



STATE BOARD OF OPTOMETRY
 2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834
 P (916) 575-7170 F (916) 575-7292 www.optometry .ca.gov



Continuing Education Course
 Approval Checklist

Title:

Provider Name:

- Completed Application
 - Open to all Optometrists? Yes No
 - Maintain Record Agreement? Yes No
- Correct Application Fee
- Detailed Course Summary
- Detailed Course Outline
- PowerPoint and/or other Presentation Materials
- Advertising (optional)
- CV for EACH Course Instructor
- License Verification for Each Course Instructor
 - Disciplinary History? Yes No



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CONTINUING EDUCATION COURSE APPROVAL APPLICATION

\$50 Mandatory Fee

Pursuant to California Code of Regulations (CCR) § 1536, the Board will approve continuing education (CE) courses after receiving the applicable fee, the requested information below and it has been determined that the course meets criteria specified in CCR § 1536(g).

In addition to the information requested below, please attach a copy of the course schedule, a detailed course outline and presentation materials (e.g., PowerPoint presentation). Applications must be submitted 45 days prior to the course presentation date.

Please type or print clearly.

Course Title <u>MICRO-INVASIVE GLAUCOMA SURGERY</u>	Course Presentation Date <u>10AM-3pm (5 hrs)</u> <div style="text-align: center; border: 1px solid black; padding: 2px;"> 0 2 / 2 6 / 2 0 1 7 </div>
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Course Provider Contact Information

Provider Name <u>Jessica</u> <u>MORALES</u> _____ (First) (Last) (Middle)		
Provider Mailing Address <u>450 N Roxbury Dr.</u> Street <u>3rd floor</u> City <u>Beverly Hills</u> State <u>A</u> Zip <u>90210</u>		
Provider Email Address <u>jmoraless@assileye.com</u>		
Will the proposed course be open to all California licensed optometrists?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Do you agree to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	

Course Instructor Information

Please provide the information below and attach the curriculum vitae for each instructor or lecturer involved in the course. If there are more instructors in the course, please provide the requested information on a separate sheet of paper.

Instructor Name <u>Dr. Mona</u> <u>Bagga</u> _____ (First) (Last) (Middle)		
License Number <u>A104390</u>	License Type <u>Physician & Surgeon</u>	
Phone Number (30) <u>651-2300</u>	Email Address <u>mbagga@assileye.com</u>	

I declare under penalty of perjury under the laws of the State of California that all the information submitted on this form and on any accompanying attachments submitted is true and correct.

_____ _____
 Signature of Course Provider Date

Assil Eye Institute
Submission for Continuing Education Credits

LOCATION:

Assil Eye Institute
450 N. Roxbury Drive
Beverly Hills, CA 90210

DATE/TIME:

February 26, 2017 from 10:00am-3:00pm (5 hours)

SUMMARY of Directly Related Topics:

Assil Eye Institute will review the latest technologies which offer new opportunities for improved quality of life and safety. We will review the pre and post operative management with each treatment. By way of example, the micro-invasive glaucoma procedures and YAG Vitreolysis each significantly reduce the level of morbidity associated with the prior standard surgeries of Trabeculectomy and Vitrectomy. Similarly, both procedures share in common with Extended Depth of Focus IOLs, certain quality of life improvements. We will review these features and also focus upon the role of Co-Management with each of these procedures.

Course Title: **“Newest Advances in Ocular Surgery”**

Subtitle: “Extended depth of focus IOL's vs. Spherical Abberation Optimized Multifocal IOLs”

Speaker: Dr. Kerry Assil

License #G62647 Exp. 4/20/2018

License Type: Physician and Surgeon

Summary: The recent FDA approval of the Tecnis Symphony IOL has enabled a new category Premium IOL to be offered for patients seeking a reduction in spectacle dependency, following cataract surgery. These extended depth of focus lenses offer a lower add power than do the traditional multifocal IOLs. We will assess the contrasting physical and optical qualities of these alternative IOL types and map out a rationale for their selection. We will thus review patient selection, surgical protocol, ancillary testing and post operative care.

Presentation Material: “OD CE Event” Multifocal IOLs

Slides Attached, 89 pages

Course Title: **“Newest Advances in Ocular Surgery”**

Subtitle: “YAG Vitreolysis”

Speaker: Dr. Kerry Assil

License #G62647 Exp. 4/20/2018

License Type: Physician and Surgeon

Summary: Vitreous detachments, accompanied by floaters, have presented a dilemma over the years, as patients are informed they are benign, so long as there is no concomitant retinal tear. Yet, the vitreous condensation (floater) itself can serve as a source of visual handicap.

Vitreotomy used to serve as the most reliable means for removing a floater and the associated surgical risks were typically considered to outweigh the benefits. Recent advances in YAG Laser technology enable ab interno vaporization of the vitreous condensation, with a much great safety profile than with vitrectomy. We will review the procedure including treatment criteria and post operative monitoring.

Presentation Materials: "Laser Vitreolysis"

Slides Attached, 13 pages

Course Title: "**Newest Advances in Ocular Surgery**"

Subtitle: "Micro Invasive Glaucoma Surgery"

Speaker: Dr. Mona Bagga

License #A104390

License Type: Physician and Surgeon

Summary: See Attached 4 pages

Presentation Materials: "Cataract Surgery In Glaucoma Patients"

Slides Attached, 34 pages

Course Title: "**Newest Advances in Ocular Surgery**"

Subtitle: "Understanding Vitreoretinal Interface: Diagnosis and Management and the Relationship to Anterior Segment Procedures."

