



Neuromedicine final exam

Doctor 2020

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Stroke

1-Which of the following is the most common vascular cause of hemorrhagic stroke:

- A. Diabetes
- B. Old age
- C. Hypercholesterolemia
- D. Smoking
- E. Hypertension

Ans: E

2-Which of the following is not a cause of subarachnoid hemorrhage:

- A. Chronic hypertension leading to charcot bouchard microaneurysms
- B. AV malformation
- C. Head injury
- D. Mycotic aneurysm
- E. Berry aneurysm

Ans: A

3-In ischemic stroke,lateral medullary syndrome is caused by occlusion of which artery:

- A. Anterior inferior cerebellar artery
- B. Posterior inferior cerebellar artery
- C. Superior cerebellar artery
- D. Subclavian artery
- E. Basilar artery

Ans: B

4-A patient presented with right hemiparesis, right facial droop, and he had expressive aphasia, which of the following is the artery likely to be occluded:

- A. Right middle cerebral artery**
- B. Left middle cerebral artery**
- C. Right anterior cerebral artery**
- D. Left anterior cerebral artery**
- E. Basilar artery**

Ans: B

5-Which of the following is not part of lacunar stroke syndrome:

- A. Gerstmann syndrome**
- B. Purely motor stroke**
- C. Purely sensory stroke**
- D. Dysarthria-clumsy hand syndrome**
- E. Ataxic hemiparesis**

Ans: A

6-A patient presented to the ER with severe vertigo lasting 2 hours with vomiting, which of the following favors the diagnosis of vestibular neuritis over posterior cerebral artery stroke:

- A. Ataxia**
- B. Negative head impulse test**
- C. Preceding viral infection**
- D. Previous history of strokes**

Ans: C

7-transient ischemic attack in the anterior circulation(carotid territory) has which of the following manifestations:

- A. Weakness of four limbs**
- B. Transient loss of consciousness**
- C. Amaurosis fugax**
- D. Vertigo**
- E. Diplopia**

Ans: C

Seizures

1-Which of the following drugs is the treatment of choice of juvenile myoclonic epilepsy:

- A. Carbamazepine**
- B. Sodium Valproate**
- C. Ethosuximide**
- D. Phenytoin**

Ans: B

2-Which of the following favors true seizure over psychogenic pseudo seizure:

- A. Resistance to opening the eyes**
- B. Head rolling from side to side**
- C. Rhythmic pelvic thrusting**
- D. Crying after episode**
- E. Side biting of the tongue**

Ans: E

3-A 16-year-old girl presented with an episode of staring followed by lip smacking and picking her clothes, the episode lasted 1-2 minutes. She was completely unaware of what happened. What is the most likely diagnosis?

- A. Complex partial seizure of temporal origin**
- B. Absence 'petit mal' seizure**
- C. Complex partial seizure of occipital origin**
- D. Simple partial seizure of the frontal lobe**
- E. Simple partial seizure of the temporal lobe**

Ans: A

4-About absence seizure, which of the following is true:

- A. Treated by carbamazepine**
- B. Onset begins in adulthood**
- C. There is a characteristic 3-Hz wave and spike on EEG**
- D. Structural brain lesion on MRI**
- E. Associated with poor development of the child**

Ans: C

5-Which of the following is NOT a normal CSF parameter:

- A. Slightly yellowish in color**
- B. Protein 40 mg/dl**
- C. less than 5 lymphocytes/cubic mm**
- D. Opening pressure 10-20 cm of H₂O**
- E. No red blood cells**

Ans: A

Headache

1-About cluster headache,which of the following is FALSE:

- A. Pain improves with with sleep**
- B. It lasts between 20-120 mins**
- C. More common in men**
- D. It presents with lacrimation and conjunctival tearing.**
- E. Steroids may help abolish the cycle in acute attacks**

Ans: A

2-Which of the following is FALSE about headache disorders:

- A. Cluster headaches are shorter than migraine headache**
- B. Giant cell arteritis can result in ischemic optic neuritis**
- C. Tension headache is usually severe at onset**
- D. Bilateral headache is present in one third of patients with migraine**

Ans: C

3-All of the following causes of secondary headache should be urgently evaluated by neuroimaging and other procedures except:

- A. A new onset severe headache**
- B. Similar previous attacks in the past month**
- C. Headache with vision impairment**
- D. Presence of fever**

Ans: B

4-A 20 year old girl presents with moderate headache. She has similar episodes 1-2 times per month. Which of the following does NOT support the diagnosis of migraine:

- A. Headache lasting 24 hours
- B. Headache exacerbates with movement
- C. Pulsating in nature
- D. Prompt administration of oxygen relieves symptoms

Ans: D

CNS infections

1-Which of the following drugs is used for treatment of listeria monocytogenes meningitis:

- A. Crystalline penicillin
- B. Vancomycin
- C. Ceftriaxone
- D. Acyclovir
- E. Ampicillin

Ans: E

2-'Stock and glove' distribution sensory loss is caused by a lesion in which of these:

