New and Innovative Uses for Contact Lenses

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New and Innovative Uses for Contact Lenses is a progressive lecture that may touch on the latest trends in the contact lens industry. The topics of the course include: aberration controlled contact lenses, sports contact lenses, keratoconus contact lens options, scleral shells, large diameter contact lenses, modern methods of piggybacking, hybrid contact lenses, orthokeratology and corneal reshaping, presbyopic lens options, and silicone hydrogels place in the contact lens world.

OBJECTIVES:

Following this course attendees will:

Understand the latest information related to contact lenses on the market including: aberration controlled contact lenses, sports contact lenses, keratoconus contact lens options, scleral shells, large diameter contact lenses, modern methods of piggybacking, hybrid contact lenses, orthokeratology and corneal reshaping, presbyopic lens options, and silicone hydrogels

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1. Aberration Controlled Contact Lenses
   1. History of Aberrations
   2. Review of Aberrations
   3. Methods of measuring aberrations
   4. Contact Lenses that cause or correct for aberrations
      1. RGP Lenses
      2. Multifocal Lenses affect
      3. Spherical Aberration lenses
      4. The future is sclerals for aberrations
2. Cusom Contact Lenses
   1. Sports Tinting
      1. You can color your OWN lenses in office
      2. In office system that you can use
      3. Incorporating into practice
      4. Amber
      5. Gray-Green
3. Colored Lenses for disease
   1. Case presentation of Red Lenses
      1. How do they work?
      2. How to demonstrate to a patient.
   2. Case presentation of occlusion lens
      1. How to occlude a lens.
      2. Make the lens color dark
      3. Use a high powered lens
4. Keratoconus Lenses
   1. Aspheric Gas Permeable Lenses
      1. What type of Kone is right for this type of lens?
         1. Central Kone
         2. Inferior Kone
         3. Global Kone
      2. Decrease spherical Aberration
      3. Decrease weight of the lens on the entire cornea
   2. Soft Lens Designs
      1. Soft Lens Design Options
         1. Kerasoft
         2. NovaKone
         3. Others
      2. When can a soft lens be used, when should you choose a Gas Permeable lens for your patient
      3. How do you fit?
      4. How do you troubleshoot?
5. Scleral Shells
   1. Differentiation the types
   2. When do you want to use which type?
   3. When do you want to go scleral?
   4. Fitting
      1. Selecting the right Sag
         1. What is the best sag for an initial fit?
            1. 250-350
         2. What sag do you want at follow up?
            1. 150-250
         3. Consequences of too little sag
            1. Bearing on the cornea
         4. Consequences of not enough sag
            1. Not enough O2 getting to the eye
            2. The tears are a bad carrier of O2
      2. Selecting the limbal lift
         1. Using your labs fitting guide
         2. Ensure that there is clearance at limbus
            1. The limbus is the “holy grail” of the cornea
      3. Select the right edge
         1. What does too little edge lift look like?
            1. This is when the edge of the lens is digging into the sclera/conjunctiva causing an area of white and redness beyond
         2. What does not enough edge lift look like?
            1. This is where the edge of the lens is lifted which causes excessive pressure on the elbow of the lens causing bearing and blanching
         3. What is perfection look like?
6. Large Diameter Lenses
   1. Mask Corneal Irregularity by Vaulting
   2. Improved Comfort
   3. Better O2 than there used to be
7. Modern Methods of Piggybacking
   1. Base Curve Selection
   2. Power Effect
8. Hybrid Lenses
   1. SoftPerm
   2. SynergEyes
      1. Fitting Methods
      2. Drawbacks
9. Orthokeratology
   1. Brief History of Ortho-k and its Progression
   2. Fitting Methods
      1. Topography Driven
      2. Diagnostic Fitting Sets
      3. Empirical Fitting
   3. Lens Designs
      1. Paragon CRT
      2. BE Retainer
      3. Euclid Emerald
      4. DreamLens
      5. Contex OK Lens
   4. Hyperopia
   5. Astigmatism
      1. Dual Axis
         1. Needed for corneas with limbal astigmatism
      2. Lenses can be spherical if smaller central astigmatism
   6. Presbyopia
10. Presbyopic Lens Options
    1. Spherical
       1. Differentiate the products available
          1. Central Near
          2. Central Distance
       2. What are the problems encountered that make vision not good for a patients vision
          1. Distance and/or Near Issues
             1. Lens power off
             2. Lens fitting too loose
             3. Lens fitting too tight
             4. Lens not centering correctly
    2. Toric
       1. GP Multifocals
          1. when are these more ideal
          2. What type of lenses are available?
             1. Tangent Streak
             2. Aspheric
       2. Soft Toric Multifocals
          1. The goods and bads of these lenses
       3. Hybrid Lenses
          1. Progressive Design
11. Diabetes and Contact Lenses
12. Single Use Lenses
    1. What is the current market trend?
    2. How are these lenses evolving?
       1. BioTrue Lens with lipid release
       2. Dailites Total1 with its water gradient technology
       3. Acuvue TruEye with its SiHy
    3. Where will the market be heading in the future
13. Silicone Hydrogels
    1. The Past, Present and Future
    2. Specialty Lenses
    3. Torics
    4. Multifocals
    5. The Good, The Bad, And The Ugly
    6. Solution Interactions