Speaker: Dr. Svetlana Pilyugina

License #A89078 Exp. 6/30/2018

License Type: Physician and Surgeon

Summary: This lecture will discuss the anatomy of vitreous and vitreoretinal interface and their role in the pathophysiology of various retinal conditions, such as vitreomacular traction, macular hole, epiretinal membrane, diabetic retinopathies, and vascular occlusions. The use of imaging modalities, such as OCT, in the understanding and therapy selection will be reviewed. Impact of vitreomacular interface abnormalities on visual acuity and their role in preoperative evaluation of patients undergoing cataract surgery and refractive procedures will be discussed. Advances in treatment modalities including pharmacologic vitreolysis and developments in microinvasive vitrectomy procedures will be reviewed.

Presentation Materials: "Diseases and Surgery of Retina, Macula & Vitreous"

Slides Attached, 51 pages

LECTURER'S CVs:

See Attached

CONTACT: Jessica Morales
310.409.9333/jmorales@assileye.com

Summary

“Micro Invasive Glaucoma Surgery” - Dr. Mona Bagga Management of Coexisting Cataract and Glaucoma

Impact of cataract surgery on Open Angle Glaucoma

The positive side effects of cataract surgery, such as intraocular pressure (IOP) reduction has been reviewed and reported extensively since many decades. In fact, cataract surgery has been described as the single best glaucoma surgery due to its IOP lowering effect. Data from OHTS study has reported an average of 16.5% IOP reduction after cataract surgery, maintained for at least 3 years with a trend of increasing IOP over time of 0.05 mm Hg/month. The higher the preoperative IOP, the greater was the reduction in postoperative IOP.

Conversely, patients with a low preoperative IOP may have higher IOPs after uncomplicated surgery. Poley et al demonstrated that, although approximately 55% of patients with a preoperative IOP between 15 and 17 mm Hg had a lower IOP after cataract surgery, 30% had a higher postoperative IOP, and the remainder experienced no change. In the group with preoperative IOP below 15 mm Hg, approximately 55% of patients had a higher IOP, and 35% had a lower IOP postoperatively.¹

Impact of cataract surgery on Angle Closure Glaucoma

Evidence strongly suggests that, in patients with narrow-angle glaucoma, the level of IOP lowering after cataract surgery is proportional to the resultant widening of the angle. Thus, patients with the narrowest angles preoperatively may benefit the most from cataract extraction as a single procedure, provided

that the angle has not become permanently closed by peripheral anterior synechiae. Gonioscopy remains indispensable for successfully identifying these patients. Anterior segment optical coherence tomography provides additional objective data about the angle's morphology as well as characteristics of the iris, the angle's opening, and the lens' vault, all of which can assist in predicting which glaucoma patients might benefit the most from cataract surgery.

A recently published randomized trial of phacoemulsification versus trabeculectomy in patients with medically uncontrolled, chronic angle-closure glaucoma demonstrated a significant reduction in IOP after phacoemulsification alone, but 73% of patients continued to require medications or underwent trabeculectomy 2 years after cataract surgery. The authors concluded that, although there was a significant benefit from phacoemulsification alone, trabeculectomy was more effective at controlling IOP, even though it was associated with more complications than phacoemulsification.²

Limitations of conventional Glaucoma surgeries such as Trabeculectomy and Glaucoma Drainage Valves.

Conventional Glaucoma surgeries such as Trabeculectomy and Glaucoma Drainage Valves, undoubtedly are an important and usually the only option in patients with severe or uncontrolled progressive glaucoma. However, they are associated with severe, sight threatening complications such as life time risk of endophthalmitis, bleb leaks, hypotony, bleb failure with uncontrolled IOP, diplopia, corneal decompensation. While they may be the only option in a small subset of glaucoma patients, over two thirds of glaucoma is mild to moderate, which does not

justify using the same high risk procedure in glaucoma patients with varying severity.

Pathophysiology of the outflow system in Glaucoma

Physiologic IOP is a delicate balance between IOP production and outflow. The outflow pathways are comprised of the traditional/conventional outflow which offers 70-95% resistance and uveoscleral outflow with 5-30% resistance. The conventional outflow is further comprised of the juxtacanalicular outflow with 50% resistance and areas distal to the Schlemms canal including collector channels which offer about 50% of the resistance to outflow.

Newer procedures that enhance the outflow system

Newer Glaucoma surgeries called MIGS (minimally invasive/micro invasive glaucoma surgeries) enhance the intrinsic outflow resistance instead of bypassing it as the conventional glaucoma surgeries. Most of these work synergistically with cataract surgery and enable moderate IOP reduction with excellent safety profile and rapid recovery.

Description and surgical technique of the newer, Minimally Invasive Glaucoma Surgeries (videos)

Patient selection and postoperative co-management of patients

Ideal patients for MIGS procedures are those with mild to moderate uncontrolled glaucoma and a visually significant cataract. Additionally, patients with controlled IOP but with poor compliance, inability to afford glaucoma medications, poor

ocular surface, intolerant to glaucoma medications, monocular patients are suitable candidates for the procedure.

References

1. Poley BJ, Lindstrom RL, Samuelson TW, Schulze R. Intraocular pressure reduction after phacoemulsification with intraocular lens implantation in glaucomatous and nonglaucomatous eyes: evaluation of a causal relationship between the natural lens and open-angle glaucoma. *J Cataract Refract Surg.* 2009;35(11):1946-1955.

2. Tham CC, Kwong YY, Baig N, et al. Phacoemulsification versus trabeculectomy in medically uncontrolled chronic angle-closure glaucoma without cataract. *Ophthalmology.* 2013;120(1):62-67.

