ...A...

594. A patient has chronic patellar dislocation. A neoprene sleeve is worn to push the patella in which direction?
 a. lateral to medial
 b. medial to lateral
 c. superior to inferior
 d. inferior to superior
 ...A...

595. What is the first muscle to atrophy after a knee injury?
 a. vastus lateralis
 b. vastus medialis
 c. rectus femoris
 d. vastus intermedius
 ...B...

596. Which muscle should be strengthened on a patient with chondromalacia patella?
 a. vastus lateralis
 b. vastus medialis
 c. rectus femoris
 d. vastus intermedius
 ...B...

597. A child presents in your office with Occiput-C1 fixation with a posterior transverse on the side of Atlas laterality would snow,
 ...NO ANS...

598. A 26 year old female presents with complaints of neck pain and weakness during shoulder abduction and medial rotation of the right arm. Motion palpation reveals fixations at the level of; OCC-C1, C2-3, C4-5, C6-7. Which vertebral motion segment is the probable area of involvement?
 a. occiput-C1
 b. C2-3
 c. C4-5
 d. C6-7
 ...C...

599. The C1 segment has gone to the right and posterior on that side. In order to do a toggle recoil side posture, patient has the right side down and the doctor uses the superior hand

b. patient has the left side down and the doctor uses the inferior hand
 c. patient has the right side down and the doctor uses his superior hand
 d. patient has the left side down and the doctor uses the superior hand
 ...D...

600. Bi-manual cervical traction using a towel with a patient lying supine is best used for:
 a. upper thoracic compression fracture
 b. acute muscle spasm
 c. paresthesia
 d. teres minor
 ...B...

601. To perform a long axis extension of the hip joint, the femur should be in the following position;
 a. full external rotation
 b. full internal rotation
 c. 30° abduction
 d. neutral
 ...C...

602. To mobilize a superior first rib in a patient with left thoracic outlet syndrome, the patient is supine with his head extended, laterally flexed to the ____ and slightly rotated to the ____
 a. left / right
 b. left / left
 c. right / left
 d. right / right
 ...A...

603. A patient presents with non-radiating low back pain. X-rays reveal a Grade II spondylolisthesis. On static palpation you discover a restriction on left rotation. How would you adjust this patient?
 a. with the patient prone using an L5 spinous contact
 b. with the patient in a side lying position using a mammillary contact on the side closest the table
 c. with a seated lumbar rotational move with the patient supine, knees to chest and using a sacrum contact
 d. ...C...

604. What position would you NOT want to put a patient with a spondylolisthesis?
 a. supine
 b. flexion
 c. extension
 d. prone
 ...C...

605. Which of the following is contraindicated for flexion/distraction?
 a. lumbar paraspinous sprain
 b. grade III spondylolisthesis
 c. facet syndrome
 d. lumbar disc syndrome
 ...B...

606. A patient has a right sacroiliac extension fixation (the P.S.I.S. is fixated in anterior and superior). Which of the following is the appropriate adjustment set-up?
 a. right side up / P.S.I.S. contact
 b. left side up / ischial tuberosity contact
 c. right side up / ischial tuberosity contact
 d. left side up / P.S.I.S. contact
 ...C...

607. A 36 year old male presents with a thoracic outlet syndrome with pain and paresthesia in the left arm. Which of the following would be an appropriate position for manipulation;
 a. extend head, laterally flex head towards the left and rotate head towards the right
 b. extend head, laterally flex head towards the right and rotate the head towards the left
 c. extend the head, laterally flex head towards the left and rotate the head towards the right
 d. extend the head, laterally flex head towards the left and rotate head towards the right
 ...A...

608. An increase in the total bilirubin that is primarily a result of indirect bilirubin is likely due to;
 a. obstructive jaundice
 b. hemolytic process
 c. cancer of the head of the pancreas
 d. ...B...

609. Which of the following would indicate acute prostatitis?
 a. RBC normal, WBC 50,000/mm³
 b. acid phosphatase
 c. ANA
 d. ASO titre
 ...A...

