

Neurology (32016)

SELF-ASSESSMENT QUESTIONNAIRE

SAQs and answers are ONLINE for RCP Fellows and Collegiate Members

The SAQs printed in the CME section can only be answered online to achieve external CPD credits. The closing date is 21 May 2007 (midnight GMT).

The answering process

- 1 To access the questions, log on to the Fellows and Members area www.rcplondon.ac.uk/Members/SAQ (those who have not yet registered will be automatically directed to the registration pages). Please contact the Information Centre if you have lost or forgotten your username or password: infocentre@rcplondon.ac.uk
- 2 Select: **Self assessment**
- 3 At the top of the SAQ page select the current CME question paper
- 4 Answer all 10 questions in any order, by indicating true or false
- 5 Check your answers and change them if you wish to
- 6 Click on **Submit for final marking**.
(Note – after submitting your answers NO changes are possible)

The marking process

- You must submit the answers before the closing date shown at the top of the screen
- Answers will be marked automatically on the date displayed for that paper
- You can find your marks with explanations of the answers on the CME page under **My past CME papers**

Registering your external CPD credits

A pass mark of 80% allows you to claim two external CPD credits. Only the first seven distance learning credits will be counted as external, the remainder can be claimed as personal credits.

To claim your credits:

- Credits can be recorded using the online diary system. All *Clinical Medicine* SAQs are listed under **External Approved CPD**

As announced in the previous issues, SAQs can now only be answered using the online system.

- 1 A 65-year-old man presents with a two-month history of weakness, particularly on walking, dry mouth of recent onset and a tendency towards constipation. On questioning, he does not report pain, double vision or sensory loss. There is a history of treated hypothyroidism and no family history of note. He drinks 1.5 litres of beer a week and has smoked 15 cigarettes a day for many years. General examination is unremarkable. On neurological examination, the cranial nerves and limb tone are normal. There is proximal fatiguable muscle weakness, affecting the legs more than the arms. Initially, tendon reflexes are absent but return after muscle contraction for 30 sec. Sensation is normal. Full blood count, biochemical screen, serum glucose and creatine kinase are normal. Thyroid function tests show adequate replacement. Which of the following statements are true and which false?
 - (a) Neurophysiology will show a decremental response of the compound muscle action potential at high frequency
 - (b) Serum voltage-gated calcium channel antibodies will be found
 - (c) Serum acetylcholine receptor antibodies will be found
 - (d) The most common associated cancer is adenocarcinoma of the colon
 - (e) The most common associated cancer also has an association with encephalomyelitis
- 2 A 71-year-old man presents with a 10-day memory loss followed by increasing agitation and then complex partial seizures. There is a past history of hypertension for two years for which he is taking enalapril. He drinks 1 litre of beer a week and smoked 10 cigarettes a day until a year previously. He is afebrile, with no neck stiffness and general examination is normal. His memory is poor and he is agitated, but there are no cranial nerve or limb signs. A full blood count, biochemical screen, serum glucose, C-reactive protein, autoimmune and infection screens are normal. The cerebrospinal fluid (CSF) is normal and herpes simplex virus polymerase chain reaction negative. Brain magnetic resonance imaging (MRI) shows bilateral medial temporal lobe signal changes. His seizures stop on starting

phenytoin, but aciclovir gives no improvement in his mental state. Which of the following statements are true and which false?

- (a) Paraneoplastic limbic encephalitis is the most likely diagnosis
- (b) This neurological disorder is most commonly associated with small cell lung cancer
- (c) The most common association is with anti-Yo antibodies
- (d) 18F-fluoro-2-deoxyglucose-positron emission tomography is the most sensitive test for underlying cancer
- (e) A full neurological recovery is to be expected

3 A 70-year-old man presents to the medical assessment unit with three days of flu-like symptoms, with nocturnal fever, petechiae on his thighs and progressive confusion. He has been anuric for 24 hours. His blood pressure is 180/110 mmHg. Which of the following statements are true and which false?

- (a) His clotting screen may be normal with a low platelet count
- (b) He is at increased risk of occlusive cerebrovascular disease
- (c) Early institution of plasma exchange may be life-saving
- (d) Acute renal failure is due to occlusion of the main renal arteries
- (e) A peripheral blood film may aid the diagnosis

4 A 42-year-old woman with a history of alcohol excess presents with confusion, nausea and vomiting. She is afebrile and has no focal neurological signs but has had three witnessed generalised tonic clonic seizures in the accident and emergency (A&E) department. Her serum sodium is 122 mmol/l. Which of the following statements are true and which false?

- (a) The serum sodium should be corrected to normal levels using hypertonic saline
- (b) The rate of correction of serum

sodium should not exceed 0.8 mmol/l/day

- (c) The seizures necessitate the use of long-term anticonvulsant therapy
- (d) An MRI brain scan may reveal characteristic abnormalities
- (e) She is at risk of brainstem dysfunction

5 A 53-year-old man is admitted after collapsing unconscious and pulseless in a supermarket. Witnesses state that resuscitation is commenced within a minute. The paramedics are on-site within six minutes and report that one cycle of cardiopulmonary resuscitation leads to restoration of a perfusing rhythm. On arrival at A&E the patient, in sinus rhythm with a blood pressure of 106/72 mmHg, is sedated and ventilated. Sedation is withdrawn at 24 hours. Three days after admission the patient remains on a ventilator. There is no response to verbal stimuli, the pupils respond sluggishly to direct light, oculocephalic reflexes can be elicited, gag and cough reflexes are present and the patient briskly extends all four limbs to painful stimuli. Multifocal myoclonic jerks are noted. Which of the following statements are true and which false?

