

1. Analysis of Neuroretinal Rim by Age, Race, and Sex Using High-Density 3-Dimensional Spectral-Domain Optical Coherence Tomography

Relevance: General Ophthalmologists and Glaucoma Specialists

The article by Antar H et al showed a known fact that the Neuroretinal Rim minimum band distance decreases with age. It also showed that the African americans are more predisposed to glaucoma because of the thinner rims as compared to white. So baseline measurement becomes very important in any OCT interpretation and the age related changes and racial parameters have to be taken care of before the final management.

2. Baseline Central Visual Field Defect as a Risk Factor For NTG Progression: A 5-Year Prospective Study

Relevance: General Ophthalmologists and Glaucoma Specialists

The study by Raman P et al showed that normal tension glaucoma patients with baseline central VF involvement are at increased risk of progression compared with those with peripheral VF defect and need to be managed more aggressively and regular follow up are needed

3. Changes in Intraocular Pressure in Single Ventricle Patients After the Glenn or Fontan Procedure

Relevance: Pediatric cardiologist and Glaucoma Specialists

Kijima et al studied Elevations in Central venous Pressure and found that it significantly increased IOP in patients with Single Ventricle who underwent the Glenn or Fontan procedure. So IOP needs to be carefully monitored in the postoperative period after both procedures.

4. Does Retinal Ganglion Cell Loss Precede Visual Field Loss in Glaucoma?

Relevance: Glaucoma Specialists & Statistician

(was not able to comprehend the article)

It is often said that substantial retinal ganglion cells are lost before glaucomatous damage is detected by standard auto-mated perimetry. There are 4 key articles referenced to support this belief.

To test the hypothesis that the 4 key articles are incorrectly cited, the publications in the first 6 months of 2019 that reference 1 or more of these 4 articles were examined. In particular, the degree to which the quotes from these 2019 publications accurately reflected the evidence in the 4 key articles was assessed. These quotes are inadequately supported by the data, and in some cases even by the conclusions found in the abstracts of the key articles. This is despite several review articles that have questioned the evidence in these key articles. Further, a case can be made that the evidence in the key articles better supports the opposite conclusion. That is, the data suggest that sensitivity loss can be seen on standard automated perimetry before retinal ganglion cells are missing.

5. Analysis of the Optic Disc and Peripapillary Structures in Monozygotic Twins

Relevance: Glaucoma Specialists, Pediatric Ophthalmologists & Dept of Genetics

Park D Y et al studied the shape and morphology of optic disc and peripapillary structures. Unlike AL and cup-to-disc ratio, similarity of peripapillary between Monozygotic twins decreased with age, suggesting that PPA could be formed as a result of various factors in addition to genetic ones.

6. Downsizing a Baerveldt Glaucoma Implant For the Management of Persistent Postoperative Hypotony: A Case Series

Relevance: Glaucoma Specialists

Persistent hypotony is a common post-operative complication of Baerveldt Glaucoma Implant. Mavrommatis M A et al showed Truncation of one or both wings of a BGI and complete closure of the tube with nonabsorbable, but releasable, suture ligation is an effective and safe method for reversing persistent postoperative hypotony while maintaining IOP control.

7. Quality of Life of Caregivers of Children With Glaucoma in an Arab Population: A Cross-Sectional Study

Relevance: Glaucoma Specialists & community Ophthalmologists

Mohannad Al Qurashi et al studied the the quality of life indicators of the caregivers of children with glaucoma in Arab population. The QoL of caregivers of children with glaucoma was poor. Caregiver's relation to patients, additional children with glaucoma in the family and patient's vision in the better eye could influence a caregiver's QoL. Periodic evaluation of QoL of caregivers is recommended to plan counseling and other support services. This study is relevant for Indian Population also. A need for Glaucoma Counselling Department in every tertiary eye care hospital is needed atleast.

8. Structure-function Relationship in Advanced Glaucoma After Reaching the RNFL Floor

Relevance: Glaucoma Specialists

Sung M S et al showed that even after the RNFL had reached the measurement floor, several macular parameters showed a statistically significant relationship with functional status in VF. In particular, the assessment of structural changes in the nasal macular region may be important in determining the central VF in advanced glaucoma. This is in contrast to conventional teaching that OCT is not very useful in advanced glaucoma.

9. The Chinese Glaucoma Study Consortium for Patients With Glaucoma: Design, Rationale and Baseline Patient Characteristics

Not relevant in our case scenario