Chapter 8 Critical Thinking Activities

You can review additional information regarding these answers in the corresponding section in which the Critical Thinking activities appear.

Critical Thinking Activity Section 8.5

Lorazepam is a benzodiazepine, which is a CNS depressant. The riskiest side effects associated with the use of lorazepam are respiratory depression and oversedation. Other central nervous system depressants, such as scopolamine and alcohol, can cause additive effects and should be avoided when taking lorazepam. Sedation, drowsiness, respiratory depression, hypotension, and unsteadiness may occur when taking lorazepam, so these side effects should be considered when participating in activities on the cruise.

Critical Thinking Activity Section 8.6

Patient and parent education about methylphenidate should include taking the medication in the morning and not after 4 p.m.. It is important to monitor the child’s growth and weight and to provide food and snacks that the child likes if weight loss is a concern. Methylphenidate has a Black Box Warning due to its high abuse potential, and signs of misuse should be reported to the provider. The risks of drinking alcohol while taking this medication should also be discussed.

Critical Thinking Activity Section 8.7

1. A patient taking an SSRI medication like fluoxetine is at risk for developing serotonin syndrome if they have liver dysfunction or are taking other CNS medications. SSRIs are contraindicated with MAOIs due to the risk of developing serotonin syndrome. Symptoms of serotonin syndrome include confusion, elevated temperature, and rapidly changing
levels of blood pressure.

2. The nurse should advise the patient of the potential for suicidal thoughts with this medication and advise her to notify her provider if she has any thoughts of self-harm.

3. Common side effects of SSRIs that the nurse should discuss with the patient include sedation, low blood pressure that can cause dizziness, suicidal thoughts, heart palpitations, sexual dysfunction, and anticholinergic side effects such as dry mouth. Patients should be advised to avoid drinking alcohol when taking an SSRI.

4. The nurse should advise the patient that it may take up to 12 weeks to reach therapeutic levels of this medication where they feel better.

**Critical Thinking Activity Section 8.8**

1. The nurse should explain symptoms of manic episodes include rapid speech, hyperactivity, reduced need for sleep, poor judgment, hostility, aggression, decreased impulse control, and risky behaviors. For more information about mania and bipolar disorder, review the “Disorders of the CNS System” section.

2. Symptoms of lithium toxicity include diarrhea, vomiting, drowsiness, muscular weakness, and a lack of coordination. At higher lithium levels, giddiness, ataxia, blurred vision, tinnitus, and a large output of dilute urine may be seen. Lithium toxicity is prevented by regularly monitoring serum lithium levels to maintain a therapeutic range between 0.8 to 1.2 mEq/L.

3. The nurse should advise the patient that lithium reaches therapeutic range within 1 to 3 weeks.

**Critical Thinking Activity Section 8.10**

1. Gabapentin is classified as an anti-seizure medication, but it is also used to help relieve neuropathic pain that patients with diabetes often describe as a “burning” or “tingling” sensation in their lower extremities.

2. Gabapentin is a CNS depressant and can cause sedation, dizziness, and ataxia that increase a patient’s risk for falls.

3. The nurse should plan to monitor for worsening depression, suicidal ideation, fever, rash, lymphadenopathy, dizziness, sleepiness, stumbling, and a lack of coordination. Development of any of these signs should be reported to the provider; suicidal ideation requires urgent notification.

**Critical Thinking Activity Section 8.11**

1. Levodopa, the metabolic precursor of dopamine, crosses the blood-brain barrier and is then converted to dopamine in the brain. Carbidopa is combined with levodopa to help prevent the breakdown of levodopa before it is able to cross the blood-brain barrier.

2. Patients taking carbidopa and levodopa have reported suddenly falling asleep without prior warning of sleepiness while engaged in activities of daily living, including operation of motor vehicles. Patients should be advised to exercise caution while driving or operating machines during treatment with carbidopa and levodopa.

3. Dyskinesia is involuntary muscle movements including tics. If a patient develops dyskinesia while taking carbidopa-
levodopa, dosing adjustment or alternate drug therapy is required.