

Azra Naheed Medical College
MBBS 4th Year Class (1st Entry)
Class Test-8 (Special Pathology - MCQs) 15-5-2015

Name: _____

Roll No: _____

Total Time: 25 Minutes

Total Marks: 25

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1. A 70-year-old man has worsening generalized headache. He now complains of stiffness in his neck and fever of 38.7°C. A lumbar puncture yields cloudy cerebrospinal fluid with glucose of 32 mg/dL, protein 146 mg/dL, and cell count of 3800 WBCs (95% PMNs and 5 % mononuclears) and 122 RBCs. He receives antibiotic therapy and improves. Which of the following long-term complications is most likely to develop from this man's current disease?
- Cerebral infarction
 - Cerebellar tonsillar herniation
 - Encephalitis
 - Hydrocephalus
 - Subdural hematoma
2. A 29-year-old man undergoes induction chemotherapy for acute myelogenous leukemia. A week later he becomes severely pancytopenic, with WBC count of 1320/microliter, Hgb 7.9 g/dL, and platelet count 72,000/microliter. Head CT scan shows a right parietal hemorrhage and angiography reveals a right middle cerebral arterial thrombosis. Which of the following infectious agents is most likely to cause these findings?
- Herpes simplex virus
 - Toxoplasma gondii*
 - Human immunodeficiency virus
 - Cytomegalovirus
 - Aspergillus flavus*
3. Following head trauma incurred in a motorcycle accident, an 18-year-old boy is noted to have decerebrate posturing. Funduscopy examination reveals marked bilateral papilledema. A CT scan of the head reveals marked diffuse cerebral edema from an increase in sodium and water content. There is effacement of lateral ventricles. This edema is most likely to be severest in which of the following parts of the brain?
- Gray matter
 - Meninges
 - White matter
 - Dura
 - Ependyma

4. A 26-year-old woman has had an uncomplicated pregnancy. A screening ultrasound is performed at 16 weeks gestation, and the findings prompt performance of maternal serum alpha-fetoprotein test, which is elevated. Which of the following abnormalities of the CNS is most likely to be present in this fetus?
- Holoprosencephaly
 - Metachromatic leukodystrophy
 - Encephalocele
 - Germinal matrix hemorrhage
 - Spina bifida occulta
5. A 31-year-old woman experiences a sudden severe headache and loses consciousness within an hour. An emergent head CT scan reveals extensive subarachnoid hemorrhage at the base of the brain. She is afebrile. A lumbar puncture yields cerebrospinal fluid with many red blood cells, but no white blood cells. The CSF protein is slightly increased, but the glucose is normal. Which of the following is the most likely diagnosis?
- Acute bacterial meningitis
 - Ruptured berry aneurysm
 - Progressive multifocal leukoencephalopathy
 - Hypertensive hemorrhage
 - Amlyoid arteriopathy
6. An 11-month-old infant has exhibited irritability, vomiting, and loss of appetite for the past 2 months. On physical examination there is macrocephaly with impaired extraocular movements, hypertonia of the lower extremities, and generalized hyperreflexia. A head CT scan reveals bilateral symmetrical ventriculomegaly. Which of the following pathologic abnormalities is most likely to produce these findings?
- Haemophilus influenzae* meningitis
 - Forking of the cerebral aqueduct
 - Epidural hematoma
 - Ruptured berry aneurysm
 - Metachromatic leukodystrophy
7. A 39-year-old female with cough and fever for 10 days has had a worsening headache for the past week and her temperature is 38.2°C. A head CT scan reveals a solitary 3 cm diameter mass lesion with ring enhancement located in the right parietal lobe. A stereotactic biopsy is performed and a frozen section shows granulation tissue with adjacent collagenization, gliosis, and edema. Which of the following is the most likely diagnosis?
- Bacterial abscess
 - Aspergillosis
 - Oligodendroglioma
 - Toxoplasmosis
 - Thromboembolic infarct

