LEARNING OBJECTIVES

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

1. Determine the likelihood that an adverse drug reaction is immunologically mediated.
2. Describe the role of immune cells, cytokines, antibodies, and other mediators in the mechanism of allergic reactions.
3. Describe the four types of allergic reactions (type I, II, III, and IV) and provide an example of each.
4. Describe the drug- and patient-specific factors that influence the risk of an allergic drug reaction.
5. Compare and contrast anaphylaxis and anaphylactoid reactions on the basis of the timing of the reaction, dose relationship, predisposing factors, and clinical features.
6. Determine the risk of allergic cross-reactivity for cephalosporins and carbapenems in patients who are allergic to penicillin.
7. Determine the risk of allergic cross-reactivity between the sulfonamide antibiotics and the sulfonamide nonantibiotics.
8. Compare and contrast desensitization and graded drug challenge procedures and determine the appropriate indications for each of these procedures.
9. Describe the proper treatment of anaphylactic reactions.
10. Describe the appropriate use of skin tests to determine the risk of anaphylaxis.