



श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकीसंस्थान, तिरुवनंतपुरम्

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SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY,  
THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION : ACADEMIC SESSION JANUARY 2020

PROGRAM: M.Ch Neurosurgery (Post MS)

Time: 90 minutes

Max.Marks: 100

(Select the most appropriate answer)  
(There are no negative marks for wrong answers)

- 1) The commonest cause of subarachnoid haemorrhage:
  - a. Trauma.
  - b. Aneurysm.
  - c. Arteriovenous malformation.
  - d. None of the above.
- 2) Which of the following statements about esophageal anatomy is correct?
  - a. The esophagus has a poor blood supply, which is segmental in distribution and accounts for the high incidence of anastomotic leakage.
  - b. The esophageal serosa consists of a thin layer of fibroareolar tissue.
  - c. The esophagus has two distinct muscle layers, an outer longitudinal one and an inner circular one, which is striated in the upper third and smooth in the distal two thirds.
  - d. The lymphatic drainage of the esophagus is relatively sparse, localized primarily to adjacent paraesophageal lymph nodes.
- 3) A 75 y old woman comes to the clinic, with a complaint of loss of vision in her left eye, which had been transient on a couple of occasions but is now persisting. She has been seen recently at urgent care centers for multiple complaints including generalized fatigue, left-sided dull boring headaches with occasional sharp jabbing sensations, and arthritic complaint in the hips. In addition, she reports some recent loss of 3-4 kg weight. The only remarkable finding on the routine labs obtained from her prior evaluations is an elevated alkaline phosphatase. You determine that the likely cause of her condition is:
  - a. Glaucoma.
  - b. Brain tumor arising anterior to the optic chiasm.
  - c. Optic neuritis.
  - d. Temporal arteritis.

- 4) A 54-year-old male patient is brought to the emergency with multiple long bone injuries and suspected blunt trauma abdomen. His ABG shows pH of 7.24, PCO<sub>2</sub> of 39.4, PO<sub>2</sub> of 95, HCO<sub>3</sub> of 18, and anion gap of 10. He is in:
- Respiratory acidosis.
  - Respiratory alkalosis.
  - Metabolic acidosis.
  - Metabolic alkalosis.
- 5) A subtle sign of corticospinal weakness is:
- Hemiparesis.
  - Waddling gait.
  - Foot drop.
  - Pronator drift.
- 6) Posterolateral herniation of L4-L5 disc causes radiculopathy of
- L3.
  - L4.
  - L5.
  - S1.
- 7) All the following are manifestations of pituitary apoplexy except:
- ophthalmoplegia.
  - vision loss.
  - cushings syndrome.
  - Panhypopituitarism.
- 8) The commonest tumor of the bone:
- Ostcosarcoma.
  - Chondrosarcoma.
  - Metastasis.
  - Ewing's Sarcoma.
- 9) Which of the following is the preferred route to perform cerebral angiography?
- Trans-femoral.
  - Trans-axillary.
  - Trans-brachial.
  - Direct carotid puncture.

10) The radiation source of a Gamma Knife is:

- a. Cobalt.
- b. Radium.
- c. Thorium.
- d. Iodine 131.

11) The least common complication of a fibroid:

- a. Calcification.
- b. Red degeneration.
- c. Hyalinisation.
- d. Malignant change.

12) Regarding Propofol the following is true except:

- a. GABA – like effects.
- b. Used for aneurysm clipping.
- c. Increased steroid synthesis.
- d. Reduces epileptic activity.

13) Concentration of Bleaching Powder for disinfection of faeces:

- a. 5%.
- b. 10%.
- c. 15%.
- d. 20%.

14) Post traumatic avascular necrosis as commonest in fractures of

- a. Humerus surgical neck
- b. Distal Radius
- c. Scapular neck
- d. Femoral Neck

15) The following about Cheyne Stoke's respiration is not true:

- a. Occurs with impaired consciousness.
- b. Crescendo – Decrescendo manner of respiratory pattern.
- c. Usually seen in bilateral cerebral dysfunction.
- d. Reactivity to CO<sub>2</sub> is lost.

16) Blindness in hydrocephalus is due to the following:

- a. Occlusion of posterior cerebral arteries.
- b. Chronic papilledema.
- c. Compression of optic apparatus due to dilatation of third ventricle.
- d. All the above.

