Refractive Surgery 2016 – Not Just for the Young Myope

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Course Description: This course will discuss refractive surgery available today and how it can serve as a tool for the optometric practice. It will present the procedures available today and discuss patient selection, the benefits and the risks. This course will also discuss how to incorporate refractive surgery into the optometric practice.

Course objectives: the attendees will:

learn how refractive surgery has evolved from a corneal procedure to include intraocular procedures

learn that refractive surgery is still surgery with risks but for many patients the risks are outweighed by the benefits

learn that laser refractive surgery is by far still the go to procedure

learn the procedures available and how to match them with the patient's needs

learn the role the optometrist plays in guiding the patient to the best outcome

learn how to incorporate refractive surgery as another tool to be used to resolve patients' visual disabilities.

Outline:

1. THE MODERN EVOLUTION OF REFRACTIVE SURGERY
   a. Began in 1995 in the US with the FDA approval of PRK
   b. Lasik approval brought a more invasive corneal technique in 1998
   c. A large number of patients do not qualify for corneal surgery
      i. The high myopes
      ii. Moderate hyperopes
      iii. The patients with suspect corneas
      iv. Older patients who have age normal lens changes
   d. The approval of the phakic iol by the FDA
   e. The natural progression to clear lens exchange

2. LENS REMOVAL AS A REFRACTIVE PROCEDURE
   a. CATARACT SURGERY is a refractive procedure
      i. Target is more than just plano
         1. Residual myopia for spectacle free near functionality
         2. Monovision
            a. Full monovision
            b. Lifestyle monovision—everyone should be offered this
      ii. Specialty lenses expand the range of options
         1. Toric lenses to correct corneal astigmatism
            a. Range of correction available
            b. When is limbal relaxing incision a better option

c. Outside the range LVC can safely pick up the balance

2. Multifocal and Accommodating lenses
    a. Two multifocal lenses available. Since the initial FDA approval lenses have gone through several iterations
        i. Less glare
        ii. Add power adjusted
        iii. Patient selection critical but can create happiest patient
        iv. We are much more aggressive in our use of MF lenses
        v. Your role in managing these patients is very important
    b. Accommodating lenses-only one available
        i. Difficult to achieve distance target
        ii. Accommodation variable and can be lost with fibrosis
        iii. Yag can impact refractive outcome
        iv. Big plus is that at worst it is a monofocus lens

iii. The Premium Refractive Package for the patient that wants to be spectacle free
    1. Additional cost and value
    2. Standard of care is to utilize automated biometry and a single formula but PRP:
        a. Utilizes additional testing such as tomography and manual Ks
        b. Utilizes best formula for eye type
        c. Manual review of all information
        d. No charge laser touch up when target not met
    3. Monovision offered in this package
    4. Correction of corneal astigmatism is part of the package

b. CLEAR LENS EXCHANGE (CLX)-Cataract surgery without the cataract
    i. All the lens options in cataract surgery available for the CLX
    ii. Patient selection
        1. Any patient struggling with standard correction modalities can be considered but for most LVC best option
        2. Ideal candidate is the presbyopic hyperope who has astigmatism
        3. The high hyperope who struggles with accommodation
        4. Any ammetrope who is not a candidate for LVC

3. PHAKIC IOL
    a. Two lenses available in the US
    b. Patient selection
        i. Young high myope
        ii. Can be used in low myopes who are not candidates for LVC
        iii. Not available in this country for hyperopes
        iv. Better quality of vision for high myopes
        v. Not for older patients-higher likelihood of cataract formation
    c. Toric correction is not available but astigmatism is corrected with laser touch up or LRI
4. KAMRA LENS
    a. Corneal insert to treat presbyopia-demonstrate
    b. One eye only
    c. Is it better than monovision
    d. Expensive

5. YOUR PRE AND POST OPERATIVE ROLE

6. SUGGESTIONS ON HOW TO INCORPORATE IT INTO YOUR PRACTICE
7. CASE PRESENTATIONS
8. QUESTIONS