- (a) The patient has developed hypoxic-ischaemic encephalopathy
- (b) The patient is in a state of stupor
- (c) There is a poor prognosis for good recovery of cognitive function and independence
- (d) An EEG showing burst suppression would indicate a better prognosis
- (e) The myoclonus should respond well to sodium valproate

6 A 25-year-old man is admitted to the intensive therapy unit with a severe infective exacerbation of asthma. He is ventilated for one week, his treatment including intravenous (iv) antibiotics, magnesium, high-dose corticosteroids,

sedatives and muscle relaxants. His chest findings improve markedly but two days after stopping muscle relaxants he still cannot be weaned from ventilatory support. On examination, he is fully alert but has severe flaccid weakness in his limbs. Which of the following statements are true and which false?

- (a) Critical illness polyneuropathy is the most likely diagnosis
- (b) The weakness is likely to lead to long-term disability
- (c) High-dose corticosteroids are likely to have contributed to his present weakness
- (d) iv magnesium may have contributed to his present weakness
- (e) Muscle biopsy will show acute necrotising change

7 A 67-year-old man is admitted with a history of sudden onset of speech disturbance. He has a history of stroke with left hemiparesis two years earlier. Since then he has taken aspirin, dipyridamole modified release, simvastatin and perindopril. On examination, he has expressive dysphasia. An ECG shows sinus rhythm. Brain MRI the following day shows a long-standing lacunar infarct deep in the right hemisphere and several acute ischaemic lesions in the left frontal lobe on diffusion-weighted sequences. Carotid ultrasound reveals a 50% stenosis of the left internal carotid artery (the method recommended by the results of the European carotid surgery trial). An echocardiogram shows a patent foramen ovale (PFO) and aortic arch atheroma. Which of the following statements are true and which false?

- (a) Device closure of PFO is indicated
- (b) If aortic arch atheroma is over 4 mm thick, he has a higher than 50% chance of suffering a further vascular event or death over the next four years
- (c) Treatment with warfarin is indicated

- (d) The pattern of abnormalities on MRI is highly suggestive of a cardioembolic source for the recent event
- (e) There is no clear indication to alter his existing secondary prevention strategy
- 8 A 26-year-old man has attended a clinic for 18 months with a diagnosis of epilepsy manifesting as collapses with involuntary movements. He has shown no convincing response to two different anti-epileptic drugs. He is accompanied by his wife who has witnessed several of the collapses. Which of the following statements are true and which false?**
- (a) A description of involuntary jerking during the attack strongly favours a diagnosis of epilepsy
- (b) The speed of recovery from an attack is a helpful discriminator between syncope and epileptic (convulsive) seizure
- (c) An abnormal interictal EEG strongly suggests a diagnosis of epilepsy
- (d) If syncope is suspected, and subsequently supported by further investigation, anti-epileptic drug withdrawal is likely to be possible and successful
- (e) If head-up tilting is performed and loss of consciousness with convulsive movements is provoked, epilepsy is unlikely
- 9 A 63-year-old woman with epilepsy presents with a one-month history of progressive cognitive impairment. She is encephalopathic but, apart from symmetrical akinetic rigidity, the physical examination is otherwise normal. Her epilepsy has been well controlled for the previous 14 years with sodium valproate 1.2 g twice daily. Results of routine blood tests, including inflammatory markers, are normal. Contrast-enhanced brain MRI is within normal limits. An EEG shows non-specific changes consistent with encephalopathy and CSF examination (including opening pressure) is normal. Which of**

the following statements are true and which false?

- (a) Sodium valproate should be withdrawn
- (b) Aciclovir should be started
- (c) High-dose iv methylprednisolone should be started
- (d) Hyperammonaemia may be present
- (e) Intracellular carnitine metabolism is likely to be abnormal

10 A 42-year-old man with a history of testicular carcinoma nine years previously and long-standing bipolar affective disorder is referred for investigation of a symmetrical cerebellar syndrome of one month's duration. His

medication comprises lithium carbonate, which he has been taking for six months, and long-term citalopram. About two years previously, carbamazepine was tried for three months but stopped because of hyponatraemia. He then took sodium valproate for about 15 months before changing to lithium carbonate. Which of the following are possible causes of his cerebellar syndrome and which not?

- (a) Testicular carcinoma (with paraneoplastic cerebellar syndrome)
- (b) Sodium valproate
- (c) Lithium
- (d) Citalopram
- (e) Carbamazepine

From the June 2007 issue SAQs will follow a best of five format in line with the MRCP(UK) Part 1 exam. Further details will follow.

CME Rheumatology SAQs

Answers to the CME SAQs published in *Clinical Medicine* January/February 2007

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
a) F	a) T	a) F	a) F	a) T	a) F	a) T	a) T	a) F	a) F
b) F	b) F	b) F	b) F	b) F	b) T	b) F	b) F	b) T	b) T
c) F	c) T	c) T	c) F	c) F	c) F	c) T	c) T	c) F	c) T
d) T	d) T	d) T	d) F	d) F	d) T	d) T	d) F	d) T	d) F
e) T	e) T	e) F	e) T	e) F	e) F	e) T	e) T	e) F	e) F