## **Chronic Illnesses I**

## Learning Objectives for Diabetes in Children and Adolescents

- 1. Distinguish between various forms of diabetes mellitus (DM) that can affect children including type 1 DM, type 2 DM, hybrid diabetes, and maturity onset diabetes of the young.
- 2. Differentiate between traditional insulin and basal/bolus insulin regimens in children with DM.
- 3. Given a specific patient, design or evaluate the effectiveness of an insulin regimen to optimize glycemic control in a child with type 1 DM.
- 4. Assess and alter, if necessary, a therapeutic regimen to control hyperglycemia or comorbidities in a child with type 2 DM.
- 5. Given a specific patient case, design or evaluate the effectiveness of a continuous subcutaneous insulin pump to optimize glycemic control in a child with DM.
- 6. Develop a patient education strategy for children with DM and their caregivers that includes information on pharmacologic and nonpharmacologic therapy to optimize glycemic control and limit complications.

## Learning Objectives for Management of Diabetic Peripheral Neuropathic Pain

- 1. Demonstrate an understanding of the potential etiologies and pathophysiology of diabetic peripheral neuropathic pain (DPNP).
- 2. Distinguish between the clinical presentation of and risk factors for diabetic neuropathy and other neuropathic syndromes.
- 3. Classify treatments for DPNP by their order of preference according to current guidelines.
- 4. Resolve a drug-related problem in a patient case based on specific parameters, concomitant disease states, ease of administration, and cost.
- 5. Develop a therapeutic plan for the effective management of painful diabetic neuropathy based on specific patient parameters.
- 6. Evaluate the appropriateness of a treatment plan for DPNP.

## Learning Objectives for Diabetic Nephropathy

- 1. Discuss the pathophysiologic changes associated with diabetic nephropathy.
- 2. Classify a patient as having microalbuminuria or macroalbuminuria and stage the level of diabetic nephropathy based on patient-specific parameters.
- 3. Distinguish among the treatment guidelines and clinical trial data for the use of antihypertensive and antidiabetes agents to slow the progression of diabetic nephropathy.
- 4. Justify an appropriate pharmaceutical care plan that includes both pharmacologic and nonpharmacologic therapy for preventing and managing diabetic nephropathy.
- 5. Assess the role of angiotensin-converting enzyme (ACE) inhibitor and angiotensin receptor blocker (ARB) combination therapy, aliskiren, aldosterone antagonists, and calcium channel blockers in the treatment of diabetic nephropathy.
- 6. Analyze the threshold for initiating and maintaining a patient on an ACE inhibitor or an ARB in the context of serum creatinine concentration.
- 7. Evaluate the treatment options available to patients with end-stage nephropathy.