Solutions to Your Lens Care Questions

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Course Description:

With the continued advancements in contact lens technology and designs, their application will undoubtedly continue to rise. However, proper lens care is critical to prevent complications and ensure optimal lens wear, as CL care practices vary between practitioners and practice modalities. This presentation will provide a comprehensive review of the standard solutions in practice and reaffirm lens care guidelines set forth by optometric organizations.

Course Objectives:

- 1. Review International Standard Organization (ISO) standards for contact lenses
- 2. Review the most common pathogens found associated with contact lens wear
- 3. Review systemic diseases that can cause contamination and can lead to cross infections
- 4. Discuss the most common specialty CL disinfection solutions
- 5. Discuss the most common scleral CL filling solutions
- 6. Reaffirm the "In-office disinfection of multi-use diagnostic contact lenses" set forth by GP Lens Institute (GPLI)

- i. ISO Standard for Contact Lens Care
 - a. ISO 14729
 - b. ISO 18259
- ii. Contact Lens and Corneal Infections
 - a. The pathogenesis
 - b. Pathogens associated with complications
 - i. Bacterial
 - 1. Pseudomonas
 - ii. Protozoans
 - 1. Acanthamoeba
 - c. Systemic diseases associated with complications
 - i. Adenovirus
 - ii. Hepatitis
 - iii. HIV
 - iv. Prion disease
 - v. Herpetic eye disease
- iii. Specialty CLs Care Solutions
 - a. RGP & Scleral Lens Cleaners
 - i. Nonabrasive surfactants
 - 1. Unique preservatives
 - ii. Abrasive surfactants
 - 1. Unique preservatives
 - iii. Surfactant Soaking Solutions
 - 1. Wetting agents
 - iv. Supplemental Solutions
 - 1. Weekly Cleaners
 - 2. Enzyme Cleaners
 - v. Hydrogen Peroxide
 - b. Custom Soft & Hybrid Lens Cleaners
 - i. Multipurpose Solutions
 - 1. Unique preservatives
 - ii. Hydrogen Peroxide
- iv. Scleral Lenses Filling Solutions
 - a. Eye's natural pH
 - i. Importance of pH complementing the eye's pH
 - 1. Possible complications
 - b. Buffered vs. Unbuffered Saline

- i. What makes them different?
- ii. Buffered
 - 1. Examples
 - 2. Benefits v disadvantages
- iii. Unbuffered
 - 1. Examples
 - 2. Benefits v disadvantages
- c. Other
 - i. Viscosity considerations
 - 1. Benefits v disadvantages
- v. "In-Office Disinfection of Multi-Use Diagnostic Contact Lenses"
 - a. Gas permeable lenses guideline
 - b. Hybrid and soft lenses guideline
 - c. Implementation to a private practice vs. an academic institution
- vi. Miscellaneous
 - a. Care of
 - i. Contact lens cases
 - ii. DMV inserters & removers