17) The following about chronic subdural hematoma is true:

- a. Has to be operated within 6 hours to get good results.
- b. Associated with parenchymal contusion.
- c. Dural repair is often done.
- d. Venous injury is the leading cause.

18) All are true about mycetoma except:

- a. Chronic granulomatous lesion caused by fungus.
- b. Hand is the commonest site.
- c. Slowly progressive painless nodule.
- d. Lymphatic spread occurs.

19) The dorsal scapular nerve arises from:

- a. C4.
- b. C5.
- c. C6.
- d. C7.

20) Pupil sparing oculomotor palsy is seen in:

- a. Anterior clinoidal meningioma.
- b. Posterior communicating artery aneurysm.
- c. Diabetic neuropathy.
- d. Uncal herniation.

21) Taste sensations from the anterior two-thirds of the tongue are carried to the geniculate ganglion by the:

- a. Greater superficial petrosal nerve.
- b. Chorda tympani.
- c. Vagus nerve.
- d. Gingivo-buccal nerve.

22) Which of the following statements regarding the p-value of a test is correct?

- a. It is the probability of detecting a true positive result or the probability of the observed effect being due to chance.
- b. It is the probability of getting a false positive result or the probability of the observed effect being due to chance.
- c. It is the probability of detecting a clinically relevant effect.
- d. It is the probability of accepting the null hypothesis.

23) Which of the following is the most appropriate outcome measure for a case control study?

- a. Odds ratio.
- b. Relative risk.
- c. Risk ratio.
- d. Attributable risk.

24) Stylopharyngeus muscle is supplied by....

- a. Facial nerve.
- b. Sup vestibular.
- c. Glossopharyngeal nerve.
- d. Vagus nerve.

25) Cricothyroid muscle acts a ..... of the vocal cord

- a. Abductor.
- b. Tensor .
- c. Adductor.
- d. Lengthner.

26) The principal fuel for the bowel mucosa is.....

- a. Leucine.
- b. Isoleucine.
- c. Glutamine.
- d. Valine.

27) Single port access laparoscopy is being used to perform.....

- a. Cholecystectomy.
- b. Liver biopsy.
- c. Colon resection.
- d. All of the above.

28) BRCA1 mutation carriers typically develop.....

- a. Low grade ER positive her2/neu negative breast cancer.
- b. High grade ER negative her2/neu negative breast cancer.
- c. Low grade ER positive her2/neu positive breast cancer.
- d. High grade ER positive her2/neu positive breast cancer.

29) Bill's bar separates the:

- a. Facial nerve and superior vestibular nerve.
- b. Superior vestibular nerve and inferior vestibular nerve.
- c. Inferior vestibular nerve and the cochlear nerve.
- d. Cochlear nerve and the superior vestibular nerve.

30) The hypothalamus inhibits the secretion of prolactin by secreting:

- a. Dopamine.
- b. Serotonin.
- c. Noradrenaline.
- d. GABA.

31) A 36 year old man (60kg body weight) has undergone pituitary adenoma excision. 6 hour post pituitary surgery, his urine output for two consecutive hours is 300ml every hour and Serum sodium is 153mEq/L, next step in management:

- a. Dextrose 5%.
- b. Normal saline.
- c. DDAVP.
- d. 3% saline.

32) CARCINO EMBRYONIC ANTIGEN is elevated in all except:

- a. Thyroid.
- b. Colon.
- c. Pancreas.
- d. Lung.

33) A 19 year old male is brought to hospital after a fall from motorbike because of headache and vomiting. His initial computerized axial tomographic examination of the skull is normal. Two hours later he loses consciousness and is found to have dilatation of one pupil. He shows no response to painful stimuli. His blood pressure is 160/100 and his pulse rate 55 per minute. In consequence of his deteriorating condition the next step in his management should be:

- a. Urgent craniotomy.
- b. Repeat CT scan of the skull.
- c. Bilateral carotid angiography.
- d. Treatment of cerebral oedema.

34) Stewart Treves syndrome is....

- a. Epithelioid angiosarcoma.
- b. Radiation induced angiosarcoma.
- c. Angiosarcoma in the context of lymphoedema.
- d. Idiopathic angiosarcoma.

35) All the following syndromes are associated with increased predisposition to cancer due to defect in DNA repair mechanisms EXCEPT:

- a. Ataxia telangiectasia.
- b. Fanconi's anemia.
- c. Xeroderma pigmentosa.
- d. Von Hippel Lindau syndrome.

