श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकी संस्थान,
तिरुवनंतपुरम् -11

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

ENTRANCE EXAMINATION : ACADEMIC SESSION JANUARY 2018

PROGRAMME: DM NEUROLOGY (PEDIATRICS)

Time: 90 min **Max.Marks: 100**

(Select the most appropriate answer)

1. Which among the following antibiotics act by interfering with cell wall synthesis of bacteria?

A. Clindamycin

B. Tigecycline

C. Clarithromycin

D. Vancomycin

2. Which of the following statements about Wilson's disease is TRUE?

A. Patients can present with hepatic manifestations before 1 year of age.

B. Abnormal gene for Wilson's disease is located in short arm of chromosome 13(13p14.3)

C. Boys are more likely than girls to present with Fulminant hepatic failure.

D. Neurological symptoms predominate after 20 years of age.

3. Which among the following is the most common myeloproliferative neoplasm driver gene?

A. FGFR1

B. JAK2

C. DKK1

D. NFκB

4. In Rheumatic mitral regurgitation, which medication is preferred to reduce regurgitant volume and preserve left ventricular function?

A. Digoxin
B. Betablockers
C. ACE-inhibitors
D. Diuretics

5. By what age do homozygous Beta Thalassemia (Thalassemia Major) afflicted children become symptomatic?

A. In-utero
B. At birth
C. 2-6 months of life
D. More than 6 months of life.

6. Least common cause of ambiguous genitalia in females?

A. 21 hydroxylase deficiency
B. 11 hydroxylase deficiency
C. WNT4 gene mutation
D. Foetal placental steroid sulfatase deficiency

7. All of the following drugs can cause IUGR except?

A. Nicotine
B. Propranolol
C. Phenothiazines
D. Alcohol

8. Deficiency of which among the following clotting factors, is not associated with any risk of bleeding?

A. Factor V
B. Factor VII
C. Factor X
D. Factor XII

9. This condition is caused by the deletion of all four alpha globin genes:

A. Hb Barts hydrops fetalis

B. Diamond-Blackfan anaemia

C. Alpha thalassemia trait

D. Beta thalassemia major

10. Which of the following is not a major cause of anemia in premature infants?

A. Parvovirus B19 infection

B. Iron and folic acid deficiency

C. Inadequate erythropoietin production

D. Reduced red cell lifespan

11. Which disorder presents with craniosynostosis, midface hypoplasia, 2-5 digital syndactyly, VSD, MR and cleft palate ,due to a defect in chromosome 10