Course Outlines for Newest Advances in Ocular Surgery:

Dr. Kerry Assil-

Extended depth of focus IOLs vs Spherical Abberation Optimized Multifocal IOLs

- FDA approval of Tecnis Symphony IOL
- Extended depth of focus lenses
- Physical and optical qualities of alternative IOL types
- Rationale for novel IOL selection
- Latest in surgical protocol and post operative care

Dr. Kerry Assil-

YAG Vitreolysis

- The nature of vitreous detachments
- Vitreous condensation and visual handicap
- Removal of vitreous floaters and associated risks
- Advances in YAG laser technology
- Vitreolysis treatment criteria and post operative monitoring

Dr. Mona Bagga-

Microinvasive Glaucoma Surgery

- Latest technologies for glaucoma surgery
- Pre operative factors affecting surgical outcomes
- Patient selection for glaucoma surgery
- Intraoperative factors for successful microsurgery
- Post operative care and management

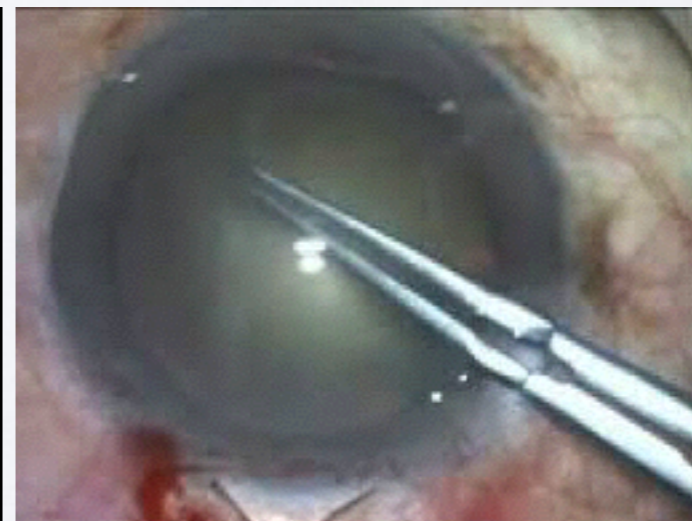
Dr. Svetlana Pilyugina-

Understanding Vitreoretinal Interface: Diagnosis and Management and
The Relationship to Anterior Segment Procedures

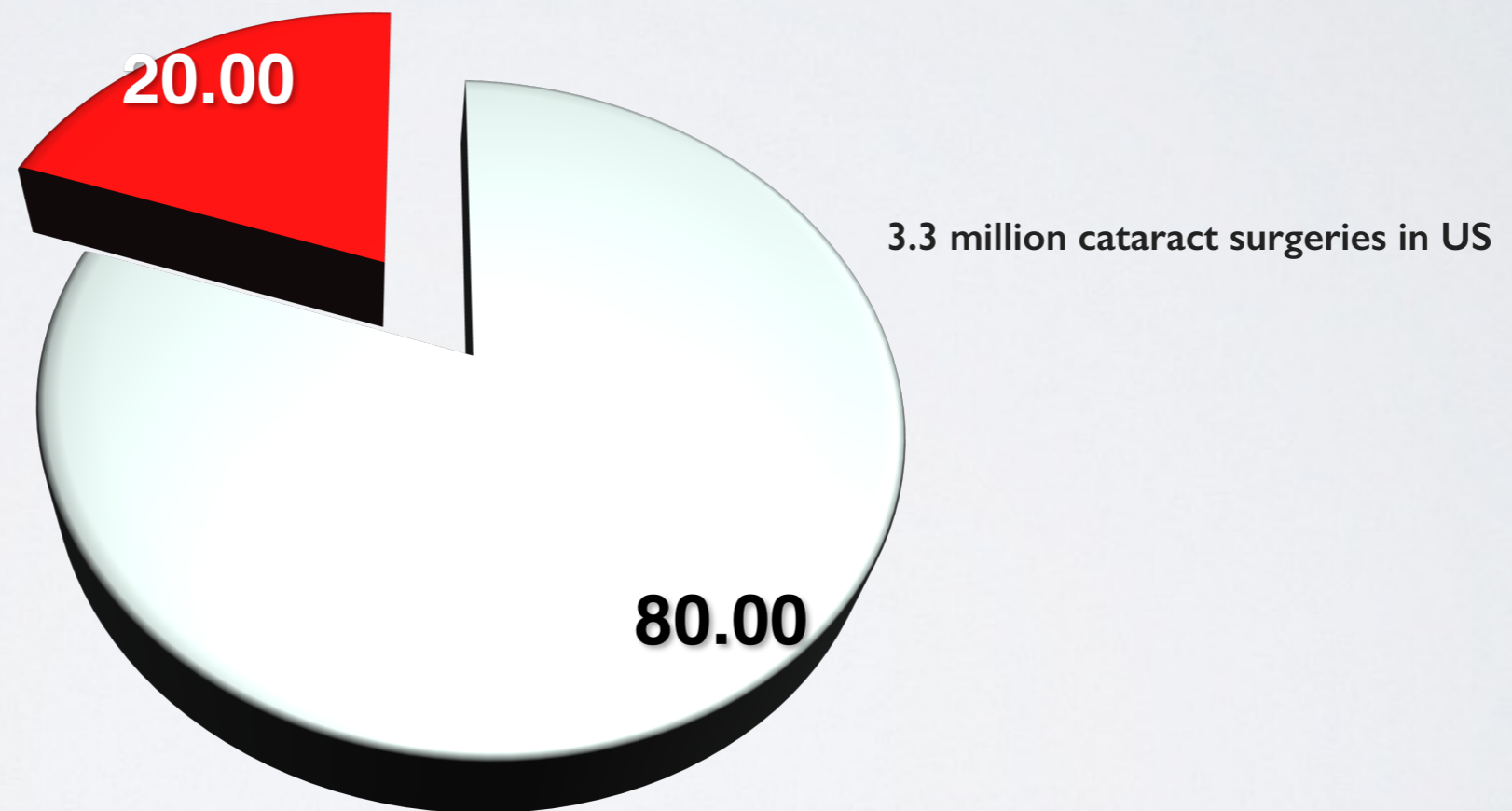
- Anatomy of the vitreoretinal interface
- Pathophysiology of various retinal conditions
- Vitreomacular interface abnormalities
- Imaging modalities of the vitreoretinal interface
- Advances in treatment modalities including pharmacologic and microinvasive surgical therapies