610. Increased specific gravity of the urine indicates;
 a. diabetes insipidus
 b. vomiting and diarrhea
 c. increase fluid intake
 d. diabetes mellitus
 ...D...

611. Which laboratory finding is indicative of tissue destruction and repair or on going inflammation?
 a. lymphokinin
 b. CRP
 c. interleukin 2
 d. bradykinin
 ...B...

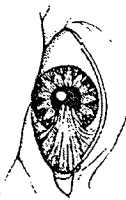
612. A normal CBC with an increased MCV and MCH is;
 a. macrocytosis
 b. microcytosis
 c. leukocytosis
 d. lymphocytosis
 ...A...

613. Linoleic acid is what type;
 a. essential amino acid
 b. nonessential amine acid
 c. essential fatty acid
 d. non-essential fatty acid
 ...C...

614. Which of the following most likely contains Provitamin A?
 a. pork potatoes
 b. green leafy vegetables, egg yolk
 c. yellow skin vegetables fish oils
 d. cheesy, milk and red meat
 ...C...

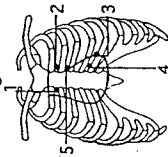
615. A patient with PKU who has NOT been following his diet. Your advice is;
 a. it doesn't matter about his diet
 b. it is critical that he follows a strict diet
 c. he can eat what he wants as long as he takes phenylalanine
 d. a little leeway is okay, but he should stay on his diet
 ...D...

616. Identify the eye abnormality in the diagram below



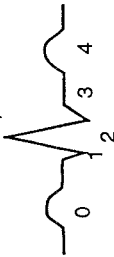
- a. senile macular degeneration
- b. pinguecula
- c. pterygium
- d. chalazion
- ...C...

617. The physiological splitting of the 2nd heart sound would be heard best at which area in the diagram below?



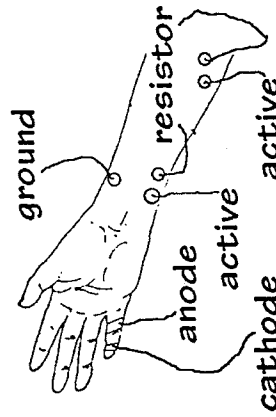
- a. 1
- b. 2
- c. 3
- d. 4
- ...B...

618. Identify the area where ventricular repolarization occurs;



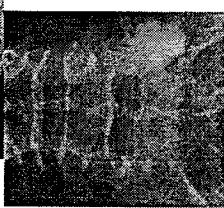
- a. 0
- b. 1-3
- c. 3
- d. 4
- ...D...

619. The set-up depicted in the diagram below best depicts;



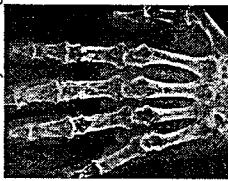
- a. EEG
- b. EKG
- c. nerve conduction velocity
- d. somato-sensory evoked potentials
- ...C...

620. Identify the findings in the radiographs below;



- a. healed bone infarct
- b. bone islands
- c. blastic mets
- d. osteopokilosis
- ...B...

621. Identify the diagnosis;



- a. RA
- b. osteoarthritis
- c. sarcoidosis
- ...B...

622. Diagnosis;



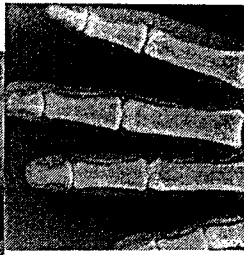
- a. sarcoidosis
- b. scleroderma
- c. psoriatic arthritis
- d. D.J.D
- ...B...

623. Diagnosis;



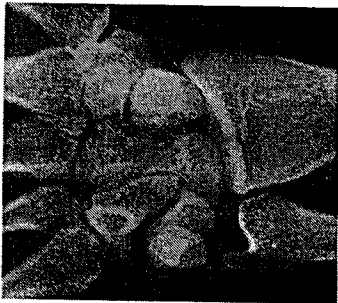
- a. Legg-Calve Perthes
- b. slipped femoral epiphysis
- c. hyperparathyroidism
- ...A...

624. Female presents with chronic pain and fatigue;



- a. 2° hyperparathyroidism
- b. scleroderma
- c. osteopokilosis
- ...A...