36) All the following innervate the scalp except:

- a. Zygomatico temporal.
- b. Greater occipital.
- c. Infratrachlear.
- d. Auriculo temporal.

37) The singer's nerve is....

- a. Recurrent laryngeal nerve.
- b. Internal branch of the superior laryngeal nerve.
- c. External branch of the superior laryngeal nerve.
- d. Vagus nerve.

38) The following statements are true for Lynch Syndrome EXCEPT:

- a. It is responsible for at least 13-20% of total colon cancer cases.
- b. It is inherited in an autosomal dominant fashion.
- c. Males are affected at a higher penetrance.
- d. It is associated with younger age at presentation of colon cancer.

39) The Abbe- Wharton- Mcindoe operation is most popular for:

- a. Creating neo vagina.
- b. Repair of vaginal vault prolapsed.
- c. Vesico vaginal fistula repair.
- d. Recto vaginal fistula repair.

40) Retroviruses are:

- a. RNA viruses that have capacity to synthesize double stranded DNA from single stranded viral RNA genome.
- b. DNA viruses that have capacity to synthesize double stranded DNA from single stranded viral RNA genome.
- c. RNA viruses that have capacity to synthesize single stranded DNA from single stranded viral RNA genome.
- d. DNA viruses that have capacity to synthesize single stranded DNA from single stranded viral RNA genome.

41) In an adult, obesity is defined as BMI (Quetelet's index) greater than:

- a. 20 kg/m<sup>2</sup>.
- b. 25 kg/m<sup>2</sup>.
- c. 30 kg/m<sup>2</sup>.
- d. 35kg/m<sup>2</sup>.

42) Kadish classification is used in which tumour?

- a. Retinoblastoma.
- b. Olfactory neuroblastoma.
- c. Cavernous sinus tumor.
- d. Paraganglioma.

43) The primary CNS neoplasm that is associated with epstein- barr virus (EBV) is:

- a. Oligodendroglioma.
- b. Primary CNS lymphoma.
- c. GBM.
- d. Ependymoma.

44) What threshold is used to define critical weight loss in patients with cancer:

- a. 10% of baseline body weight in 3months.
- b. 10 lbs in 1 month.
- c. 10% of baseline body weight in 6 months.
- d. 10% of lean body mass in 6months.

45) Which surgeon among the following has been a recipient of the Nobel prize in Medicine?

- a. Theodore Bilioth.
- b. Alexis Carell.
- c. Thomas Wilhem Murray.
- d. William Halstead.



46) Whipple's resection for carcinoma pancreas does not usually include:

- a. Choledochojejunostomy.
- b. Duodenojejunostomy.
- c. Pancreaticojejunostomy.
- d. Gastrojejunostomy.

47) Ulcerative colitis could involve all of the following organs except:

- a. Ileum.
- b. Eyes.
- c. Liver
- d. Duodenum.

48) Off pump beating heart coronary artery surgery(OPCAB) is associated with all of the following except:

- a. Increased risk of post perfusion syndrome.
- b. Use of a stabiliser during surgery.
- c. Reduced risk of perioperative stroke.
- d. Avoidance of crystalloid cardioplegic solutions.

49) An ideal patient for trans-hiatal esophagectomy and gastric pull up would be.....

- a. A 25 year old lady with upper third esophageal squamous cell carcinoma.
- b. A 40 year old man with lower third esophageal adenocarcinoma.
- c. A 30 year old man with a middle third esophageal perforation and mediastinitis.
- d. A 45 year old lady with gastroesophageal junction ulceroproliferative adenocarcinoma and ascites.

50) About blood transfusions, the following statement is incorrect?

- a. Platelets have a shelf life of 3 weeks.
- b. Cryoprecipitate is useful in low fibrinogen conditions and in factor VIII deficiency.
- c. Fresh frozen plasma (FFP) is considered as the first-line therapy in coagulopathic haemorrhage.
- d. Patients can pre-donate blood up to 3 weeks before surgery for autologous transfusion.

51) Which tumor of the pancreas of endocrine origin has the best prognosis?

- a. Somatostatinoma.
- b. Gastrinoma.
- c. Insulinoma.
- d. VIPoma.