CATARACT SURGERY IN GLAUCOMA PATIENTS

Mona Bagga, MD
Feb 26, 2015



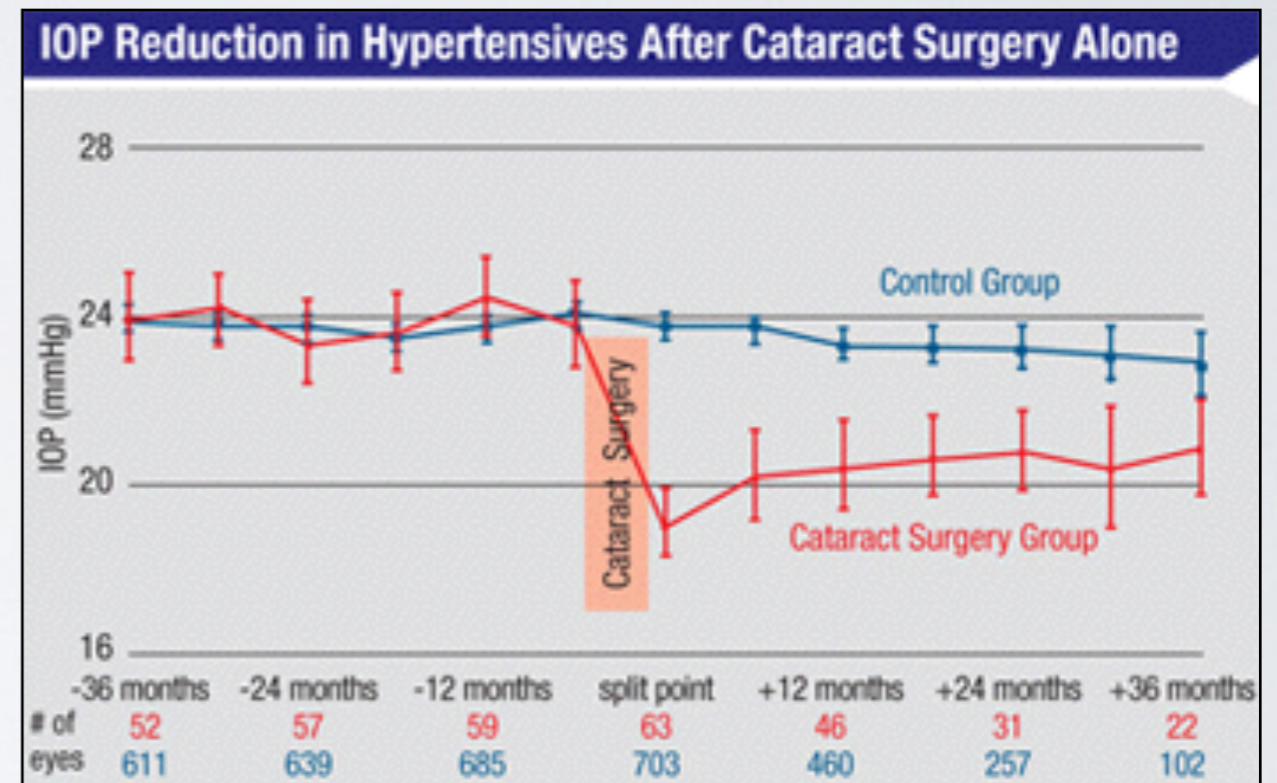
One in five Cataracts Eyes on OHT Medication



Centers for Medicare and Medicaid Services. 2002 – 2007. Medicare Standard Analytical File. Baltimore, MD. 2007

IMPACT OF CATARACT SURGERY ON IOP

1. UNTREATED OHT PATIENTS S/P CE
2. PRE-OP IOP STRONGEST PREDICTOR
3. IOP DROP NOT SUSTAINED IN THOSE ON TREATMENT
4. DROP IN IOP CORRELATES WITH # OF PRE-OP MEDS