625. A female presents with pain in the wrist, states that she fell on an outstretched hand. Based on the history and the radiographs below what is the likely cause of the pain?



- a. healed fracture of the scaphoid
b. Keinboch's
c. lunare dislocation
...C...

626. Diagnosis;



- a. ponticulus posticus
b. omovertebral bone
c. long nuchal bone
d. butterfly vertebra
...B...

627. The "unhappy triad" of O'Donoghue consists of the following:

- a. anterior cruciate, medial collateral, medial meniscus
b. lateral meniscus, lateral collateral, posterior cruciate
c. medial collateral, medial meniscus, posterior cruciate
d. anterior cruciate, lateral meniscus, medial collateral
...A...

628. A positive _____ test indicates a torn rotator cuff;

a. Yergason's
b. apprehension
c. Dawbarn's
d. drop arm
...D...

629. What is not in the differential diagnosis of carpal tunnel?

a. C6 nerve Discopathy
b. DeQuervain's disease
c. pronator teres syndrome
d. scalenus anticus syndrome
...D...

630. All of the following are related to carpal tunnel syndrome except for:

a. pronator teres syndrome
b. ape hand
c. cubital tunnel syndrome
d. carpal tunnel
...C...

631. Relief of symptoms by raising the affected arm over the head is indicative of:

a. thoracic outlet syndrome
b. cervical radiculitis
c. cervical cystitis
d. meningeal irritation
...B...

632. What condition is indicated when a patient's hand is placed on his/her head and it gives them relief?

a. compressed nerve root
b. costoclavicular
c. thoracic outlet syndrome
...A...

633. Lateral hyperflexion injury to the cervical spine can cause an avulsion of which nerve root.

a. C2
b. C3
c. C4
d. C5
...D...

634. What muscle affects the patella?

a. semimembranosus
b. vastus medialis
c. popliteus
...B...

635. Tom anterior cruciate ligament injury most common symptom?

a. Midline joint pain
b. Diffuse swelling
c. Severe pain
...B...

636. Which of the following is decreased in adhesive capsulitis?

a. abduction/adduction ROM only
b. flexion/extension ROM only
c. Forward/backward movement of shoulder only
d. All ROM is lost
...D...

637. With frozen shoulder syndrome, movement is limited in _____?

a. supraspinatus
b. all ranges of motion
c. deltoids
...C...

638. In what position should the leg be to palpate the lateral collateral ligament? Best position to palpate the lateral collateral ligament is:

a. Knee flexed 60 flexion, hip extended and externally rotated.
b. Knee flexed 90, hip extended and internally rotated.
c. Hip/knee fully extended
d. knee flexed at 90°, hip abducted and externally rotated
...D...

639. What is the name of the maneuver where the patient's head is turned to one side with ipsilateral arm raised and the examiner is palpating the radial artery?

a. Adson's
b. Allen's
c. Thomas
d. Bakody's
...A...

640. Stretching of this muscle will alleviate the above condition.

a. pectoralis minor
b. serratus anterior
c. costoclavicular
d. scalenus anticus
...D...

641. Which tests for vertebral basilar insufficiency?

a. Maigne's
b. Bakody's
c. Dejerine's triad
d. Homan's
...A...

4.2.4
642. A 40 year old female presents w/ leg pain, mild low back pain, double vision, aberrant gait, and mild paresthesia in both upper limbs. She has a history of previous episodes, similar symptoms lasting several days. There is no history of trauma and the radiographs are unremarkable. What is most likely diagnosis?

a. systemic lupus erythematosus
b. amyotrophic lateral sclerosis
c. myasthenia gravis
d. multiple sclerosis
...D...

643. Which vertebral level controls the bladder?

a. S3-S4
b. L3
c. T9-10
...B...

644. Homer's syndrome commonly affects what nerve?

a. sympathetic chain ganglia
b. parasympathetic chain ganglia
c. trigeminal nerve
d. ocular nerve
...C...

645. A patient presents with Homer's syndrome, which of the following is not a finding?

a. miosis
b. ptosis
c. iritis
d. anhidrosis
...C...