A. Hurler's syndrome

B. Crouzon's syndrome

C. Apert's syndrome

D. Sotos syndrome

12. Which of the following is an example of intrahepatic biliary hypoplasia?

A. Alpha 1 antitrypsin deficiency

B. Galactosemia

C. Alagille's syndrome

D. Cystic fibrosis

13. Which of the following has the shortest plasma half-life

A. Corticosterone

B. Renin

C. Dehydroepiandrosterone

D. Norepinephrine

14. Which of the following is associated with a reduced risk of diabetes?

A. Mother with insulin dependent diabetes mellitus

B. HLA-DR5

C. HLA-DR3

D. HLA-DR4

15. Which is the glycogen storage defect due to a defect in the enzyme amylo-1,6-glucosidase

A. Cori (Type III)

B. Swilling (Type XI)

C. Von Gierke (Type 1)

D. McArdle (Type V)

16. The initial reaction in the intrinsic system is conversion of

A. Inactive factorXI to active factor Xi

B. inactive factor XII to active factor XII

C. Inactive factor IX to active factor IX

D. Inactive factor X to active factor X

17. Abstract thinking commences at what age in toddlers?

A. 2 years

B. 3 years

C. 9 years

D. 12 years

18. The fatty acid, which is necessary during 0 to 6 months of age of fetal development, is

A. Linolic acid

B. Linolenic acid

C. Arachidonic acid

D. Palmitic acid

19. Which of the following inborn errors have X-linked recessive inheritance?

A. Hurler syndrome

B. Biotinidase deficiency

C. Ornithine transcarbamylase deficiency

D. Acute intermittent porphyria

20. Which of the following conditions is associated with pulmonary stenosis of childhood:

A. Prominent pulmonary vascular markings on X Ray

B. Loud P2 on auscultation

C. Intestinal carcinoid

D. Indomethacin useful for treatment

21. Which of the following is FALSE about von Willebrand's disease type IIb:

A. vWF binds platelet suface receptor Gp 1b

B. Desmopressin used for bleeding prophylaxis

C. Administer factor VIII concentrate

D. Normal platelet counts

22. Which of the following is likely to be associated with cardiac myxomas:

A. Splinter hemorrhages

B. Thrombocytosis

C. Neurofibroma

D. Autosomal recessive inheritance

23. Imaging of the spine to exclude an occult spinal dysraphism is not required in which of the following

A. Subcutaneous lipoma

B. Coccygeal pits

C. Atypical dimples

D. Vascular lesions like hemangioma and telangiectasia

24. The candidate genes strongly implicated in attention deficit hyperactivity disorders are all except

A. Dopamine transporter gene (DAT1)

B. Dopamine 4 receptor gene (DRD4)

C. Synaptosomal associated protein SNAP-25

D. SH3 and multiple ankyrin repeat domains protein 2 encoding gene (SHANK 2 gene)

25. Which of the following statements regarding Rett syndrome is NOT true

A. Cardiac arrhythmia may result in sudden, unexpected death at a rate that is higher than the general population

B. Seizures are rare in Rett syndrome

C. MeCP2 mutation is the underlying genetic cause

D. Autistic behaviour is a typical finding in all patients

26. Which of the following triptans is FDA approved for the episodic headache of migraine in children?

A. Rizatriptan

B. Almotriptan

C. Sumatriptan

D. Zolmitriptan

27. A 2-year-old boy presented to the emergency department with 3 episodes of right focal seizures in a single day. He had mild global developmental delay and has glaucoma. On examination he had paucity of right side and port vine stain over the left side of face. What is the commonest MRI brain finding associated with this condition?

A. Hemimegalencephaly

B. Leptomeningeal angioma

C. Hemangioblastoma

D. Sub ependymal giant cell astrocytoma

28. A 4-year-old boy presented with delayed development, ataxia, generalised chorea and nystagmus. MRI brain showed findings suggestive of hypomyelination. What is the most likely diagnosis?

A. Pelizaeus-Merzbacher disease
B. Neuronal ceroid lipofuscinose
C. Metachromatic leuokodystrophy
D. Sialidosis type 2

29. Which of the following produces 'downhill esophageal varices' in children?

A. Splenic vein thrombosis
B. Chronic liver disease
C. Superior vena cava thrombosis
D. Inferior vena cava thrombosis

30. Which among the following is NOT true regarding Hirchsprung's disease?

A. There is absence of ganglion cells in submucosal and mesenteric plexus
B. Long segment disease is the most common presentation
C. Tissue biopsy shows increased acetylcholine esterase staining of the nerve bundles
D. Enterocolitis is responsible for mortality and morbidity

31. At birth when the placental circulation is cut off, what change is produced

A. Peripheral resistance suddenly falls
B. Peripheral resistance suddenly rises
C. The pressure in the aorta falls
D. The pressure in the pulmonary artery rises

32. What is the TRUE statement regarding Pendred syndrome?

A. Autosomal dominant disorder
B. Mutation of bicarbonate-iodide transport protein
C. Most common cause of syndromic deafness
D. Hypothyroidism is not associated with goitre

33. Chronic mucocutaneous candidiasis is seen as an initial manifestation of which of the following?

A. Type 1 autoimmune polyendocrinopathy

B. Familial glucocorticoid deficiency

C. McCune Albright syndrome

D. Adrenomyeloneuropathy

34. Which of the following is not a live attenuated vaccine?

A. HPV vaccine

B. Bacille Calmette-Guerin vaccine

C. Oral typhoid vaccine

D. MMR vaccine

35. Pulfrich's phenomenon is

A. Sensory deafferenattion causing hands feel useless but with normal motor function

B. Visual phenomenon with trouble following moving objects visually and lateral motion in the field of vision is perceived in depth which is virtual