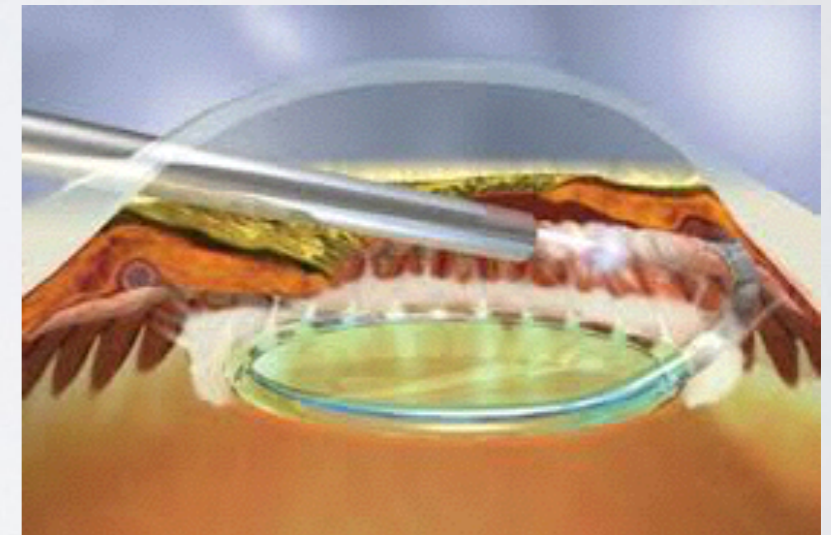
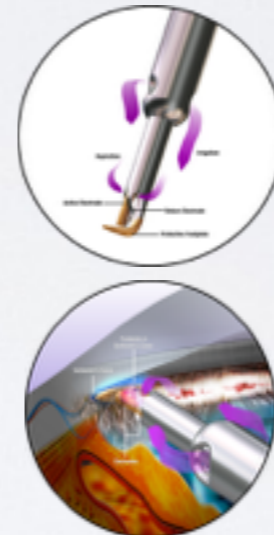
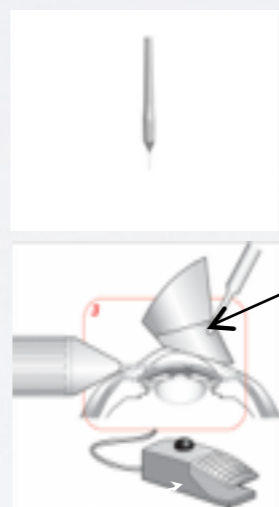
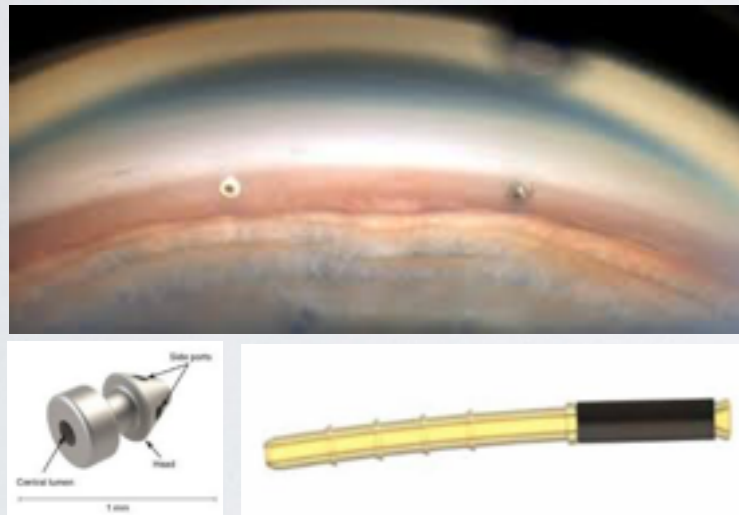
OHTS Study

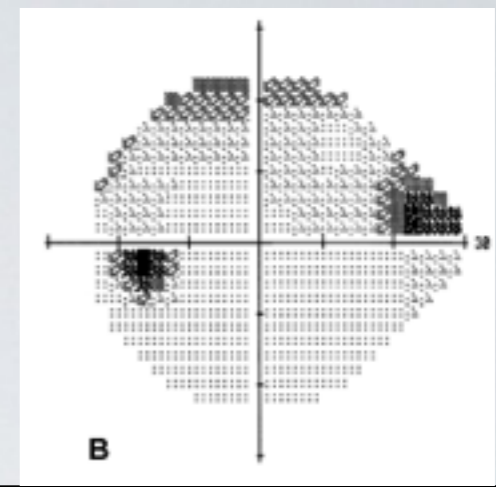
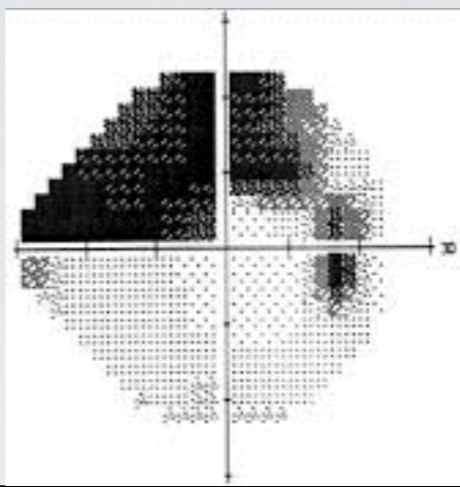
Mansberger SL, Gordon MO, Jampel H, Bhorade A, Brandt JD, Wilson B, Kass MA; Ocular Hypertension Treatment Study Group. Reduction in intraocular pressure after cataract extraction: The Ocular Hypertension Treatment Study. *Ophthalmology* 2012;119:9:1826-31.

