Questions for this month’s clinical challenge are based on articles in this issue. The style and scope of questions is in keeping with the multiple choice questions of the RACGP Fellowship exam. The quiz is endorsed by the RACGP Quality Improvement and Continuing Professional Development Program and has been allocated 4 Category 2 points per issue. Answers to this clinical challenge are available immediately following successful completion online at www.gplearning.com.au. Clinical challenge quizzes may be completed at any time throughout the 2011–2013 triennium, therefore the previous months answers are not published.

Nyoli Valentine

**Case 1**

**Betty Watson**

Betty, aged 65 years, has been recently diagnosed with frontotemporal dementia. Her family have come to the practice today wanting to know more about Betty’s diagnosis.

**Question 1**

With regard to frontotemporal dementia which of the following statements is true:

A. the frontal lobe contains the motor cortex
B. the right frontal lobe is responsible for language related function
C. frontotemporal dementia incidence increases over 65 years of age
D. mortality is not increased with frontotemporal dementia
E. males are more commonly affected.

**Question 2**

Betty performed poorly on the attention test. What does the attention test involve:

A. saying as many words as possible in 1 minute starting with a single letter, eg. ‘F’
B. explaining the similarities and differences between two words
C. drawing alternating Ms and Ns
D. performing an action under certain stimuli
E. serial 7 subtractions.

**Question 3**

Betty’s family have noted increasing behavioural problems over the past few years. What are the three major subtypes of frontotemporal dementia:

A. behavioural variant, semantic dementia and progressive dysphagia
B. behavioural variant, motor variant and progressive supranuclear palsy
C. behavioural variant, motor neurone disease, genetic frontotemporal dementia
D. behavioural variant, semantic dementia and progressive nonfluent aphasia
E. behavioural variant, psychosis and semantic dementia.

**Case 2**

**Leticia Chan**

Leticia, aged 38 years, presents with two isolated episodes of left arm paraesthesia. She is diagnosed with multiple sclerosis (MS).

**Question 5**

Leticia wishes to know how quickly her MS will progress. In relation to the disease phases of MS, which of the following is correct:

A. a clinically isolated syndrome occurs in less than half of all patients with MS
B. optic neuritis is the most frequent clinically isolated syndrome
C. major residual disability is common with every relapse in relapsing remitting MS
D. the majority of patients transition to secondary progressive MS within 5 years
E. progressive spastic paraparesis is the most common presentation of primary progressive MS.

**Question 6**

Leticia is given intravenous methylprednisolone for her relapse. Which of the following is true of methylprednisolone in MS:

A. methylprednisolone increases the likelihood of recovery from a relapse
B. methylprednisolone hastens recovery of a relapse
C. methylprednisolone reduces the frequency of further attacks
D. methylprednisolone should be given for a period of 5 days
E. methylprednisolone is indicated for all relapses of MS.

**Question 7**

Leticia commences interferon-β as a disease modifying agent. Which of the following statements is true:

A. interferon-β is a relatively new drug so unreported adverse effects may occur
B. efficacy of disease modifying agents is assessed as reduction in permanent disability
C. disease modifying agents can delay progression from clinically isolated syndromes to MS
D. interferon-β reduces relapses by approximately 50%
E. natalizumab is an alternative first line treatment for MS.

**Question 8**
Leticia asks what her prognosis is. Which of the following factors is associated with a better prognosis of MS:
A. younger age of onset
B. male gender
C. multifocal clinically isolated syndrome
D. short interval between initial and second relapse
E. abnormal initial MRI.

**Case 3**
Tom Fuller
Tom, aged 61 years, presents with weakness of his left arm. There is wasting of his hand muscles on examination. Tom is diagnosed with motor neurone disease (MND).

**Question 9**
Which of the following statements is true of MND:
A. peak incidence is in patients aged over 70 years
B. most cases of MND are genetic
C. associated mild cognitive impairment is rare
D. average life expectancy for patients with MND is approximately 3 years from diagnosis
E. most patients require residential care.

**Question 10**
Which of the following clinical scenarios would be most suggestive of a diagnosis of MND:
A. a patient with bilateral weakness of lower limbs
B. a patient with unilateral wasting and brisk reflexes
C. a patient with relapsing remitting neurological symptoms
D. a patient with unilateral weakness and reduced sensation
E. a patient with unilateral neuropathic pain.

**Question 11**
Tom is commenced on riluzole. Which of the following statements is true of riluzole:
A. riluzole antagonises glutamate release
B. riluzole may increase survival by 12 months
C. riluzole’s large adverse effect profile limits its use
D. regular monitoring of coagulation studies is required
E. riluzole eliminates the need for respiratory intervention.

**Question 12**
You refer Tom to a respiratory physician for consideration of noninvasive respiratory support. Which of the following statements is true:
A. noninvasive respiratory support is used 24 hours per day
B. noninvasive respiratory support improves survival but impacts on quality of life
C. noninvasive respiratory support prolongs survival by up to 6 months
D. claustrophobia from noninvasive respiratory support can be treated by oral morphine
E. noninvasive support involves delivery of bi-level positive airway pressure via a mask.

**Case 4**
Lisa Williams
Lisa, aged 25 years, was in a motor vehicle accident 9 months ago and suffered a traumatic brain injury (TBI). She now lives at home with her parents.

**Question 13**
Lisa suffered from postconcussion syndrome after her TBI. Which of the following symptom categories is NOT part of the diagnosis of postconcussion syndrome:
A. headache, dizziness, fatigue, malaise
B. paraesthesia, allodynia, reduced sensation
C. irritability, depression, anxiety, emotional lability
D. concentration, memory, intellectual difficulties
E. preoccupation with symptoms and fear of brain damage.

**Question 14**
Lisa reports difficulty with her memory, which she feels is limiting her ability to work and complete day-to-day activities. Which of the following treatment options is most likely to be successful:
A. meditation techniques
B. phenytoin
C. reminder devices
D. dopamine agonists
E. sertraline.

**Question 15**
Lisa’s family report behavioural problems with Lisa since her TBI. Which of the following statements is true:
A. long term behaviour problems are rare
B. drug therapy is likely to be effective
C. behavioural problems occur in approximately 25% of patients
D. behavioural outcomes are worse in patients with post-traumatic epilepsy
E. psychostimulants can improve agitation and aggression.

**Question 16**
In addition to memory difficulties, Lisa reports somatic complaints. Of the following somatic complaints, which is LEAST likely to be present:
A. headaches
B. dizziness
C. diarrhoea
D. pain
E. sleep disturbance.