C. Inability to adduct one eye with opposite eye abduction nystagmyus seein in MLF lesions

D. Transient symptoms like visual blurring.vertigo and nystagmus elicited by head movement or exercise in multiple sclerosis

36. A 7-year-old boy was admitted with pneumonia and was on parenteral antibiotics (Cefotaxim). After a brief improvement in his fever and cough, he developed multiple episodes of bloody diarrhoea, crampy abdominal pain and vomiting on the 4th day of admission. He was dehydrated, blood pressure was low with a rise in leukocyte count. What will be the ideal line of management?

A. Fluid and electrolyte replacement with discontinuation of cefotaxime

B. Fluid and electrolyte replacement with intravenous metronidazole

C. Fluid and electrolyte replacement with oral Vancomycin

D. Fluid and electrolyte replacement with intravenous Vancomycin

37. A male baby born of unrelated parentage, had cried immediately after birth and was feeding adequately and was discharged on the third day. He was readmitted on the postnatal day 8 with severe respiratory distress and drowsiness. What could be the possible diagnosis in this child among the following:-

A. Large PDA

B. TOF

C. Ebsein anomaly

D. Hypoplastic left heart syndrome

38. What are the indications for steroids in rheumatic fever?

A. Sydenham's chorea and carditis

B. Subcutaneous nodule

C. Sydenham's chorea, arthritis and carditis

D. Arthritis and carditis

39. Which of the following statements is true about methemoglobinemia in the newborn?

A. Congenital form may be due to autosomal recessive diaphorase 1 deficiency

B. Due to a right shift of the haemoglobin dissociation curve

C. Can be caused by autosomal recessive haemoglobin M disease

D. It is caused due to failure of conversion of ferrous haemoglobin back to ferric form

40. Which of the following is a poor prognostic indicator in acute lymphoblastic leukemia?

A. t(12,21)

B. t(4,11)

C. t(10,14)

D. Trisomy 10

41. A 10-year–old boy is brought for evaluation of proximal weakness affecting predomnantly the pelvic girdle.An LGMD is suspected.Which of the following protein is associated with its respective type of LGMD?

A. Myotilin and LGMD2A

B. Caveolin and LGMD2B

C. Dysferilin and LGMD1A

D. Fukutin related protein and LGMD2I

42. Yersinia pseudotuberculosis is

A. Anerobic infection causing tuberculosis like picture

B. Zoonotic infection occurring mostly in children and elderly causing watery diarrhea and abdominal pain

C. Aerobic infection occurring in elderly with cough, expectoration etc mimicking tuberculosis.

D. Infection caused by a gram negative bacteria simultating Bartonellosis

43. The commonest brain tumor in pediatric population is

A. Astrocytomas

B. Ependymomas

C. Germ cell tumours

D. Medulloblastoma

44. Which of the following is not a cause for metabolic coma in a child associated with hypoglycemia and acidosis?

A. Maple syrup urine disease

B. HMG-CoA lyase deficiency

C. Triple H syndrome

D. Fatty acid oxidation disorder

45. The parents of a child who has Down syndrome and a 47XX+21 karyotype comes to you for counseling about future pregnancies. Of the following, the risk for giving birth to another child who has trisomy is CLOSEST to:

