

# Neurology

- 1) For the management of an acute delirium acquired in the hospital, which one of the following options would be least appropriate?
  - a) Treating the underlying cause
  - b) Promptly increasing antibiotic coverage
  - c) Antipsychotic medication as needed
  - d) Avoiding foley catheters and physical restraints
  - e) Providing the patient with a well-lit room
- 2) When differentiating between seizure and syncope, which of the following is important to consider?
  - a) Onset
  - b) EEG
  - c) Autonomic features
  - d) Urinary incontinence
  - e) All of the above
- 3) In the early stages of Alzheimer's disease what is the most common deficit to be expected?
  - a) Major depression
  - b) Parkinsonism
  - c) Psychosis
  - d) Memory impairment for newly acquired information
  - e) Memory impairment for events prior to the onset of degeneration
- 4) A patient that has just suffered a stroke finds it difficult to utter words in either English or his native Portuguese. He is not pointing to the ceiling when prompted with the aid of a translator, nor does he respond when asked to repeat a word he had just managed to speak out. In an otherwise functional individual, these deficits can be most likely due to this type of aphasia:
  - a) Broca's non-fluent aphasia
  - b) Global non-fluent aphasia
  - c) Anomic fluent aphasia
  - d) Wernicke's fluent aphasia
  - e) Conduction fluent aphasia
- 5) When examining a patient with a working diagnosis of Bell's palsy what is most important to rule out?
  - a) A brainstem lesion
  - b) An idiopathic cause
  - c) An Epstein-Barr virus infection
  - d) Diabetes mellitus mononeuropathy
  - e) Parotid gland pathology
- 6) Which medication would you expect to worsen the common symptoms of Parkinson's Disease?
  - a) Bromocriptine
  - b) Benztropine
  - c) Lithium
  - d) Amantadine
  - e) Haldol
- 7) Which of the following interventions would benefit any patient suffering from myasthenia gravis?
  - a) Thymectomy
  - b) Acetylcholinesterase inhibitors
  - c) Edrophonium
  - d) Only a and b
  - e) All of a, b, and c
- 8) A 30-year old hairdresser is experiencing a headache as you, a medical student about to graduate, are sitting in the leather chair. Which of the following questions would be least useful in assessing her complaint?
  - a) Is there a family history of similar headaches?
  - b) Does the pain seem to come from behind one eye?
  - c) Did your headache develop suddenly and unexpectedly?
  - d) Are you having trouble or discomfort chewing gum and/or talking during the headache?
  - e) At What time of day is the headache at its worst?

- 9) When investigating for the cause of a stroke which one of the following is most likely to yield abnormal findings?
- An echocardiogram
  - An EEG
  - An electrocardiogram
  - A biopsy from a large artery
  - A CT of all the long bones
- 10) A 74 year-old, right-handed man presents with a past medical history of hypertension and dyslipidemia for 30 years. He is a retired banker who recently has had trouble calculating his restaurant bill. He also notices that his writing has deteriorated. On physical exam, he has difficulty naming his fingers and is confused with distinguishing left from right. The lesion is most likely in which part of the brain?
- Right parietal
  - Left parietal
  - Left temporal
  - Right temporal
  - Frontal
- 11) Which of the following pair of CNS lesions and corresponding visual field defects is incorrect?
- Temporal lobe tumour – superior quadrantanopia
  - Frontal lobe tumour – altitudinal field defect
  - Pituitary tumour – bitemporal hemianopsia
  - Occipital lobe tumour – homonymous hemianopsia
  - Multiple Sclerosis – central scotoma
- 12) A 63 year-old woman develops intermittent dizziness. Examination discloses diminished corneal reflex and mild hearing loss in the right ear. The most likely diagnosis is:
- Cerebellopontine angle tumour
  - Benign paroxysmal positional vertigo
  - Lateral medullary syndrome
  - Ménière disease
  - None of the above
- 13) A 25 year-old man is admitted with a history suggesting seizures. Which of the following would not support this diagnosis?
- Urinary incontinence
  - The sound of voices preceding events
  - Drowsiness and weakness following the event
  - Rarely occur when recumbent
  - None of the above
- 14) Which of the following would not be expected in a right-sided Brown-Séquard syndrome?
- Right-sided hemiparesis
  - Right-sided decreased proprioception
  - Left-sided decreased sensitivity to pinprick
  - Left-sided decreased vibration sense
  - None of the above
- 15) Which of the following is true of Myasthenia Gravis?
- In patients older than 60, thymic hyperplasia is a common etiology
  - Often associated with thyroid disease
  - Antibodies that are produced against acetylcholinesterase
  - Associated with small cell lung carcinoma

### Neurology CASE 1:

A 45 year-old migrant farm worker comes to see you with sudden onset of severe pain in his back and right leg after lifting some bales of hay. The pain radiates into the lateral aspect of the right foot and is associated with numbness along the lateral aspect of the foot. He has had a 5 year history of lower back pain with a similar episode of pain 1 year ago which was concentrated at the posterolateral aspect of the right calf and lateral aspect of the right foot. It became progressively worse and then resolved over a 3 week period.

1. What elements of the history would you ask about in order to formulate your diagnosis?

Choose up to five.

1. Diffuse muscle cramps
2. Alcohol intake
3. Effect of NSAIDs
4. Family history of back problems
5. Previous history of back injury
6. Shoulder pain
7. Weakness in right leg
8. Allergies
9. Knee problems
10. Urinary incontinence
11. Skin rashes
12. Previous effective physiotherapy
13. Headaches
14. Nocturia

2. What elements of the physical exam would you focus on? Choose up to five.

1. Examination of skin
2. Range of motion of lumbar spine
3. Blood pressure
4. Inspection of muscle bulk in lower extremities
5. Sensory exam of arms
6. Peripheral pulses
7. Reflexes in lower extremities
8. Power testing of legs
9. Power testing of arms
10. Sensory exam of legs
11. Respiratory rate
12. Temperature
13. Straight leg raise test
14. Abdominal exam
15. Rectal exam
16. Pulse
17. Range of motion of knee
18. Auscultation of chest
19. Romberg test

## **ANSWERS**

1. B  
2. E  
3. D

4. B  
5. A  
6. E

7. D  
8. D  
9. C

10. B  
11. B  
12. A

13. D  
14. D  
15. B

### **Neurology Case 1**

Case 1 #1:  
3, 5, 7, 10, 12

Case 1 #2:  
7, 8, 10, 11, 14

