

Ehsan Sadri, M.D.  
Board Certified Ophthalmologist  
Fellowship Trained in Glaucoma

## Updates in Glaucoma 2018

### Challenging Cases and Advancements in:

- Diagnostics
- Treatments
- Future

- I. Testing Functional Tests of SITA SAP, SWAP, SITA SWAP FDT (C20-1) FDT Matrix, on a case study on a 49 yr old patient Hispanic Male, POHX Glaucoma suspect, PMHx Mother POAG, Healthy
  - a. Advantages and disadvantages of each test
  - b. Structural Damage Precedes Functional Change
  - c. Structures and Function in Glaucoma
  
- II. 2012 Diagnostics
  - a. Early Detection
  - b. Spectralis 3D OCT
  - c. Alterations to Prelaminar Optic Nerve Head (ONH)
  - d. Posterior Bowing of lamina and peripapillary BM
  - e. Quantitative detection deep BM early detection
  - f. Tracking treatments
  
- III. Case Study discussing Corneal Biomechanics
- IV. Case study discussing Laser Peripheral Iridotomy and Treatment
  - a. Medications
  - b. Surgical Intervention
  - c. Future Treatment
  
- V. Monotherapy and its efficacy
- VI. Selective Laser Trabeculoplasty vs Meds
- VII. The “5Rs” of Progression – Crucial steps necessary to detect and appropriately monitor glaucoma progression
  - a. Record Baseline Structure and function
  - b. Risk Evaluation
  - c. Repeat fields and imaging/photos
  - d. Rate of progression
  - e. Reassess and revise management plan and reestablish baseline
  
- VIII. Five Rules for Assessment Optic Disc In Glaucoma

- a. Observe the Ring to identify the limits and the size of the optic disc
- b. Identify the size of the rim
- c. Examine the Retinal nerve fiber layer
- d. Examine the Region of parapillary atrophy
- e. Look for Retinal and optic disc hemorrhages

IX. Optic Nerve Progression: Structural Changes

- a. Patterns of Glaucomatous Progression
- b. Overview of Quantitative Imaging Technologies

X. Implications for Clinical Practice

- a. Managing Progression in Clinical Practice
- b. Developing a Risk Profile
- c. Independent Risk Factors for Progression
- d. Summary Recommendations

XI. Future

- a. Clinical Applications of cytokines and their receptors
- b. Increase use of Baerveldt shunt
- c. IOptima's laser filtration system (CO2 laser)
- d. Neurostimulation
- e. Continuous IOP monitoring
- f. Wireless Soft Contact Lens
- g. MMC coated Tube Shunt
- h. Medication coated punctal plugs
- i. OCT imaging in 2020
- j. OCTA the next breakthrough
- k. Central Macular Imaging for Monitoring of Advanced Glaucoma
- l. Adaptive Optics-SLO Imaging of RGC
- m. Axonal Bundle High-Resolution AS-OC