A. No greater than general population at risk

B. 1% added to the mother's age-related risk

C. 5% added to the mother's age related risk

D. 10% added to the mother's age-related risk

46. Circulating antibodies against PLA2R is associated with which of the following glomerular disorders?

A. IgA Nephropathy

B. Membranous glomerulonephritis

C. Minimum change disease

D. Focal segmental glomerulosclerosis

47. Which of the following is true about Creatine deficiency disorder?

A. Gene map locus is 20p13.3

B. MR spectroscopy shows guanidinoacetate accumulation

C. Presents with severe spasticity in infant

D. Due to branched-chain alpha-keto acid dehydrogenase complex deficiency

48. All of the following are true about pyruvate carboxylase deficiency except

A. Lactic acidosis

B. Normal citrulline levels

C. Associated with high amplitude tremor of the limbs

D. MRI shows cystic periventricular leukomalacia

49. What is false about total anomalous pulmonary venous connection?

A. Right ventricular hypertrophy in older child on ECG

B. Prostaglandin is effective in management if obstructive symptoms appear

C. It is a duct-dependent lesion

D. May present at 6 months age if unobstructed with heart failure

50. Which of the following is false about Schwachmann- Diamond Syndrome?

A. Pancreatic failure

B. Autosomal recessive inheritance

C. Sweat sodium levels are increased

D. One-fourth of patients may develop myelodysplastic syndrome

51. Immunotherapy is less likely to be effective in encephalopathy associated with all of the following auto-antibodies except

A. Anti neuronal nuclear antibody-1

B. Anti neuronal nuclear antibody 2

C. Anti leucine rich glioma inactivated 1 antibody

D. Anti glutamic acid decarboxylase 65 antibody

52. Which of the following patterns of CSF Amyloid beta and tau is most consistent with the diagnosis of Alzheimer disease?

A. Elevated A beta and tau

B. Elevated A beta 42, reduced total tau and phosphorylated tau

C. Elevated t-tau and p-tau, reduced A beta 42

D. Reduced A beta 42, t-tau and p-tau

53. **A 34- year-old male presented with a one year history and signs of spastic paraparesis, spastic dysarthria and palatal myoclonus. His brain MRI revealed medullary atrophy with bilateral T2W hyperintensities in the dentate nuclei and middle cerebellar peduncles. A similar history was noted in his father who died in his fourth decade. Which of the following disorders is most likely**

A. Adrenoleukodystrophy

B. Krabbe disease

C. Metachromatic leukodystrophy

D. Alexander disease

54. **The language function most likely to be impaired following left thalamic hemorrhage is**

A. Comprehension

B. Fluency

C. Prosody

D. Repetition

55. **Which of the following cortical areas is involved in the comprehension of emotions of other people?**

A. Anterior insular cortex

B. Inferior frontal gyrus

C. Inferior parietal lobule

D. Temporoparietal junction

56. **Which of the following tests would indicate a major neurocognitive disorder over and above a major depressive disorder?**

A. Inattention

B. Impairment in construction tasks

C. Psychomotor slowing

D. Intact temporal orientation

57. **Which of the following antipsychotics is particularly useful in improving treatment-resistant psychosis and also in reducing suicide risk?**

A. Arpiprazole

B. Clozapine

C. Haloperidol

D. Risperidone

58. **Which of the following is a feature of alexia with agraphia**

A. Associated with Broca's aphasia

B. Associated with lesion in the left medial occipitotemporal junction

C. Associated with colour anomia

D. Associated with right inferior quadrantanopia

59. **A 60-year-old woman presents with 2 months of pain radiating from her buttock down to her right leg. She has right foot drop, with severe foot dorsiflexion weakness and sensory deficit in the right lateral leg and dorsum of the foot.. NCS showed reduced CMAP amplitude recorded from the tibialis anterior and extensor digitorum brevis muscles and normal superficial peroneal SNAP amplitude. Needle EMG shows fibrillation potentials and reduced recruitment in the tibialis anterior, extensor digitorum brevis, extensor hallucis, peroneus longus, tibialis posterior and flexor digitorum longus. Which of the following is the most likely diagnosis?**

A. L5 radiculopathy

B. S1 radiculopathy

C. Common peroneal neuropathy

D. Sciatic nerve injury

60. **Which of the following tests would you recommend in a 45-year-old lady with rapidly progressive dementia associated with diarrhoea, bloating, joint aches, weight loss and abnormal rhythmic facial and eye movements?**

A. HIV-ELISA

B. CSF PCR for Tropheryma whippelii

C. Blood PCR for Borrelia burgdorferi

D. CSF PCR for Herpes simplex virus

61. **Which of the following viruses is thought to have a strong association with the pathogenesis of multiple sclerosis?**

