Chapter 39:

LEARNING OBJECTIVES

On completion of the chapter, the reader will be able to:

1. List four factors associated with the risk of developing multiple sclerosis (MS).
2. Describe the etiology of MS.
3. Discuss the pathophysiology of MS.
4. Explain the concept of T-cell differentiation and plasticity in MS.
5. Counsel a patient on the goals of medication therapy in MS.
6. Recommend treatment for a patient with an exacerbation of MS.
7. Define when it is appropriate to start medication therapy in a patient with relapsing-remitting MS.
8. Compare and contrast all agents used to treat relapsing remitting MS with respect to mechanism of action, side effects, efficacy, and impact on disease progression, administration, and cost.
9. Design a treatment-monitoring plan for an MS patient newly started on interferon therapy.
10. Discuss the presentation and significance of progressive multifocal leukoencephalopathy associated with natalizumab.
11. Explain the importance of cardiac monitoring in patients with MS started on mitoxantrone.
12. Recommend treatment, including dosing regimens, monitoring, and medication counseling, for a patient with worsening relapsing-remitting MS and a patient with secondary-progressive MS.
13. Recommend initial and alternative treatment of spasticity in a patient with MS.
14. Propose a treatment plan for a complicated MS patient with urinary tract dysfunction.
15. Revise a patient’s treatment course based on secondary symptomatology such as depression.
16. Recommend treatment of fatigue in a patient with MS.
17. List which therapies used in the treatment of MS have risk evaluation and mitigation strategy (REMS) programs associated with them.
18. Formulate the monitoring plan for patients taking fingolimod and dimethyl fumarate.