646. A patient presents with hoarseness, pain in left shoulder, ptosis and miosis of the right eye.

a. carotid avulsion
b. Pancoast tumor
c. MG
d. brainstem infarction
...B...

647. What nerve runs under transverse ligament?

a. ulnar
b. median
c. radial
...C...

648. Walking on heel with the foot inverted is a function of what nerve level?

a. L2
b. L4
c. S1
d. S2
...B...

649. What nerve supplies the deltoids?
 a. C6
 b. T1
 c. C7
 d. C5
 ...D...

650. Sensory loss of L2 would be demonstrated at what area?
 a. hip and buttocks
 b. anterior thigh and groin
 c. anterior thigh to medial knee
 d. anterior thigh to in knee
 ...B...

651. Syncope of vasovagal usually occurs;
 a. while standing
 b. during micturition
 c. during extreme rotation
 d. during fright or flight
 ...A...

652. A female patient with a history of panic attacks, palpitations, and tremors when holding arms out with her hands supinated suggests which type of tremor?
 a. intention
 b. resting
 c. psychological
 d. essential-familial
 ...C...

653. A young male presents in your office with headache, neck pain with a stab wound to the right of his neck. What pupillary action is most likely with complete severance of the cervical sympathetic?
 a. constricted right
 b. constricted left
 c. bilateral dilated
 d. dilated right
 ...A...

654. Choreiform movements are:
 a. involuntary coordinated movements
 b. repetitive, compulsive movements
 c. jerky purposeless involuntary movements.
 d. worm-like movements
 ...C...

655. TIA would predispose you to? What disease process has highest risk of TIA?
 a. cerebellar hemorrhage
 b. myocardial infarction
 c. cerebral hemorrhage
 d. atherosclerotic stroke
 ...D...

656. A patient presents with knife-like stabbing pain in chest, tachycardia, dyspnea suggests possible;
 a. pulmonary edema
 b. acute pericarditis
 c. myocardial infarction
 ...B...

657. What does blueness on or around the umbilicus indicate?
 a. Chvostek's sign
 b. Cullen's sign
 c. Chadwick's sign
 ...D...

658. Which of the following is suggested by this pain pattern?




- a. acute appendicitis
 b. kidney
 c. cholecystitis
 d. urethral obstruction
 ...B...

659. A 12-year old boy presents in your office crying up a storm because he had just had an altercation with another classmate the day before. He presented with bruised orbits, a nose bleed and a clear discharge from the ear. X-rays were negative for pathology. What is most serious complication?
 a. meningitis
 b. facial disfiguration
 c. sinus infection
 d. inhalation of a floating bone fragment
 ...A...

660. A 35 year old female presents with generalized weakness, moderate weight loss, and probable Addison's disease. Which of the following would she answer "no" to?
 a. Do you feel light-headed upon changing positions?
 b. Have you been vomiting or feeling nauseas?
 c. Have you noticed a change in visual acuity?
 d. Have you noticed a change in skin color?
 ...C...

661. A patient presents in your office with Addison's like symptoms, which of the following is not seen?
 a. visual disturbances
 b. vomiting
 c. hypotension
 d. decreased Na⁺
 ...A...

662. This presentation is most indicative of:

 a. psoriatic arthritis
 b. chronic lung conditions
 c. myocardial infarction
 d. pericarditis
 ...B...

663. A 68 year old patient presents with low back pain, worse with activity and relieved with rest. X-rays reveal osteopenia, lab analysis shows hypercalcemia, hypergamma-globulinemia, and a normocytic & normochromic anemia. What is likely diagnosis?
 a. iron deficiency anemia
 b. hyperthyroid
 c. sarcoidosis
 d. multiple myeloma
 ...D...

664. A mid systolic murmur that is heard parasternally at the 2nd intercostal space on the left describes which condition:
 a. aortic regurgitation / insufficiency
 b. aortic stenosis
 c. pulmonic regurgitation / insufficiency
 d. pulmonic stenosis
 ...D...