- 52) Which of the following is least likely to have a post operative cardiac complication after elective surgery?
- Myocardial infarction 5 months prior.
  - A harsh aortic systolic murmur.
  - Premature ventricular contractions on ECG.
  - Features of congestive heart failure and 8 g/dl haemoglobin.
- 53) Adequate recommended pressure to be maintained in the endotracheal tube cuff is...
- 20-30cms of water.
  - 35-45cms of water.
  - 40-50cms of water.
  - 5-10cms of water.
- 54) True about Gastro intestinal stromal tumors (GIST) is....
- Surgical excision has the best prognostic outcome.
  - Tyrosine kinase inhibitors offer no benefit for adjuvant therapy.
  - Most tumors are large and cause intestinal obstruction.
  - Size less than 4 cm and homogeneity on endoscopic ultrasound is a predictor for malignant GIST.
- 55) Which of the following is true about Wilm's tumor?
- Usually affects adolescent males sporadically.
  - Has a survival of 30-40% for Stage I even with surgery and multimodal therapy.
  - Most commonly presents as an abdominal mass.
  - Bilateral Wilm's tumor may be present in 30-40% of patients.
- 56) PAS stains for fungus stains the.....
- Cytoplasm.
  - Mitochondria.
  - Nucleus.
  - Cell wall.
- 57) Which of the following zones of the adrenal gland is the site of aldosterone synthesis?
- Zona glomerulosa.
  - Zona fasciculate.
  - Zona reticularis.
  - Adrenal medulla.

58) The following statement about Heparin induced thrombocytopenia are true except:

- a. It is an immune mediated activation of circulating platelets.
- b. It is exclusively seen when unfractionated heparin is used.
- c. It may present with acute thrombotic complications.
- d. Warfarin is contraindicated in the management of this condition.

59) A 36-year-old woman complains of a 3-month history of bloody discharge from the nipple. On examination, a small nodule is found, deep to the areola. Careful palpation of the nipple areolar complex results in blood arrearng at the 3 O'clock position. Mammogram findings are normal. What is the likeliest diagnosis?

- a. Intraductal papilloma.
- b. Breast cyst.
- c. Intraductal carcinoma.
- d. Carcinoma in situ.

60) When progressive enlargement of a multinodular goiter causes symptomatic tracheal compression, the preferred management in otherwise good-risk patients is:

- a. Iodine treatment.
- b. Thyroid hormone treatment.
- c. Surgical resection of the abnormal thyroid.
- d. Radioactive iodine treatment.

61) The most precise diagnostic screening procedure for differentiating benign thyroid nodules from malignant ones is:

- a. Thyroid ultrasonography.
- b. Thyroid scintiscan.
- c. Fine-needle-aspiration biopsy (FNAB).
- d. Thyroid hormone suppression.

62) Staples may safely be placed during laparoscopic hernia repair in each of the following structures except:

- a. Cooper's ligament.
- b. Tissues superior to the lateral iliopubic tract.
- c. Tissues inferior to the lateral iliopubic tract.
- d. The iliopubic tract at its insertion onto Cooper's ligament.

- 63) Which of the following statements is false about the corpus callosum?
- It is largest condensation of commissural fibres of the brain.
  - The forceps minor is a curved anterior extension of the callosal fibres into the frontal lobe.
  - The forceps major is a posterior continuation of the fibres passing through the callosum forced laterally by the deep parieto-occipital sulcus.
  - The commissural fibres from medial part of the temporal lobe pass through the tapetum via the splenium to communicate with similar structures on the opposite side.
- 64) A 45 year-old woman has diffuse loss of vibration sense. Which of the following tests would give the most information about the cause of this loss?
- X rays of her spine.
  - Determination of her reflex reaction time.
  - Measurement of her CSF protein content.
  - Biopsy of her gastric mucosa.
- 65) Posterior Mediastinum includes all except:
- Esophagus.
  - Vagus nerve.
  - Thoracic aorta.
  - Phrenic Nerve.
- 66) When performing a Nissens fundoplication pneumothorax is formed by penetration of the mediastinal pleura with insufflated carbon dioxide. Which of the following methods are ideal?
- Immediate cessation of surgery and placement of a tube thoracotomy.
  - This is of no consequence and surgery may be continued as usual.
  - Placement of a catheter through the same defect and placing it under water seal.
  - Aspiration through a needle placed in the second intercostal space.
- 67) Which of the following is not involved in colour vision?
- activation of a pathway that signals differences between S cone responses and the sum of L and M cone responses.
  - geniculate layers 3-6.
  - P pathway.
  - area V3A of visual cortex.

