Chapter 112:

LEARNING OBJECTIVES

1. Describe the role of the Philadelphia chromosome in the pathogenesis of chronic myeloid leukemia (CML).
2. Describe the epidemiology, molecular biology, clinical presentation, and disease progression of CML.
3. Explain the role of tyrosine kinase inhibition with regard to CML.
4. Choose an initial therapeutic plan in a patient with newly diagnosed CML.
5. Describe the currently accepted standard treatments and response monitoring parameters for CML.
6. Describe the role of second-generation tyrosine kinase inhibitors (TKIs) in imatinib-resistant CML and emerging evidence related to their use.
7. Identify options for preventing and managing toxicities, drug–drug interactions, and drug–food interactions related to TKIs.
8. Describe the epidemiology, molecular biology, clinical presentation, and disease progression of chronic lymphocytic leukemia (CLL).
9. Classify CLL based on the Rai and Binet staging system.
10. Explain the role of alkylator-based chemotherapy in the treatment of CLL.
11. Choose an initial therapeutic plan in a patient with newly diagnosed CLL.
12. Describe the currently accepted standard treatments and response monitoring parameters for CLL.
13. Describe the role of biologic therapy in the treatment of initial and relapsed CLL.
14. Discuss the role of hematopoietic stem cell transplant in the treatment of CML and CLL.