665. What would be a physical finding of a patient with a history of systemic lupus erythematosus, tachycardia, tachypnea, fever, and knife like pain that is relieved by sitting and flexed position?
 a. pan-systolic murmur
 b. machinery murmur
 c. pericardial friction rub
 d. pleural friction rub
 ...D...

666. A young male presents with fever, abdominal cramps, (-) rheumatoid factor, (-) auto antibodies, arthropathies (pain?) in knee, ankle, and wrist.
 a. mesenteric adenitis
 b. ulcerative colitis
 c. ankylosing spondylitis
 d. viral gastroenteritis
 ...B...

667. Which of the following is most consistent with acute acting nocturnal back pain that is not relieved by rest?
 a. posterior facet syndrome
 b. DISH
 c. spinal metastasis
 d. primary colon carcinoma
 ...C...

- 4.25
 668. Low back pain exacerbated by trunk flexion and lifting, tender upon pressure and stiffening upon rest would be of _____ origin?
 a. vertebrogenic
 b. muscular
 c. ligamentous
 d. vascular
 ...B...

669. Which female patient would most likely have endometriosis?
 a. 33 year old with no children
 b. 28 year old with 4 kids
 c. 16 year old who began menses at 12
 d. 64 year old with 6 kids
 ...A...

670. A 62 year old male presents with headaches, getting worse with projectile vomiting;
 a. migraine
 b. tension
 c. brain tumor
 d. cluster
 ...C...

671. A 50 year old male presents in your office with symptoms of a stiff neck, motor weakness, in a contused state and increased BP. What is most probable?
 a. classic migraine
 b. subarachnoid hemorrhage
 c. temporal arteritis
 d. brain tumor
 ...B...

672. A 68 year-old female is taking hypertensive medication, but only takes it when she feels bad. She states she has a headache for the last 1/2 hour. She has also vomited once, and has a BP of 210/150?
 a. encephalopathy
 b. cluster headache
 c. cerebral embolism
 d. temporal arteritis
 ...NO ANS...

673. A patient presents with hepato-biliary disease. What wouldn't you order:
 a. urinalysis
 b. intravenous pyelography
 ...B...

674. A 25 year old female with joint pain. What is the best diagnosis?
 a. Scleroderma
 b. Gout
 c. Hypertrophic osteoarthropathy
 d. Reifers syndrome
 ...C...

