



Credit for Learning  
**MULTIPLE  
 SCLEROSIS**

THE QUESTIONS

1. With regard to the epidemiology and genetics of multiple sclerosis (MS):

- a) MS has been associated with genes of the major histocompatibility complex.....T F
- b) Concordance rates for MS in monozygotic twins are nearly 100 per cent.....T F
- c) MS is more common in women than in men....T F
- d) MS is more prevalent in Caucasians of north European descent than in black Africans .....T F
- e) MS most commonly starts in the sixth decade...T F

2. With regard to the pathology and pathogenesis of MS:

- a) Axonal loss occurs, which is an important factor for causing clinical disability .....T F
- b) Immunisation with myelin proteins can induce experimental allergic (autoimmune) encephalomyelitis (EAE) .....T F
- c) Both CD4+ and CD8+ cells are likely to be involved .....T F
- d) Antibodies against myelin proteins can induce demyelination.....T F
- e) TH1 cells (helper T lymphocytes) are not important for mediation of EAE or MS .....T F

3. When considering the relationship between viruses and MS:

- a) MS is caused by a single viral pathogen which can be detected in the cerebrospinal fluid (CSF) of most patients .....T F
- b) Most patients with MS have antibodies against Epstein-Barr virus .....T F
- c) Viruses can trigger an autoimmune reaction in prone individuals .....T F
- d) The oligoclonal bands in the CSF of MS patients react against measles virus .....T F
- e) Some studies show an association between MS and human herpes virus-6 .....T F

4. The plaques associated with the pathology of MS are:

- a) Caused by an unknown pathogenic mechanism.T F
- b) Located within blood vessels .....T F
- c) Characterised by loss of myelin and/or oligodendrocytes .....T F
- d) Infiltrated by inflammatory cells in the acute or active phases .....T F
- e) Described as Dawson's fingers .....T F

Questions continue overleaf



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• MULTIPLE SCLEROSIS •

5. With regard to the aetiology and immunogenetics of MS:

- |  |   |   |
|--|---|---|
| a) Both genetic and environmental factors are thought to be involved in the induction of MS.....   | T | F |
| b) The human leukocyte antigen gene HLA-DR2 is associated with the clinical expression and course of the disease.....                    | T | F |
| c) There is some evidence that environmental factors, such as low sunlight exposure, toxins and diet, may play a part in causing MS..... | T | F |
| d) The gene apolipoprotein E-4 can be linked with the severity of MS as it has been shown to be associated with axonal degeneration..... | T | F |
| e) There is much evidence to suggest that the early clinical expression of MS is hereditary.....   | T | F |

6. When considering drug treatment for relapses (acute deterioration in the neurological state):

- |  |   |   |
|--|---|---|
| a) Drug treatment is advised for relapses that have an important impact on function .....  | T | F |
| b) Steroids are the treatment of choice for relapses.....  | T | F |
| c) Oral steroids may be used as an alternative when relapses are less severe .....   | T | F |
| d) Steroids affect the rate of recovery from relapse ..  | T | F |
| e) The recommended dose of methylprednisolone for relapses is 1g by IV infusion daily for three days, or 500mg daily for five days ..... | T | F |

7. In the prevention of disease progression:

- |   |   |   |
|---|---|---|
| a) Interferon beta and glatiramer acetate are used as first-line treatments .....   | T | F |
| b) Four interferon beta preparations are licensed for the treatment of MS .....   | T | F |
| c) Glatiramer acetate is licensed for the reduction in frequency of relapses in ambulatory patients with relapsing-remitting MS ..... | T | F |

- |  |   |   |
|--|---|---|
| d) Interferon beta is not recommended for patients with non-relapsing secondary progressive disease..... | T | F |
| e) Methotrexate has been used to treat MS with varying degrees of success .....                          | T | F |

8. When considering interferon beta therapy:

- |  |   |   |
|--|---|---|
| a) Contraindications to use include severe depression and poorly controlled epilepsy .....     | T | F |
| b) The Association of British Neurologists recommends use in MS patients aged over 16 .....    | T | F |
| c) The precise mechanism of action is unclear .....  | T | F |
| d) One of the most common adverse effects is an influenza-like syndrome .....                  | T | F |
| e) Neutralising antibodies can develop, which can reduce the activity of interferon beta ..... | T | F |

9. In the treatment of MS-associated spasticity:

- |  |   |   |
|--|---|---|
| a) Dantrolene is the treatment of choice .....   | T | F |
| b) Tizanidine may be used as an alternative to baclofen .....                          | T | F |
| c) Diazepam and clonazepam are useful if given at night.....                           | T | F |
| d) The recommended starting dose of baclofen is 5mg three times daily.....             | T | F |
| e) Stopping baclofen abruptly may cause undesirable effects such as hallucination..... | T | F |

10. When considering treatment for chronic symptoms of MS:

- |   |   |   |
|---|---|---|
| a) Fatigue does not generally respond well to pharmacological intervention.....                                 | T | F |
| b) Cannabis and its pharmacological derivatives are currently undergoing trials for use in MS-related pain..... | T | F |
| c) Bladder dysfunctions are usually treated with fluoxetine .....   | T | F |
| d) Depression in MS usually responds to standard antidepressant treatment.....                                  | T | F |
| e) Sildenafil is a treatment option for erectile dysfunction in male patients .....                             | T | F |