A. Human herpes virus 7

B. Epstein Barr virus

C. Cytomegalovirus

D. Coxsackie virus B

62. **Which of the following neuropsychological tests is most useful to test an important executive function, i.e ability to suppress irrelevant or interfering stimuli?**

A. Controlled Oral Word Association Test

B. Wisconsin Card Sorting Test

C. Antisaccade task

D. Visual subset of Weschler Memory Scale

63. **Which of the following ocular findings is highly characteristic of multiple sclerosis?**

A. Rebound nystagmus

B. Upbeat nystagmus

C. Periodic alternating nystagmus

D. Acquired pendular nystagmus

64. Which of the following neuropathies present characteristically with autonomic neuropathy?

A. Charcot Marie Tooth disease

B. Refsum's disease

C. Familial amyloid polyneuropathy

D. Adrenomyeloneuropathy

65. Which of the following diabetic neuropathies has the least association with the degree of glycemic control and duration of diabetes?

A. Diabetic neuropathic cachexia

B. Diabetic sensorimotor polyneuropathy

C. Diabetic autonomic neuropathy

D. Diabetic lumbosacral radiculoplexopathy

66. Which is true statement regarding Membrane potential

A. Decrease in extra cellular Ca concentration increases the excitability of the nerve

B. Decrease in the Ca concentration can stabilize the membrane

C. Increasing the external Na concentration will reduce the size of Action potential

D. Decreasing the external K decreases the resting membrane potential

67. Which of the following statements regarding dystrophinopathies is FALSE?

A. Point mutations are the commonest genetic abnormality in dystrophinopathies

B. In-frame mutation results in Becker phenotype and out of frame mutation produces Duchenne phenotype

C. Corticosteroid therapy may prolong ambulation in these patients

D. Female carriers can present with cardiomyopathy

68. A 50-year-old male patient presented with sub-acute onset limb girdle pattern of weakness 2 months after starting high dose Atorvastatin therapy which continued to worsen in spite of stopping the drug. His serum creatinine phosphokinase level was 5600 IU/L. Which of the following statements is FALSE regarding this patient?

A. Antibodies to HMGCoA reductase may be elevated

B. The patient should be investigated for connective tissue diseases and malignancies

C. Muscle biopsy will show extensive perimysial and endomysial infiltration with lymphocytes

D. The treatment of choice is corticosteroid

69. Which of the following statements is correct regarding disorders of corpus callosum

A. They result from abnormalities in the third trimester of pregnancy

B. Complete agenesis of corpus callosum is more common than partial agenesis.

C. They result from abnormalities in the commissural plate

D. Corpus callosum agenesis is rarely seen in isolation

70. A 30-year old gentleman from South India presents with three-year history of generalized chorea. His family members also reported significant behavioral disturbances in the patient. He has seizures of recent onset and his examination revealed disabling oro-mandibular choreo-dystonic movements, potentially injuring his tongue and lips. He also has clinical evidence of a peripheral neuropathy. No other family member is affected. Which among the following genes is most likely to be abnormal in him?

A. VPS13A gene

B. Junctophilin-3 gene

C. TBP gene

D. PRRT2 gene

71. Which among the following is the commonest target used for Deep Brain Stimulation (DBS) for Parkinson's disease

A. Subthalamic Nucleus

B. Globus Pallidus Externus

C. Substantia Nigra

D. Caudate Nucleus

72. STRIDE-PD study addressed which of the following therapies in Parkinson's disease?

A. Dopamine agonist

B. Amantadine

C. Monoamine Oxidase-B (MAO-B) Inhibitors

D. Catechol-O-Methyl Transferase (COMT) Inhibitors

73. Which among the following is the commonest cause of bacterial meningitis in adults?

A. Staphylococcus aureus

B. Haemophilus Influenzae

C. Streptococcus pneumoniae

D. Streptococcus pyogenes

74. Nephrogenic systemic fibrosis occurs in response to:

A. Intravenous iodinated computerized tomography (CT) contrast

B. Gadolinium contrast used for MRI

C. Pittsburgh Compound B

D. I-123 Meta-iodobenzylguanidine

75. Which of the following features would make a diagnosis of Aquaporin 4 antibody positive neuromyelitis optica spectrum disorder highly likely?