697. A 27 year old patient sprained his ankle skiing 3 weeks ago. He has a cast and is on crutches. One week ago, he started developing weakness in arm and forearm. He came to see you because he thought he "twisted a vertebrae". Ranges of motion in the upper extremity were normal, but had sensory loss on extensor surfaces of arm and weak wrist extensors. What should be done first in this case management?
- Cervical radiographs including obliques
 - MRI
 - adjust crutches
 - ...
698. Recent compression fracture, what is the proper thing to do.
- Adjust with traction
 - Adjust in flexion
 - Refer to internist
 - Refer to orthopedist
 - ...
699. A patient presents in your office with osteitis pubis, what therapy would be most appropriate?
- swimming
 - stretch the adductors
 - bicycling
 - refer for surgery
 - ...
700. Trigger point therapy of which muscle is indicated for pain that radiates into the buttocks over the course of the sciatic nerve?
- quadriceps
 - psoas
 - piriformis
 - quadratus lumborum
 - ...
701. What exercise is best performed after an acute injury?
- variable-resistance isotonic
 - fixed-resistance isotonic
 - isometric
 - isokinetic
 - ...
702. What is a calcified superior sacroiliac ligament indicative of?
- Gouty arthritis
 - D.I.S.H.
 - Reiter's syndrome
 - C.P.P.D.
 - ...
690. What is the best way to remove adhesions in a nerve?
- cross friction massage
 - manipulation
 - ...
691. Your patient suffers from an abduction injury. The best way to rehabilitate the injury.
- run more distance
 - cycle training
 - resistance training
 - swimming exercises
 - ...
692. What exercise would you prescribe for a Boot fracture?
- swimming
 - running
 - ...
693. An 8 year old boy presents with a scoliosis on the right. He has no symptoms, and there is a congenital non-segmentation of T4-T18. What is the best option for treatment:
- refer to orthopedist
 - x-ray again in 6 months
 - adjust
 - ...
694. The patient presents with pain in medial malleolus which radiates to medial calf and front of foot sometimes with muscle tightness on inversion and dorsiflexion. Which of the following is contraindicated
- weight bearing long distance walking
 - foot orthotics
 - under water ultrasound
 - manipulation
 - ...
695. A 42 year female presents with recurrent frontal headaches, onset is gradual and usually occurs upon waking. Duration is a couple of hours or throughout the day. Digital percussion reveals tenderness on the ipsilateral frontal & sub-orbital areas. To whom would you refer?
- vascular surgeon
 - neurologist
 - otorhinolaryngologist
 - internist
 - ...
696. A female patient presents with a history of bruxism and temporal headaches. What would your initial care include?
- adjust upper cervical & treat soft tissue
 - ultrasound
 - refer myofascial dentist specialist
 - refer neurological & psychological
 - ...
682. Exertional dyspnea in an otherwise asymptomatic young individual is most likely cause of?
- congested heart failure
 - mitral stenosis
 - endocarditis
 - angina pectoris
 - ...
683. What is the most common finding of left congested heart failure?
- orthopnea
 - dyspnea
 - whispered pectrology
 - ...
684. Which of the following presents with right lower quadrant pain?
- cecum
 - sigmoidal colon
 - kidney
 - ...
685. A female presents with dysuria, urgency, increased frequency. What is the most likely finding?
- suprapubic mass
 - flank pain
 - colicky pain
 - shoulder pain
 - ...
686. A retracted nipple with dimpling and a firm, hard mass is most likely to be:
- fibrocystic disease
 - mastitis
 - breast carcinoma
 - ...
687. A 36-year-old woman presents with stiff neck, neck pain and projectile vomiting. She states she seldom has any warning before vomiting and no nausea. Who would you consult with on this case?
- Gastroenterologist
 - Internist
 - Neurologist
 - Psychologist
 - ...
688. Which of the following is exercise an absolute contraindication for someone that is also pregnant?
- diabetes mellitus
 - cardiac problems
 - respiratory problem (asthma)
 - thyroid disease
 - ...
689. A 34-year-old male disc herniation has been treated with ice & traction for 2 weeks with no results & progressive weakness. What should we do?
- manipulate for weeks
 - refer out
 - ...
675. The most common cause of loss of central vision acuity and color changes?
- open angle glaucoma
 - papilledema
 - macular degeneration
 - lenticular cataracts
 - ...
676. What symptoms would most indicate an acute upper airway obstruction?
- abnormal heart sounds, cardiomegaly, basilar moist rales
 - hepatomegaly, liver problems
 - stridor, infra-clavicular retraction
 - wheezes (asthma type problems)
 - ...
677. On the following EKG, #3 represents:
- 
- S wave
 - P wave
 - Q wave
 - st complex
 - ...
678. A female aged 28 presents with nausea, vomiting, fever, and a sunburn-like rash and hypotension:
- systemic lupus erythematosus
 - purulent infection
 - chlamydial infection
 - toxic shock syndrome
 - ...
679. A woman in her eighth month of pregnancy suddenly presents with hypertension, edema, proteinuria, and experiences visual disturbances. Which is the most probable diagnosis?
- tubal pregnancy
 - pre-eclampsia
 - nephrotic syndrome
 - ectopic pregnancy
 - ...
680. A person with reactive hypoglycemia has increased palpitations, pallor, and sweating. These findings may be due to?
- increase temperature
 - increase serotonin
 - hormonal changes
 - alcohol
 - ...
681. Of the following, which is most typically associated with pneumothorax?
- increased pectrology
 - hyper-resonant percussive note
 - increased vocal fremitus
 - increased chest excursion
 - ...

