Chapter 15:

LEARNING OBJECTIVES

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

1. List at least six factors that can trigger asthma symptoms in patients with asthma.
2. Describe the four primary pathophysiologic events that lead to airway obstruction in asthma.
3. Describe the symptoms that patients with asthma are likely to experience.
4. Describe the characteristics that classify a patient as having intermittent, mild persistent, moderate persistent, and severe persistent asthma.
5. State the NAEPP’s recommendations for the treatment of intermittent, mild persistent, moderate persistent, and severe persistent asthma in adults and children 5 to 11 years old, and younger than 5 years old.
6. Describe the NAEPP’s recommended therapy for exercise-induced bronchospasm.
7. Describe the appropriate technique for using a metered-dose inhaler (MDI) and an MDI with a spacer/holding chamber.
8. Describe the appropriate technique for using a breath activated dry powder inhaler (DPI) device.
9. State at least two determinants of lung delivery for MDIs, DPIs, nebulizers, and spacer devices.
10. Describe the recommended therapy for an acute exacerbation of asthma at home, in the emergency department, and in the hospital.
11. Describe how to monitor patients in the hospital with an acute exacerbation of asthma for both efficacy of therapy and potential side effects from therapy.
12. List the possible systemic effects of β₂-agonists.
13. List at least four potential systemic adverse effects from high-dose inhaled corticosteroids.
14. Describe the differences in efficacy between inhaled corticosteroids and leukotriene modifiers.
15. List two advantages of combination therapy with inhaled corticosteroids and long-acting inhaled β₂-agonists over increased dose of inhaled corticosteroids.
16. Describe the controversy surrounding the use of combination inhaled corticosteroids and long-acting inhaled β₂-agonists.