- A. Peripheral nerves
- B. Spinal cord
- C. Thalamus
- D. Dorsal root ganglion
- E. Brainstem

Ans: A

3-A 43-year-old lady presented to the ED with a 2 day history of fever and progressive severe headache. On examination, there was nuchal rigidity and GCS was 14/15 (E4 V4 M6). There were no focal neurological signs. Cardiovascular, respiratory examinations were normal. Her vital signs were stable apart from a fever of 38.8°C. Which of the following is the most likely diagnosis:

- A. Acute viral encephalitis**
- B. Acute viral meningitis**
- C. Acute bacterial meningitis**
- D. Severe sinusitis**
- E. Upper lobe pneumonia**

Ans: C

4-Which of the following visual field defects is likely to result from a lesion in the left parietal lobe:

- A. Right upper homonymous anopsia**
- B. Left upper homonymous anopsia**
- C. Right lower homonymous anopsia**
- D. Left lower homonymous anopsia**
- E. Bilateral hemianopia**

Ans: C

5-Which of the following is the most common cause of viral encephalitis:

- A. Herpes zoster virus**
- B. Cytomegalovirus**
- C. Herpes simplex virus**
- D. Arbovirus**
- E. Epstein barr virus**

Ans: C

6-A 24 year old male presented to the physician with increasing muscle weakness in the lower limbs for 3 days. He had severe gastroenteritis from which he recovered. A CSF fluid analysis will show which of the following;

- A. High protein with near normal cell count**
- B. Increased protein and increasing cell count**
- C. Normal protein and increasing cell count**
- D. Normal protein and decreasing cell count**
- E. Normal protein with increased cell count**

Ans: A

7-Regarding the examination of comatosed patient, which of the following is FALSE:

- A. Roving movement of eye indicates that the brainstem is not damaged**
- B. Pinpoint pupils might indicate opioid intoxication**
- C. Gaze deviation to the contralateral side of the cortical destructive lesion**
- D. Skew deviation of eyes indicates acute brainstem injury**

Ans: C

Multiple sclerosis

1-A 32 year old female presented with (-) day history of decreased visual acuity and color vision in her right eye. She had a previous similar episode in her left eye 6 months ago. Which of the following does NOT support the diagnosis of Multiple Sclerosis:

- A. Urinary urgency**
- B. An electric shock-like sensation on the back when flexing the neck**
- C. Painful erythematous rash on the shins**
- D. Left facial excruciating paroxysmal pain**

Ans: C

2-Which of the following does NOT support the diagnosis of optic (retrobulbar) neuritis as a part of multiple sclerosis:

- A. Left monocular visual loss over days**
- B. Enlargement of the physiological blind spot**
- C. Rapid afferent pupillary defect**
- D. Loss of Colour vision**
- E. Pain while moving the affected eye**

Ans: B

3-Which of the following is true about multiple sclerosis:

- A. It is more common in tropical areas**
- B. The peak incidence is between ages 40-50 years**
- C. The initial course is relapsing remitting in the majority of patients**

Ans: C

4-Which of the following is true about Uthoff's phenomenon:

- A. It is the shock like electrical sensation in the neck that occurs after flexion of the spine**
- B. Transient worsening of neurological function that occurs with activities associated with increased core body temperature**
- C. Severe fatigue with minimal effort**

Ans: B

5-Which of the following is associated with poor prognosis in multiple sclerosis:

- A. Female gender**
- B. Long interval between attacks**
- C. Onset at an older age**
- D. Pure sensory symptoms**

Ans: C

Parkinson

1-Which of the following drugs is not used in the management of parkinson disease:

- A. L-Dopa
- B. Amantadine
- C. MAO A inhibitors
- D. Dopamine agonist
- E. Entacapone

Ans: C

2-About Parkinson disease, which of the following is true:

- A. Parkinson disease results from degeneration of cells in the globus pallidus
- B. Treatment is aimed at reducing dopamine levels
- C. It presents with the triad of bradykinesia, tremor and spasticity
- D. Anticholinergic drugs help reduce the tremor

Ans: D

3-About parkinsonian syndromes, which of the following is FALSE:

- A. Tobacco smoking is associated with decreased risk of parkinson disease
- B. Valproic acid causes irreversible parkinsonism
- C. Sleep disorders can precede motor symptoms in parkinson disease
- D. Recurrent head trauma is a recognized cause

Ans: B

4-About chorea,which of the following is false:

- A. Huntington disease is autosomal dominant**
- B. Sensory tricks can help improve symptoms**
- C. Rheumatic fever is a recognized cause**
- D. Blood films can help in differntial diagnosis**
- E. Huntington disease is prominently heralded by psychiatric symptoms**

Ans: B

5-About tics,Which of the following is FALSE:

- A. Can be suppressible**
- B. Common in the population**
- C. Stereotyped movements**
- D. Caused by antipsychotic drugs**
- E. Can present with grunting sound**

Ans: D

6-Essential tremor,which of the following is FALSE:

- A. It is associated with head tremor**
- B. Positive family history in many cases**
- C. It is usually associated with bradykinesia**
- D. Alcohol can decrease symptoms**
- E. May respond to propranolol**