- 68) Which of the statements about the mesencephalic nucleus of trigeminal nerve is false?
- It contains bipolar cells.
  - This nucleus along with the motor nucleus is the anatomical substrate of the jaw jerk.
  - It helps in regulating the strength of the bite.
  - Their peripheral processes carry proprioceptive information from the muscles of mastication.
- 69) At the age of 46, an accountant has developed hoarseness due to an inoperable cancer of the left upper lung lobe. He has smoked heavily since the age of 14. Which of the following features of cancer of the lung indicates distant spread?
- Hypercalcemia.
  - Gynecomastia.
  - Syndrome of inappropriate secretion of antidiuretic hormone (SIADH).
  - Brachial plexus lesion (Pancoast's syndrome).
- 70) Carcinoid tumors- common sites are all except:
- Appendix.
  - Ileum.
  - Esophagus.
  - Jejunum.
- 71) All are true of anterior perforated substance except:
- Area of grey matter located in the sphenoidal compartment of sylvian fissure.
  - Bounded anteriorly by medial and lateral olfactory stria.
  - Bounded medially by limen insulae.
  - Bounded posterolaterally by stem of temporal lobe.
- 72) Which one of the following is not a cortical branch of anterior cerebral artery?
- frontopolar artery.
  - orbitofrontal artery.
  - pericallosal artery.
  - anterior, mid and posterior internal frontal arteries.
- 73) Vernet syndrome is characterized by involvement of cranial nerves:
- 7, 8, 9.
  - 8, 9, 10.
  - 9, 10, 11.
  - 9, 10, 11, 12.

74) Cushing reflex in raised ICP relates to all of the following except?

- a. Bradycardia.
- b. Hypertension.
- c. Irregular respiration.
- d. Hypotension.

75) A 1-week-old infant is brought to the hospital because of vomiting. An upper gastrointestinal (GI) series reveals duodenal obstruction. On laparotomy, annular pancreas is found. Which of the following statements about annular pancreas is TRUE?

- a. Resection is the treatment of choice.
- b. It is associated with Down's syndrome.
- c. It is most likely due to abnormal rotation encircling the third part of the duodenum.
- d. Symptoms begin in childhood.

76) Which of the following are incorrectly paired?

- a. Timbre (quality) of sound: harmonic vibrations.
- b. Direction of sound: difference in frequency of impulses in auditory nerve fibers.
- c. Pitch of sound: point of greatest displacement of the basilar membrane.
- d. Pitch of sound: frequency of sound wave.

77) In a patient who had a motor-cycle crash, a CT of the abdomen revealed a peripancreatic hematoma and indistinct pancreatic border. The most definitive test for a pancreatic injury requiring operative intervention is:

- a. ERCP.
- b. Ultrasonography.
- c. CT scanning.
- d. Amylase test of lavage fluid.

78) A 25 year old gentleman presents with gynaecomastia and reduced libido. He has a prolactin level of 1200 ng/ml with bitemporal hemianopsia. His MRI shows a pituitary macroadenoma. The treatment of choice would be:

- a. Oral ketoconazole.
- b. Oral cabergoline.
- c. Transnasal endoscopic excision.
- d. Transcranial microscopic excision.

79) A 20 year old villager has insidious onset upgaze paresis, convergence retraction nystagmus, light near dissociation and retracted eyelids. The most likely pathological lesion is:

- a. Pineal germinoma.
- b. Pontine glioma.
- c. Pulvinar tuberculoma.
- d. 4<sup>th</sup> ventricular ependymoma.

80) A 20-year-old unrestrained driver was involved in a motor-vehicle crash. A computed tomography (CT) of the abdomen revealed a large hematoma in the second portion of duodenum. The rest of the abdomen is normal. The initial management of this duodenal hematoma should be:

- a. Operative evacuation.
- b. Nasogastric decompression, intravenous fluids, and gradual resumption of oral diet.
- c. Laparotomy, pyloric exclusion, and gastrojejunostomy.
- d. Octreotide.

