A Solution for Solutions: Counseling Contact Lens Wearers

Learning Assessment

1. Multipurpose disinfecting solutions (MPDS) require rinsing of hydrogel soft contact lenses prior to storage.
   A. True***
   B. False

Correct answer: A
The sequence for cleaning all contact lenses is to remove from the eye, apply a small amount of multipurpose disinfecting solution (MPDS) to contact lens, rub lens and solution together between index finger and palm of hand, rinse lens with appropriate amount of solution, and then place in storage case full of fresh solution.

2. Rigid gas permeable contact lenses require additional care compared with hydrogel soft contact lenses, including which of the following:
   A. Disinfection
   B. Rewetting prior to insertion into the eye***
   C. Visual examination for scratches, chips, a tear, or discoloration
   D. Storage in appropriate containers

Correct answer: B
The last step in the process to clean rigid gas permeable lenses is to rewet the lens prior to inserting into the eye. Adequate hydration status achieved with rewetting drops helps to maintain the tear film and provide clear vision.

3. Which one of the following is the correct statement regarding topical ophthalmic medication use for patients with contact lenses:
   A. Artificial tears can be used while wearing contact lenses
   B. Most over-the-counter ophthalmic medications (such as antihistamines and decongestants) can be used while wearing contact lenses
   C. Ophthalmic suspensions, ointments, or gels should not be used while wearing contact lenses***
   D. At least 60 minutes should elapse between instilling topical ophthalmic medications and inserting contact lenses

Correct answer: C
Ophthalmic suspensions, ointments, or gels should not be used while wearing contact lenses. Applying ophthalmic medications to a contact lens may facilitate the formation of a precipitate if the lens and the active or inactive ingredients in the medication are not compatible.

4. Which of the following are appropriate reminders when counseling patients about contact lens care:
A. Wash your hands before touching contact lenses
B. Expired contact lens solutions should be discarded because of the risk for microbial contamination
C. Contact lens solutions from different manufacturers should not be mixed because of the risk for precipitation
D. All of the above***

Correct answer: D
All of the points listed are appropriate information to provide to a patient during a counseling session.

5. Which of the following correctly describes the steps for self-care of contact lenses after removal from the eye:
   A. Rinse, clean with surface-active cleaner, soak/store
   B. Clean with surface-active cleaner, rinse, soak/store***
   C. Soak/store, rinse, clean with surface-active cleaner
   D. Clean with surface-active cleaner, soak/store, rinse

Correct answer: B
Clean with surface-active cleaner, rinse, soak/store is the correct sequence for cleaning all contact lenses following removal from the eye. Start by applying a small amount of solution to the contact lens, rub lens and solution together between index finger and palm of the opposite hand, rinse lens with appropriate amount of solution, and then place in a storage case full of fresh solution.

6. Which type of contact lens solution is preservative free?
   A. Hydrogen peroxide based solutions***
   B. Multipurpose disinfecting solutions

Correct answer: A
Hydrogen peroxide-based solutions contain pure hydrogen peroxide, which does not need preservatives because the hydrogen peroxide reacts with microorganisms and proteins, resulting in the liberation of oxygen and, thus, disinfection of the lens.

7. Which of the following is an advantage of rigid gas permeable contact lenses:
   A. Excellent initial lens comfort and rapid adaptability
   B. Unlikely to trap foreign materials beneath the lens
   C. Excellent optical quality for optimal visual acuity***
   D. Unlikely to dislodge from, or fall out of, the eye

Correct answer: C
Excellent optical quality for optimal visual acuity is an advantage of gas permeable contact lenses. All the other answer options are advantages of hydrogel soft contact lenses.

8. Contact lens solutions are considered nonprescription medications and are, thus, strictly regulated by the U.S. Food and Drug Administration.
A. True
B. False

Correct answer: B
Contact lens solutions are not considered nonprescription medications, but they are regulated by the ophthalmic devices division of the U.S. Food and Drug Administration.

9. An example of a noninfectious complication from the use of contact lenses includes 3/9 o'clock staining. 3/9 o'clock staining is defined as which of the following:
   A. An allergic reaction to preservatives within the contact lens solution
   B. Reduced oxygen permeability to the cornea
   C. Inadequate spreading of the tear film as the result of inadequate blinking or the improper fit of rigid contact lenses
   D. A worn or scraped-off area of the cornea

Correct answer: C
The definition of 3/9 o'clock staining is the inadequate spreading of the tear film caused by inadequate blinking or the improper fit of rigid contact lenses. Answer choice A is the definition of solution reactions. Answer choice B is the definition of hypoxia. Answer choice D is the definition of corneal abrasion.

10. Which of the following medications has a drug interaction with hydrogel soft contact lenses:
   A. Amoxicillin
   B. Glyburide
   C. Lisinopril
   D. Phenazopyridine

Correct answer: D
Phenazopyridine can change the color of all bodily fluids to a red/orange color. This includes tears, sweat, and urine. The other medications listed do not have a drug interaction with hydrogel soft contact lenses.