A. Typical optic neuritis

B. Area postrema syndrome

C. Multiple asymptomatic brain lesions

D. Encephalopathic presentation in childhood

76. The first reflex response to appear after spinal shock wears off

A. Slight contraction of the leg flexors and adductors in response to noxious stimuli

B. Slight contraction of the leg extensors and abductors in response to noxious stimuli

C. Slight contraction of the leg extensors and adductors in response to noxious stimuli

D. Slight contraction of the leg flexors and abductors in response to noxious stimuli

77. The neurological disorder "Brown-Vialetto-Van Laere syndrome" responds to treatment with high doses of:

A. Riboflavin

B. Niacin

C. Vitamin E

D. Alpha Lipoic Acid

78. Which among the following muscles internally rotate the thigh at the hip?

A. Gluteus Medius

B. Gluteus maximus

C. Piriformis

D. Obturator externus

79. Pigmentary retinal degeneration is seen in which among the following Spinocerebellar Ataxia (SCA) syndromes?

A. SCA-2

B. SCA-8

C. SCA-6

D. SCA-7

80. Which among the following form part of the "Neural Integrator" for horizontal gaze?

A. Rostral Interstitial nucleus of Medial Longitudinal Fasciculus (riMLF)

B. Interstitial nucleus of Cajal (INC)

C. Nucleus PropositusHypoglossi/ Medial Vestibular Nucleus

D. Pontine Paramedian Reticular Formation

81. Which among the following neurological syndromes is seen in advanced HIV infection, when CD4 count drops below 200 cells/mm3

A. Demyelinating polyradiculoneuropathy

B. HIV associated dementia

C. Zidovudine associated myopathy

D. Zoster associated radiculopathy

82. HAND: all are false except

A. Generally an early complication of HIV infection seen in almost 1/3 rd patients

B. Frascati criteria for clinical staging of HAND defines "mild neurocognitive disorder" as 1 SD below mean in 2 cognitive domains

C. Anti retroviral therapy causes little or no improvement

D. The prostate gland serve as a reservoir for HIV virus causing neurocognitive manifestations

83. In most of the current series on Progressive multifocal leukoencephalopathy (PML),what is the most common precipitating factor?

A. Natalizumab exposure

B. NHL chemotherapy with Rituximab

C. HIV infection

D. Crohn's disease treatment

84. A 45-year-old woman presented with pulsatile tinnitus and was diagnosed with cranial dural arterio-venous fistula (DAVF).Which of the following is correct regarding this condition?

A. Cortical venous drainage is associated with higher risk of hemorrhage

B. Drainage to a dural venous sinus is seen in less than 1% of patients

C. Endovascular embolisation does not play a role in the treatment of DAVFs

D. These lesions have a parenchymal nidus and pial arterial supply

85. Which of the following statements about acute pyogenic meningitis is TRUE?

A. All patients should undergo neuroimaging prior to CSF analysis

B. Patient should be initiated on empirical antibiotics ,if pyogenic meningitis is suspected, only after CSF has been send for culture.

C. If an imaging before CSF analysis is planned, to avoid delay in initiation of antibiotics, send a blood culture before starting empirical therapy.

D. All patients should receive 3rd generation Cephalosporin and Vancomycin as the first empirical therapy in suspected pyogenic meningitis, regardless of age.