8. A 52-year man has had headaches and difficulty concentrating for the past 2 months and exhibit odd behavior. He then suffers a grand mal seizure, and is admitted to the hospital. MR imaging of the brain reveals a large mass with extensive necrosis in the left cerebral hemisphere extending across corpus callosum into the right hemisphere. Which of the following neoplasms is he most likely to have?
- Meningioma
 - Glioblastoma
 - Medulloblastoma
 - Metastatic adenocarcinoma
 - Pilocytic astrocytoma
9. A 5-year-old girl is restless and not arousable. At the emergency department the examining nurse notes a temperature of 38.8°C and nuchal rigidity. A lumbar puncture yields slightly cloudy CSF with a protein of 61 mg/dL and glucose 19 mg/dL (serum glucose 83 mg/dL). A culture of CSF is most likely to yield which of the following organisms?
- Streptococcus pneumoniae*
 - Cryptococcus neoformans*
 - Aspergillus fumigatus*
 - Mycobacterium tuberculosis*
 - Cytomegalovirus
10. A 49-year-old woman is bothered by tinnitus in her left ear that has progressed to unilateral hearing loss. On physical examination she has a marked decrease in hearing on the left. Brain MR imaging reveals a solitary, circumscribed 3 cm mass located in the region of the left cerebellopontine angle. Which of the following statements is most appropriate to tell the patient and her family regarding the course of her disease?
- Survival more than a year is unlikely
 - Remissions and exacerbations will occur in coming years
 - Other family members should undergo brain MR imaging
 - Resection without recurrence is likely
 - HIV-1 infection must be treated
11. A 58-year-old man has undergone personality changes over the last year and has noted to be obsessive-compulsive. MR imaging of the brain is performed and shows a 3 cm diameter left frontal lobe mass with areas of calcification. Which of the following diagnoses is most likely to be made on microscopic examination of this mass?
- Vascular malformation
 - Oligodendroglioma
 - Meningioma
 - Schwannoma
 - Organizing abscess

12. A 9-year-old boy has headache, associated with dull, more frequent, prolonged and diffuse pain. On physical examination he has no focal neurologic deficits. MR imaging reveals enlargement of the lateral ventricles with 4 cm homogenous, well-circumscribed mass within the fourth ventricle. Which of the following is the most likely diagnosis?

- a. Astrocytoma
- b. Choroid plexus papilloma
- c. Ependymoma
- d. Meningioma
- e. Schwannoma

13. Glycosylated Hb gives the glucose status for:

- a. Previous 3 months
- b. Next 2 months
- c. Previous 6 months
- d. Previous 1 month
- e. Next 6 months

14. In diabetic ketoacidosis the lab investigations shows:

- a. Acidosis, high glucose and low sodium
- b. Acidosis, low glucose and low sodium
- c. Alkalosis, high glucose and low sodium
- d. Alkalosis, low glucose and high sodium
- e. Alkalosis, high glucose and high sodium

15. Fasting plasma glucose level in healthy individual is:

- a. 3.3 – 6.4 mmol/l
- b. 5.6 – 6.4 mmol/l
- c. 3.3 – 5.6 mmol/l
- d. 6.4 – 7.8 mmol/l
- e. 2.2 – 3.3 mmol/l

16. Normal urine albumin excretion ranges from:

- a. 30-300mg/day
- b. 10-15mg/day
- c. 200-1500mg/day
- d. 100-150mg/day
- e. >30mg/day

17. For diagnosis of diabetes the most important investigation is:

- a. Random blood glucose level
- b. GCT
- c. OGTT
- d. Fasting plasma glucose level
- e. Urinary glucose level

18. One of the following is true about malignant melanoma:

- a. It is commoner in females than males
- b. Amelanotic type is more aggressive than pigmented type
- c. Malignant transformation in common moles is about 1:10,000
- d. Staging is according to the size of the tumour
- e. It is found exclusively in the skin

19. The following are true about squamous cell carcinoma:

- a. It is a commoner malignant skin tumour than basal cell carcinoma
- b. IT only occurs in the skin
- c. IT is commonly not seen in transplant patient
- d. Metastasis is usually to the bones
- e. The tumour typically has everted edges

20. The following condition does not predispose the squamous cell carcinoma:

- a. Solar keratosis
- b. Bowen's disease
- c. Chronic eczema
- d. Chronic ulceration
- e. Keratoacanthoma

21. An appendageal tumor with apocrine or eccrine differentiation usually occurs on the forehead and scalp and is also named as turban tumor:

- a. Cyndroma
- b. Trichoepithelioma
- c. Sebaceous adenoma
- d. Pilomatrixoma
- e. Apocrine carcinoma

22. Urticaria is:

- a. Allergic infection
- b. Inflammatory disease
- c. Toxic infection
- d. Infectious disease
- e. Bullous disease

23. Which one of the following melanocytic nevi is the precursor for melanoma?

- a. Halo nevus
- b. Congenital nevus
- c. Dysplastic nevus
- d. Blue nevus
- e. Spindle cell nevus

24. Pemphigus is:

- a. Blistering lesions
- b. Infectious lesions
- c. Hypersensitive reaction
- d. Inflammatory lesion
- e. Tumor

25. A round, flat, coin-like, waxy plaques that vary in size with horn cysts and pseudo-horn cysts in middle-aged or older individuals commonly involving the trunk. What is the likely diagnosis?

- a. Pemphigus
- b. Acanthosis nigricans
- c. Basal cell carcinoma
- d. Seborrheic keratosis
- e. Melanoma