COEXISTING CATARACT AND GLAUCOMA

- 1. CATARACT SURGERY**
- 2. CATARACT SURGERY + MIGS**
- 3. CATARACT SURGERY + TRABECULECTOMY/MMC**

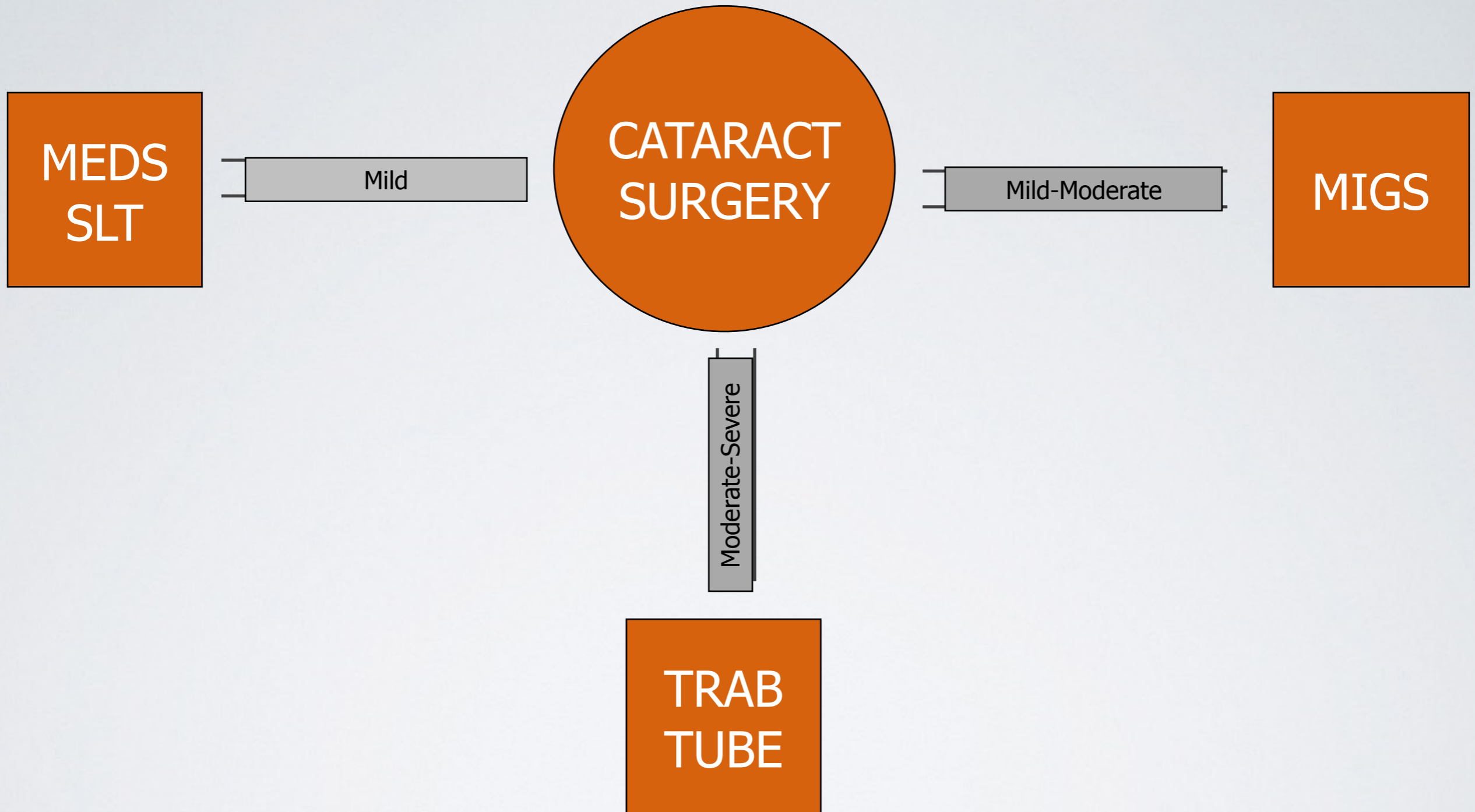
MIGS





	TRABECULECTOMY	MIGS
SAFETY	Sight threatening complications	Minimal risk
EFFICACY	High	Moderate
BLEB	Yes	Bleb Free
RECOVERY	Prolonged	Rapid
ADDITIONAL SURGERY	Possible but success compromised	No impact

Studies	Surgery	Follow up	Patients	% IOP reduction in study pts	% IOP reduction in controls	% meds reduction in study pts	% meds reduction in controls
Fea	Phaco + 1 iStent	n= 24	15	17.3	9.2	80	31.6
Fernández-Barrientos	Phaco + 2 iStents	n=14	12	27.3	16.5	100	41.7
Samuelson	Phaco + 1 iStent	n= 123	12	8.2	5.4	86.7	73.3
	Phaco + 1 iStent	n=123	24	8.1	4.3	80	66.7



PREOPERATIVE CHECKLIST

- 1. SEVERITY OF GLAUCOMA**
- 2. TYPE OF GLAUCOMA**
- 3. CONTROL OF IOP**
- 4. INTOLERANCE TO MEDS**
- 5. COMPLIANCE WITH MEDS**
- 6. PREVIOUS GLAUCOMA SURGERY**
- 7. PATIENT LIFESTYLE AND EXPECTATIONS**
- 8. ADDITIONAL COMORBIDITY - PXE, UVEITIS, RVO**

PREOPERATIVE DISCUSSION

- 1. IMPACT OF CATARACT SURGERY ON VISION**
- 2. ELIGIBILITY FOR PREMIUM IOL IMPLANTS**
- 3. COMBINED CATARACT AND GLAUCOMA PROCEDURE**
- 4. ADDITIONAL RISK FACTORS**
- 5. NEED FOR MORE FREQUENT FOLLOWUP**
- 6. POSTOP IOP SPIKES**
- 7. USE OF GLAUCOMA MEDS AFTER SURGERY**

