Addressing the Barriers to Effective Overactive Bladder Management Through Medication Therapy Management

Upon completion of this activity, participants should be better able to:

1. Discuss barriers that prevent patients from receiving diagnosis and effective treatment of overactive bladder (OAB);
2. Describe the economic and quality of life impact of OAB and the influence of this condition on older adult patients and those with medical comorbidities;
3. Review current guideline statement recommendations for OAB and identify updates or changes related to newer therapeutic approaches;
4. Determine methods pharmacists can use to identify and discuss adherence issues with OAB treatment regimens; and
5. Explain the applicability of medication therapy management (MTM) services in OAB and how these can be implemented in pharmacy practice.

Post-test/Rationale

1. Overactive bladder (OAB) is linked to which of the following:
   A. Structural changes in the urinary tract system
   B. Altered neurotransmitter function
   C. Caffeine use
   D. All of the above are possible causes of OAB symptoms***

Correct Answer: D

Structural changes to the anatomic structures of the genitourinary tract, coupled with alterations in neurotransmitter function, and consumption of caffeine are all factors that may result in symptoms associated with OAB.

2. Treatment failure for OAB may be attributed to which one of the following:
   A. Lack of efficacy for drug therapies
   B. The cost of OAB medications
   C. Lack of aggressive dosing
   D. Lack of time during office visits for thorough assessment***

Correct Answer: D

OAB treatment failure can occur because success takes detailed coaching, diagnostics, and monitoring and the establishment of realistic treatment expectations with the patient.
3. Which of the following is TRUE regarding OAB:
   A. A disorder with an objective set of diagnostic criteria
   B. Easy to manage with use of evidence-based treatment algorithms
   C. Not influenced by other medical conditions; frequently a lone disorder
   D. A syndrome***

Correct Answer: D

OAB is a syndrome because there is no distinct etiology and it consists of signs and symptoms that define the issue, but the causes are multifactorial and individual.

4. Which of the following is a medication known to contribute to OAB:
   A. Acetaminophen
   B. Rivaroxaban
   C. Diltiazem***
   D. Guaifenesin

Correct Answer: C

The calcium channel blockers, including diltiazem, affect the detrusor muscle as well as cause fluid retention and constipation, which effects OAB as well.

5. Which of the following is a preferable first-line or second-line treatment choice for OAB per the American Urological Association (AUA) guidelines:
   A. Onabotulinumtoxin A
   B. Intradetrusor capsaicin injection
   C. Long-acting (LA) or extended-release (ER) oxybutynin***
   D. Short-acting tolterodine

Correct Answer: C

AUA guidelines for the treatment of OAB specify a preference for either LA or ER dosage forms of anticholinergic agents because of the more favorable side effect profile.

6. The medications that are used to treat OAB are
   A. Never used for overflow incontinence
   B. Used the first time a patient notices a symptom of OAB, to prevent decline
   C. Only used to treat OAB symptoms in older adults
   D. To be used along with behavioral therapies***

Correct Answer: D

Medications are ideally used in conjunction with lifestyle and behavioral therapies and not alone, per AUA guidelines.
7. Mirabegron has which of the following side effects associated with its use:
   A. Cardiac palpitations***
   B. High post-void residual urine
   C. Dry mouth
   D. Low blood pressure

Correct Answer: A

Mirabegron, as a beta-3 adrenergic receptor agonist, by stimulating beta-adrenergic receptors on cardiac tissue may result in cardiac palpitations.

8. The bladder-specific alpha-adrenergic receptor antagonists target which one of the following:
   A. The bladder detrusor muscle
   B. The limbic system
   C. The external urethral sphincter***
   D. The internal bladder vesical sphincter

Correct Answer: C

The external urethral sphincter, which helps counter the urethral obstruction accompanying benign prostatic hyperplasia (BPH) and other obstructive disorders is the target tissue affected by the selective alpha adrenergic receptor antagonists.

9. Which one of the following is a behavioral therapy for OAB:
   A. Consuming more ice cream weekly
   B. Limiting the intake of caffeine***
   C. Increasing expectations of treatment success with oral medications
   D. Ensuring that the patient uses OAB medications

Correct Answer: B

Caffeine is a bladder irritant and causes increased contractility; elimination of caffeine may result in symptomatic improvement in some individuals.

10. Which of the following antimuscarinic medications is least likely to cross the blood-brain barrier:
   A. Darifenacin
   B. Trospium***
   C. Solifenacin
   D. Oxybutynin

Correct Answer: B

Trospium is a quaternary amine and the positive charge makes it nonlipophilic and unable to cross the intact blood-brain barrier.