81) Maximum caloric intake with peripheral parenteral nutrition is:

- a. 1800-2000kcal /day.
- b. 800-1200kcal/day.
- c. 500-700kcal/day.
- d. 1300-1700kcal/day.

82) Which among the following type of HPV has a strong association with cervical cancer?

- a. HPV 6.
- b. HPV 11.
- c. HPV 16.
- d. None of the above.

83) In ONCOTYPE DX assay, recurrence scores 18 -30 denotes:

- a. Low risk.
- b. Intermediate risk.
- c. High risk.
- d. None of the above.

- 84) An individual who has received all three doses of hepatitis B vaccine and who has never had hepatitis B virus (HBV) infection would be expected to have which of the following serologic marker(s)?
- HBcAb.
  - HBsAb.
  - HBeAb.
  - HBeAb and HBsAb.
- 85) A palliative surgical option for primary generalised drug resistant atonic seizures would be:
- Selective amygdalohippocampectomy.
  - Multilobar resection.
  - Posterior quadrant disconnection.
  - Corpus callosotomy.
- 86) The artery of Bernasconi and Cassanari is a branch of:
- Thalamoperforators.
  - Internal carotid artery.
  - Basilar artery.
  - Medial posterior choroidal artery.
- 87) The areas devoid of a blood brain barrier include all except:
- area postrema.
  - induseum griseum.
  - Neurohypophysis.
  - pineal gland.
- 88) Which of the following is not a part of the limbic system:
- Fimbria of fornix.
  - Thalamic fasciculus.
  - Diagonal band of Broca.
  - Mamillothalamic tract.
- 89) Resting membrane potential of a neuron is:
- 90 mV.
  - 65 mV.
  - 70 mV.
  - 50 mV.



- 90) Which of the following histological variants of a meningioma is associated with a more aggressive clinical behaviour?
- Angiomatous.
  - Chordoid.
  - Clear cell.
  - Papillary.
- 91) True about dexmedetomidine, commonly used for awake craniotomy is:
- Alpha 2 adrenergic receptor agonist.
  - Sedative without the risk of respiratory depression.
  - Both of the above.
  - None of the above.
- 92) Which of the following is *not* a feature of Parinaud's syndrome?
- Dissociated light-near response.
  - Nystagmus retractorius.
  - Paralysis of upgaze.
  - Third nerve palsy.
- 93) Which of the following antiepileptic drugs has the shortest half-life?
- Carbamazepine.
  - Phenobarbital.
  - Phenytoin.
  - Valproate.
- 94) Each of the following is true of central pontine myelinolysis except:
- A marked inflammatory response with destruction of nerve cells in the pons is seen.
  - It is associated with rapid correction of hyponatremia.
  - Quadriplegia, pseudobulbar palsy, and a locked-in syndrome can occur.
  - Some patients have no signs or symptoms referable to the pontine lesion.
- 95) The anterior choroidal artery supplies portions of each of the following structures except the.....
- Globus pallidus.
  - Hippocampus.
  - Hypothalamus.
  - Internal capsule.

- 96) The membrane of Lilliequist separates which of the following subarachnoid cisterns?
- Ambient cistern and crural cistern.
  - Ambient cistern and quadrigeminal cistern.
  - Interpeduncular and chiasmatic cistern.
  - Lamina terminalis cistern and interpeduncular cistern.
- 97) Which of the following vascular malformations have no intervening brain parenchyma between blood vessels?
- Arteriovenous malformations.
  - Capillary telangiectasias.
  - Cavernous malformations.
  - Venous angiomas.
- 98) Cortical blindness, amnesia, thalamic pain is associated with occlusion of...
- Anterior cerebral artery.
  - Basilar artery.
  - Middle cerebral artery.
  - Posterior cerebral artery.
- 99) A 56-year-old male describes bilateral pain in his lower back and legs with prolonged standing while working on an assembly line. Whenever he sits down and takes a break, he gets some relief, but it recurs when he resumes his job. No other inciting events can be identified. The most likely cause of this problem is....
- Degenerative joint disease.
  - Degenerative disk disease.
  - Peripheral vascular disease.
  - Lumbar spinal stenosis.
- 100) An artery of Percheron territory infarct would result in:
- Bilateral pontine infarcts.
  - Bilateral thalamic and mesencephalic infarcts.
  - Unilateral thalamic and diffuse brain stem infarcts.
  - Hypothalamic and medullary infarcts.