Ans: C

Dementia

1-Wernicke's encephalopathy results from which vitamin deficiency:

- A. Tocopherol
- B. Niacin
- C. Thiamine
- D. Pyridoxine
- E. Cobalamin

Ans: C

2-All of the following are causes of dementia except:

- A. Normal pressure hydrocephalus
- B. Chronic subdural hematoma
- C. Lewy body dementia
- D. Vascular infarcts
- E. Thyrotoxicosis

Ans: E

3-All of the following neurological manifestations are caused by vitamin B12 deficiency except:

- A. Parkinsonism
- B. Optic atrophy
- C. Subacute combined degeneration of the spinal cord
- D. Polyneuropathy

Ans: A

4-A 60 year old male presented to the clinic with decreased cognition and loss of visuospatial relations and visual hallucinations. His son described that his behavior changed after taking haloperidol that is prescribed by another doctor for his delusions. Which of the following is the most likely diagnosis:

- A. Parkinson's disease**
- B. Frontotemporal dementia**
- C. Lewy body dementia**
- D. Alzheimer disease**
- E. Vascular dementia**

Ans: C

5-In an acute illness, a patient is in a 'sleep-like' state and unresponsive to verbal stimuli, and does not respond to light tactile stimuli, but can be aroused with continuous noxious stimulation, but once the stimulation is over he returns to his poor responsive state. Which of the following describes the level of consciousness in this patient:

- A. Coma**
- B. Unresponsive waking**
- C. Stupor**
- D. Delirium**

Ans: C

Motor function

1-All of the following are signs of UMN lesions except:

- A. Rigidity
- B. Pronator drift
- C. Extensor plantar response
- D. Absent superficial abdominal reflexes
- E. Brisk deep tendon reflexes

Ans: A

2-Regarding nerve roots and peripheral nerves, which of the following is true:

- A. The ulnar nerve supplies most of the intrinsic muscles of the hand
- B. Most of the intrinsic muscles of the hand are supplied by C7 root
- C. Most of the hypothenar muscles are supplied by median nerve
- D. The radial nerve innervates dorsal interossei
- E. Ulnar nerve supplies flexor carpi radialis

Ans: A

3-Which of the following is a function of the non dominant cerebral hemisphere:

- A. Reading
- B. Language
- C. Visuospatial relations
- D. Calculation
- E. Writing

Ans: C

4-An injury of the ulnar nerve at the elbow will likely produce one of the following:

- A. Wrist drop**
- B. Ulnar deviation**
- C. Loss of thumb opposition**
- D. Loss of sensation on the medial aspect of the palm**
- E. Loss of thenar eminence**

Ans: D

5-Which of the following is FALSE about myasthenia gravis:

- A. Majority of patients will have diplopia and ptosis at some time in their lives**
- B. Increased weakness with exercise**
- C. Decreased deep tendon reflexes**
- D. It is associated with thymoma**
- E. Can cause type II respiratory failure**

Ans: C

6-Which of the following is FALSE about carpal tunnel syndrome:

- A. It is more common in woman**
- B. Tends to occur during sleep**
- C. Unpleasant tingling sensation of the hand**
- D. Wasting of the hypothenar eminence can occur in chronic cases**
- E. It is more common during pregnancy**

Ans: D

7-All of the following are present in bulbar palsy except:

- A. Dysphonia**
- B. Wasted, fasciculating tongue**
- C. Decreased gag reflex**
- D. Emotional liability**
- E. Nasal regurgitation of food**

Ans: D

8-Ischemic vasculopathic lesion in third cranial nerve manifests as which of the following:

- A. Pupillary dilation**
- B. Complete ptosis**
- C. Pupillary constriction**
- D. Difficulty abducting the affected eye**
- E. Upward deviation of gaze**

Ans: B

9-Abducens cranial nerve palsy ,which of the following is false:

- A. It innervates the lateral rectus muscle**
- B. Lesion can result in horizontal diplopia**
- C. It passes through superior orbital fissure and cavernous sinus**
- D. It causes pupillary dilatation**

Ans: D

10-A 38-year-old lady complains of fatigue that worsens at the end of the day, she also reports seeing 'double' when watching television. On examination, ptosis was sustained when asking the patient to look at the ceiling without blinking. Appropriate serology was done. Repetitive stimulation of nerves on electromyography showed progressive reduction in action potential on electrical impulse. Which of the following is the most likely diagnosis:

- A. Lambert Eaton syndrome**
- B. Acute inflammatory demyelinating polyneuropathy**
- C. Myasthenia gravis**

Ans: C

****A 62 year old lady complains of difficulty climbing stairs, she describes proximal muscle weakness in shoulder and hips. On exam, she has purplish red discoloration on her eyelids and purple nodules over her joints and elbows. Which of the following is the most likely diagnosis:**

- A. Systemic Lupus Erythematosus**
- B. Psoriasis**
- C. Rheumatoid arthritis**
- D. Dermatomyositis**
- E. Myasthenia gravis**

Ans: D