86. In healthy human adults, REM (Rapid Eye Movement) sleep occupies what fraction of total sleep time?

A. 10-15%

B. 20-25%

C. 30-35%

D. 50%

87. Which of the following structures is involved in the pathophysiology of narcolepsy with cataplexy?

A. Lateral hypothalamus

B. Pedunculopontine nucleus

C. Superior olivary nucleus

D. Suprachiasmatic nucleus

88. If the Anterior lobe of the cerebellum is removed in a decerebrate animal there will be

A Hyperactivity of the flexor muscles

B Hyperactivity of the extensor muscles

C Hyperactivity of both the flexors and extensor muscles

D There will be no change in the rigidity

89. Spontaneous intracranial hypotension is most commonly due to a CSF leak in the -

A. Cervical region

B. Thoracic region

C. Lumbar region

D. Cribriform plate

90. The lenticulostriate branches provide blood supply to all, except

A. Putamen

B. Thalamus

C. Head and body of caudate

D. External globus pallidus

91. A 67- year-old male patient with diabetes mellitus, hypertension and dyslipidemia presented with acute onset paraplegia in the emergency department. While he was gardening, he had sudden onset back ache with radiating pain in the right leg and had difficulty in walking the previous day. On examination his peripheral pulses were palpable and regular. He had a grade 0-1 power of the both lower limbs with loss of pain and temperature sensation below umbilicus. The vibration and joint position sense was preserved and he had absent knee and ankle jerk. He was catheterized for urinary retention. What is the most likely diagnosis in him?

A. Central cord syndrome

B. Acute transverse myelitis

C. Anterior spinal artery occlusion

D. Spinal epidural abscess

92. The following statements regarding Glioblastoma are all true except

A. The peak age of onset is 50 -60 years

B. It is the second most common malignant primary brain tumor in adults

C. The average survival in patients receiving radiotherapy and chemotherapy is approximately 1 to 1.5 years

D. Glioblastoma most commonly occurs in the deep white matter, basal ganglia and thalamus

93. Regarding the use of antiepileptic drugs in elderly, which of the following is correct?

A. The distribution of hydrophilic drugs increases

B. Hepatic blood flow, bile flow and protein synthesis increase along with hepatic metabolism

C. Gastric acidity may decrease, making weakly basic drugs less easily absorbed and weakly acidic drugs more easily absorbed.

D. Renal blood flow increases, but glomerular filtration rate decreases.

94. A one-year-old girl born of consanguineous parentage presented to you with history of developmental delay and seizures. Examination showed a floppy child and she was just able to sit with support. A scaling seborrheic and erythematous rash was noted around the eyes, nose, mouth and on the extremities along with alopecia. What will the treatment in this situation?

A. Ketogenic diet

B. Supplementation with CoQ and Carnitine

C. Biotin supplementation

D. Folinic acid supplementation

95. Which of the following is the earliest step in the proposed pathophysiology of migraine?

A. Meningeal blood vessel dilation

B. Cortical spreading depression

C. Release of vasoactive neuropetides from trigeminal sensory nerves

D. Local release of Substance P upon stimulation by trigeminal afferents

96. The muscle protein that connects the Z line to the M line is

A Troponin

B Titin

C Actinin

D Desmin

97. Rufinamide is a new FDA approved drug used orally and intravenously in

A. Refractory status epilepticus

B. Refractory status dystonicus

C. Refractory partial seizure of temporal origin (TLE)

D. Refractory seizures in Lennox- Gastaut syndrome

98. A 40-year-old man presents with multiple cranial neuropathies.A tumor is found compressing the brain stem and given the radiologic appearance,there is suspicion of a chordoma. Which of the following is correct regarding this tumor?

A. It is composed of physaliphorous cells

B. It is only encountered in the clivus region

C. It invades nervous tissue,but spares bone

D. Surgery does not play a role in treatment, but irradiation is best.

99. TRAIL and FADD are

A. Linked with HIV treatment regions (antiretroviral regimes)

B. TNF-related apoptosis-inducing ligand and Fas-associated death domain in apoptosis

C. Tuberculosis related anti-inflammatory lymphocytes and Follicular activating dipeptide diastases associated with pathogenesis of TB

D. Synonyms of gene therapies in AML and CML which are under phase I trial.

100. A 65-year-old woman presents with abrupt onset akinetic mutism, lack of motivation, apathy, leg weakness and incontinence. You suspect she may have had a stroke. Which of the following locations could explain her symptoms?

A. Dominant temporal lobe infarct

B. Non-dominant parietal lobe infarct

C. Bilateral anterior cerebral artery infarcts

D. Anterior bilateral thalamic infarcts

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