Optical Coherence Tomography in the Primary Eye Care Practice
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Summary

OCT technology has changed the way we manage our patients. This course will review the role of OCT in primary eye care practice with a focus on clinical decision making optimizing patient outcomes.

Learning Objectives

1) Understand advances in OCT technology
2) Discuss it’s role in managing macular disease
3) Understand current roles for the management of glaucoma

Outline:

1) OCT – it’s role in diagnosis and treatment
   a. Discussion of the structural analysis provided by optical coherence tomography
   b. Understand its importance in understanding the normal versus the abnormal state
   c. Discussion of symmetry and why it is important when differentiating the normal from the abnormal state
2) Retina
   a. Epiretinal membrane
      i. Discussion of the etiology and pathophysiology of the clinical entity
      ii. Understand the anatomical implications and its effects on visual acuity
      iii. Discussion of OCT images for epiretinal images
      iv. Comparison of clinical outcomes for patients with various levels of visual acuities
      v. Determining the need for referral versus monitoring the condition
   b. Diabetic retinopathy
      i. Understand the pathophysiology of diabetic retinopathy
         1. Why does it happen
         2. What are the effects on the integrity of the vascular system
         3. How does this relate to what we observe clinically
ii. Discussion of the stages of the disease process with an emphasis on the involvement of the macula
iii. Understand the role of the OCT in the structural assessment of the macula in patients with macular edema
iv. Understand the clinical decision making process for referring patients for further treatment
c. Macular hole
   i. Understand the pathophysiology of the disease state
   ii. Discussion of the staging of macular holes
   iii. Understand how OCT technology has recalibrated the way we stage macular holes
   iv. Understand the clinical decision making process
   v. Clinical outcomes and proper intervention
d. Macular degeneration
   i. Discussion of disease state
   ii. Understand the clinical picture with OCT
   iii. Understand what the key clinical findings are for patient referral
e. Plaquinil evaluation
   i. Discussion of pathophysiology
   ii. Understand anatomical variations that can occur
   iii. Describe new clinical guidelines for patients utilizing plaquinil involving OCT

3) Glaucoma
   a. Optic nerve head
      i. Understand the TSNIT pattern and nerve fiber layer thickness
      ii. Understand the normal values and how to utilize them in clinical practice
      iii. Discussion of symmetry and the importance of comparing both eyes along vertical symmetry
   b. Ganglion cell complex
      i. Understand anatomically how nerve fibers synapse to outer layers of the retina
      ii. Discuss the clinical relevance with respect to assessing both glaucoma patients and glaucoma suspects
      iii. Understand its relevance to visual fields and glaucoma management
   c. Understanding visual field measurements
      i. Discussion of various field strategies and when certain tests may be more advantageous

4) Anterior segment
   a. Angle measurements
      i. Discussion of its role in glaucoma management
   b. Cornea
      i. Understand corneal thickness readings
      ii. Discussion of keratoconus
c. Contact lenses
   i. Understanding the interaction between the contact lens and the cornea

5) Billing and coding pearls
   a. 92135 – replaced at the beginning of 2011
   b. 92132 – anterior segment
   c. 92133 – optic nerve
   d. 92134 – retina