703. Identify.



- A. congenital non-segmentation
- B. hemi-vertebrae
- C. scoliosis
- D. butterfly
- E. Klippel-Feil syndrome

704. Where is location of bi-partite patellar?

- a. superior lateral
- b. superior medial
- c. inferior lateral
- d. inferior medial

705. Which is the least likely cause of low back pain?

- a. osteoarthritis DJD
- b. gout
- c. osteolytic metastasis
- d. multiple myeloma

706. Osteolytic metastatic represents _____ percent of all metastatic bone lesions in the spine.

- a. 5
- b. 20
- c. 75
- d. 95

707. Thoracic fracture will cause what deformity?

- a. sprenghles
- b. gibbus

708. What do you visualize on a right anterior oblique of the cervicalis;

- a. left IVF
- b. right IVF
- c. occipital condyles

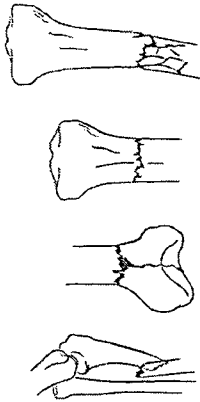
709. Which of the following has nothing to do with scatter radiation?

- a. object
- b. tissue density
- c. film speed
- d. object thickness

710. The "Anode Heel Effect" is defined as:

- a. increased density at the anode side
- b. increased density to the cathode side

711. Monteggia's fracture is which number in the diagram below;



- 1
- 2
- 3
- 4

712. Fracture to the proximal radius is most indicative of:

- a. Torus fracture
- b. Jefferson's fracture
- c. Galeazzi's fracture
- d. Monteggia's fracture

713. A 32-year-old female presents with low back & sacroiliac pain of 3 week duration. What is the most likely diagnosis?



- a. ankylosing spondylitis
- b. psoriatic arthritis
- c. osteitis condensans ili
- d. sacro-iliac degenerative arthritis

714. Which of the following radiographs best determines the integrity of the transverse ligament?

- a. A-P open mouth
- b. neutral cervical lateral
- c. flexion cervical
- d. extension cervical

715. View of A-P Pelvis



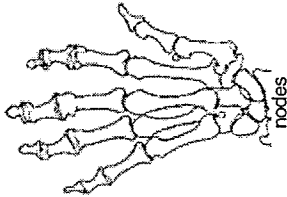
- a. avulsion of ischial tuberosity
- b. metastatic carcinoma
- c. fracture
- d. osteosarcoma

716. Identify the following condition;



- a. avascular necrosis of femur
- b. septic infection
- c. arthritis of femoral joint
- d. DJD

717. The diagram below demonstrates which sign and condition?



- a. Pencil in cup deformity : psoriatic
- b. gull wing : erosive osteoarthritis
- c. Heberden's nodes : DJD
- d. rat bites, juxta-articular osteoporosis: RA

718. Bilateral degeneration of the uncovertebral joints results in _____ intersegmental malposition;

- a. flexion
- b. extension
- c. lateral flexion
- d. rotation

719. When a unco-vertebral motion glides abnormally, what is it due to?

- a. muscular
- b. ligamentous
- c. neurological
- d. vertebral origin

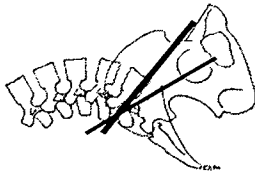
720. What is the best differential diagnosis between rheumatoid arthritis and degenerative joint disorder when only a single view of a joint is given?

- a. soft tissue swelling
- b. eburation
- c. osteophytes
- d. narrow joint space
- e. subchondral cysts

721. An increased VIA usually presents with?

- a. tight gluteals
- b. tight hamstrings
- c. tight abdominals
- d. tight quadriceps





722. What is the name of the angle in Diagram A?



- a. Ferguson's angle
- b. lumbosacral disc angle
- c. Mikulicz's angle
- d. McNabb's angle

723. Which of the following malignancies most commonly occurs in 20-35 year olds?

- a. neuroblastoma
- b. Ewing's sarcoma
- c. osteosarcoma
- d. Hodgkin's lymphoma