MEDICATIONS BEFORE SURGERY

BEFORE SURGERY

- 1. PROSTAGLANDIN DROPS**
- 2. MIOTICS**

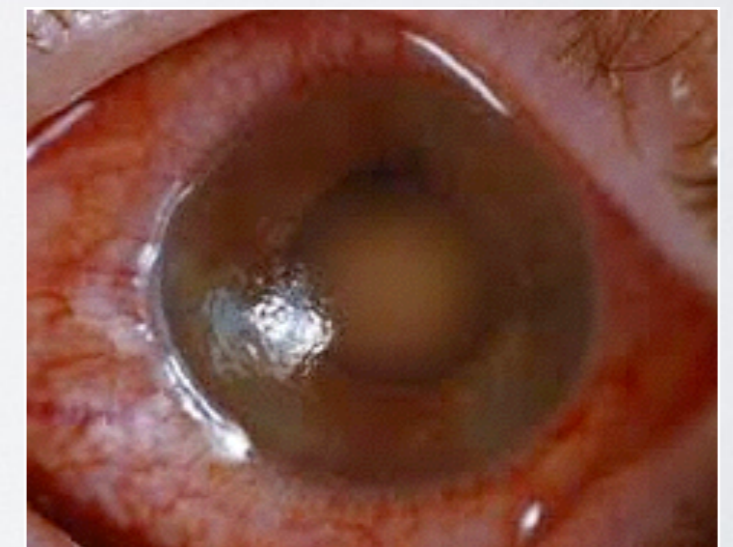
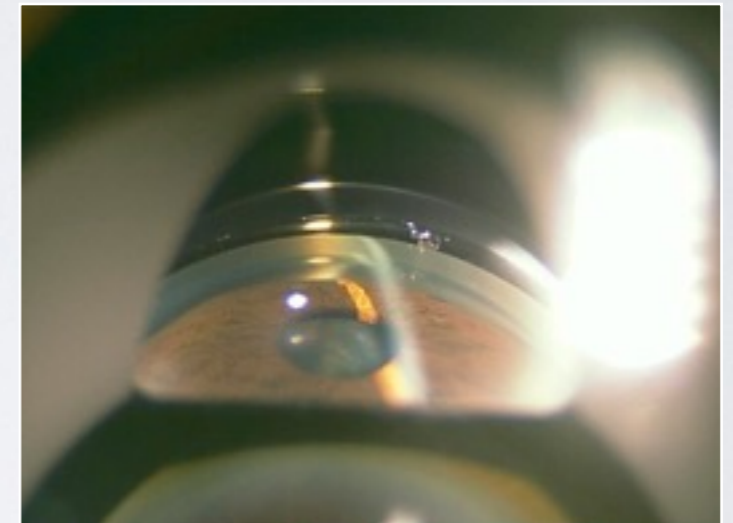
MEDICATIONS

POST SURGERY

- 1. COMPLIANCE WITH GLAUCOMA MEDS**
- 2. GLAUCOMA DRUG HOLIDAY**
- 3. STEROID RESPONSE**
- 4. NSAIDS**

CASE I

- **53 yr hispanic male**
- **Pressure, redness, fluctuating vision OS x several weeks**
- **Va CC 20/30, 20/400**
- **Ta: 18, 39 mm Hg**
- **POH: LPI OS 1 year ago**
- **Meds: Combigan gtts bid OS**



