Multiple Sclerosis: A Review and Treatment Option Updates

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1. Of the following, which is NOT a course of multiple sclerosis (MS)?
   a. Relapsing-remitting
   b. Primary progressive
   c. Primary relapsing
   d. Secondary progressive

2. Out of the courses of MS, which course is most commonly diagnosed initially?
   a. Relapsing-remitting
   b. Primary progressive
   c. Primary relapsing
   d. Secondary progressive

3. MS is a disease that affects men more than women.
   True
   False

4. According to the McDonald Criteria from 2010, MRI evidence in conjunction with an elevated IgG index is required for a diagnosis of MS.
   True
   False

5. About how many new cases of MS are diagnosed each year in the United States?
   a. 100,000
   b. 100
   c. 10,000
   d. 1,000,000

6. Which of the following agents has a black box warning for progressive multifocal leukoencephalopathy (PML)?
   a. Natalizumab
   b. Mitoxantrone
   c. Glatiramer
   d. Laquinimod

7. The prevalence of MS increases as one moves closer to the equator.
   True
   False

8. Which agent was designed to mimic myelin basic protein?
   a. Mitoxantrone
   b. Glatiramer
   c. Natalizumab
   d. Laquinimod

9. The use of a MRI scan is the preferred imaging technique.
   True
   False

10. Which monoclonal antibody being studied for use in MS patients targets interleukin-2?
    a. alemtuzumab
    b. daclizumab
    c. ocrelizumab
    d. rituximab

11. Teriflunomide is contraindicated in which patients?
    a. A patient currently on amiodarone for A-fib
    b. A patient who experienced a transient ischemic attack four months prior
    c. A patient with a creatinine clearance of 30ml/min
    d. A patient who is 12 weeks pregnant

12. When a patient is first given fingolimod (Gilenya™) a health care practitioner should
    a. Observe patient for six hours after administration due to first dose affects such as decreased heart rate, abnormally slow heart rhythm, and mild reduction in FEV-1
    b. Make sure to counsel patient to take fingolimod (Gilenya™) on a full stomach to prevent stomach irritation
    c. Alert patient of common adverse effect of flushing and GI symptoms and that the effect will decrease with time
    d. Have epinephrine on hand in case of an anaphylactic reaction

13. Fingolimod’s (Gilenya™) mechanism of action in MS is thought to be due to
    a. Activation of the Nrf2 pathway
    b. Being a Sphingosine 1 receptor modulator
    c. Inhibition of the dihydroorotate dehydrogenase enzyme
    d. Its ability to target CD20 cells

14. There are 9 different FDA-approved agents for which course of MS?
    a. Relapsing-remitting
    b. Primary progressive
    c. Primary relapsing
    d. Secondary progressive
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1.   A   B   C   D
2.   A   B   C   D
3.   T   F
4.   T   F
5.   A   B   C   D
6.   A   B   C   D
7.   T   F
8.   A   B   C   D
9.   T   F
10.  A   B   C   D
11.  A   B   C   D
12.  A   B   C   D
13.  A   B   C   D
14.  A   B   C   D

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