724. What therapy is contraindicated for condition of fatigue, disturbed sleep patterns, trigger points?
 a. ice
 b. heat
 c. psychotherapy
 d. massage
 ...A...
725. Of the following in a patient presenting with fibromyalgia, what is a contraindication?
 a. home cryotherapy
 b. psychological consult
 c. massage
 d. stress relaxing techniques
 ...A...
726. Rigid foot orthotics versus flexible & semi-flexible is for.
 a. athletes in different events
 b. flexible pediatric foot
 c. bunion
 d. elderly with point of pressure
 ...A...
727. What is another name for progressive resistive exercises?
 a. Jacobson's
 b. Bobath's
 c. DeLorme's
 d. Frenkel's
 ...C...
728. What vitamin or supplement would help with Carpal Tunnel Syndrome?
 a. Pyroxidine
 b. Thiamine
 c. cyanocobalamin
 d. riboflavin
 ...A...
729. Which of the following is indicated for a patient presenting with a yeast infection?
 a. B-complex
 b. Acidophilus
 c. Mg
 d. Ca⁺⁺
 ...B...
730. Patient w/ senile osteoporosis, nutritional treatment should NOT be:
 a. ↑ Ca⁺⁺ and ↑ Protein
 b. ↓ Ca⁺⁺ and ↓ Protein
 c. ↓ Na⁺
 d. ↑ physical activity
 ...A...
731. Patient has a spondylolysis of 8mm of L5 vertebra. What is the best care to give? Patient had no pain, signs or symptoms of any kind.
 a. Posterior adjustment with a drop
 b. Anterior adjustment with a drop
 c. refer for surgery
 ...NO ANS...
732. To correct a subluxation of the trapezium, segmental contact would be:
 a. proximal to the base of the 1st metacarpal
 b. proximal to the base of the 2nd metacarpal
 c. proximal to the base of the 5th metacarpal
 d. proximal to the lunate
 e. proximal to the base of the 4th metacarpal
 ...A...
733. Side posture move for inferior sacral base fixation with ischial contact the line of correction is
 a. P-A, I-S
 b. P-A, S-I
 c. A-P, I-S
 d. A-P, S-I
 ...B...
734. What is the segmental contact point for a supine glenohumeral misalignment?
 a. axilla
 b. inferior spine of scapular
 c. acromioclavicular joint
 d. posterior aspect of humeral head
 ...D (if post misaligned)...
735. Presence of squamous epithelial cells indicates:
 a. glomerulonephritis
 b. urinary tract infection
 c. contamination
 d. hematuria
 ...C...
736. What test measures the rate of absorption for B12?
 a. Coomb's
 b. Schilling
 c. Dick
 d. VDRL
 ...B...
737. Which of the following is a presentation of a transverse section in the cervical region?
 A  B  C  D 
 a. A
 b. B
 c. C
 d. D
 ...C...
738. Which of the following vertebral levels is medial to the spine of the scapula?
 a. T1
 b. T3
 c. T5
 d. T7
 ...B...
739. Shortened and hypertonic quadriceps will result in the movement of the ilium (P.S.I.S.) in which direction.
 a. anterior superior
 b. posterior inferior
 c. anterior inferior
 d. posterior superior
 ...C...
740. Lumbar range of motion is most restricted in?
 a. flexion
 b. extension
 c. rotation
 d. lateral flexion
 ...C...
741. Best indicator for successful flexion distraction on low back pain patient on initial trial.
 a. diffuse thigh pain goes to buttock
 b. diffuse thigh pain centralizes in low back
 c. centralized low back pain diffuses over low back
 d. centralized low back pain diffuses to thigh
 ...B...
742. Hypermobility and discopathy occur most at:
 a. C0-C1
 b. C2-C4
 c. C4-C6
 d. C7-T1
 ...C...
743. In coupling motion with left lateral flexion, the spinous rotate to _____ in the cervical region and in the lumbar region, right lateral flexion causes the spinous to rotate
 a. left, right
 b. right, right
 c. left, left
 d. right, left
 ...B...
744. What muscle is not used in shoulder abduction?
 a. teres major
 b. latissimus dorsi
 c. pectoralis major
 d. levator scapulae
 ...D...
745. In transition from T10-L1 facets go from _____ to _____
 Coronal – Sagittal