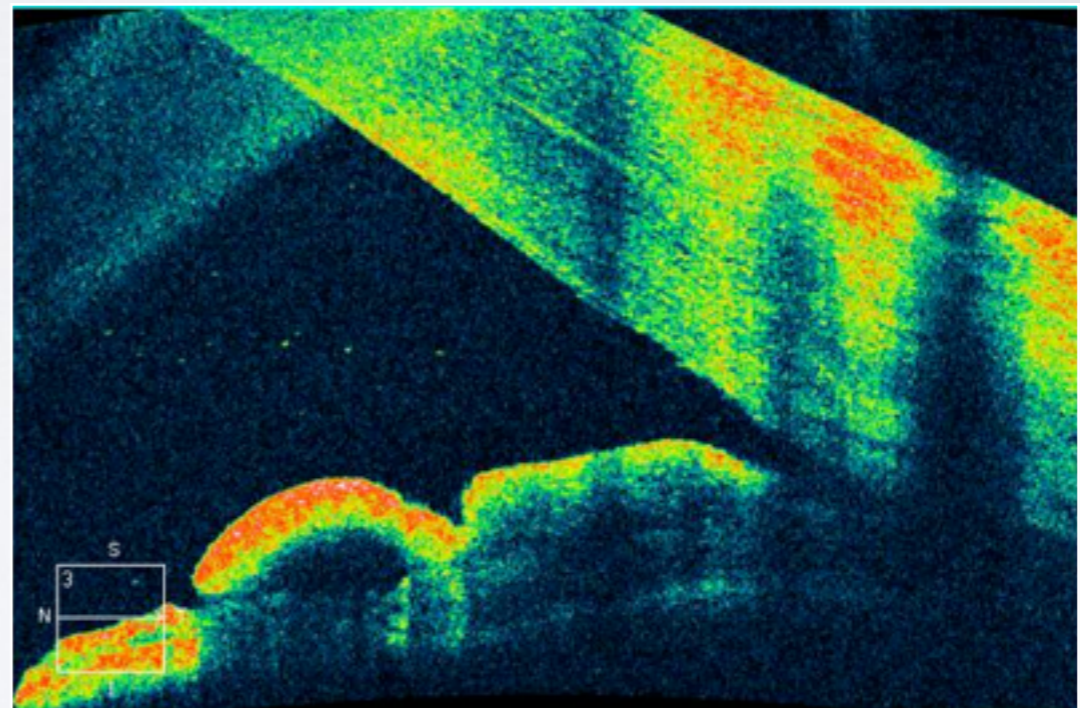
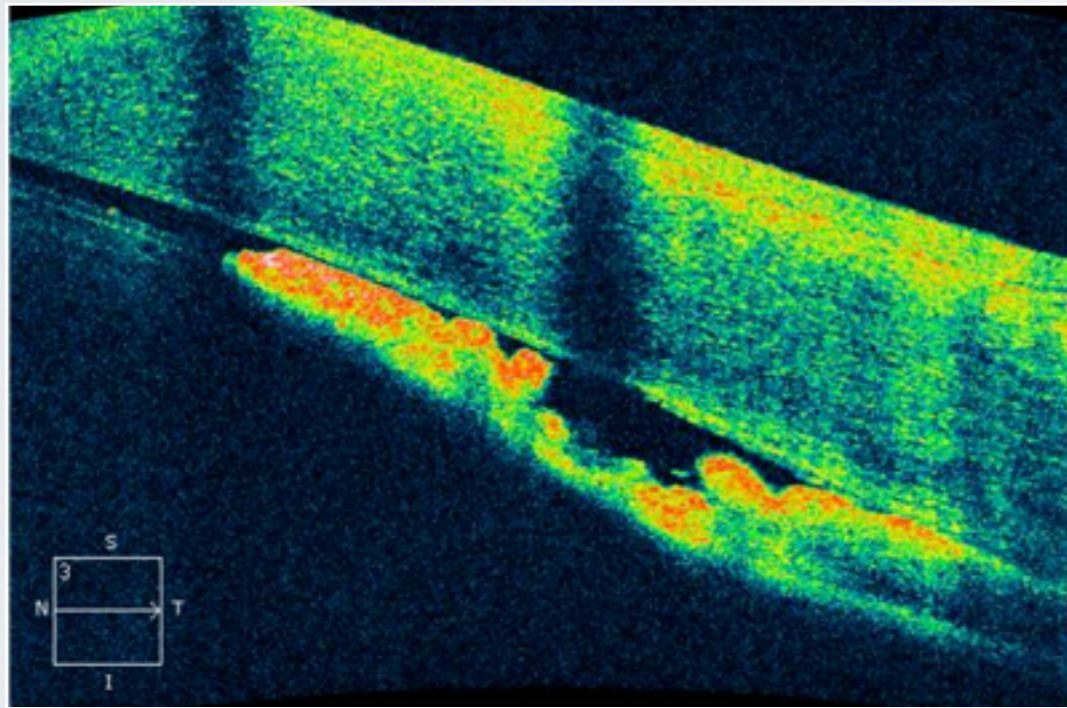
MEDICATIONS

- **Start Lumigan, Azopt, continue combigan gtts. Oral Diamox 500 mg stat. IOP after 40 min -31 mm Hg.**
- **CE/IOL with Goniosynechiolysis OS for next day**



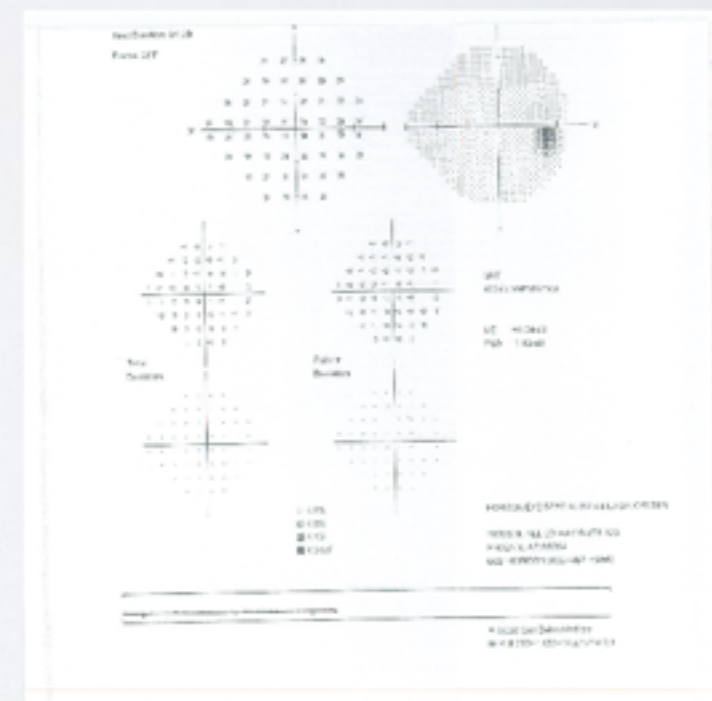
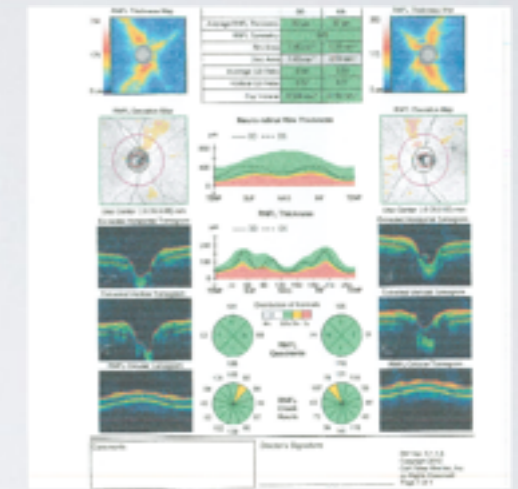
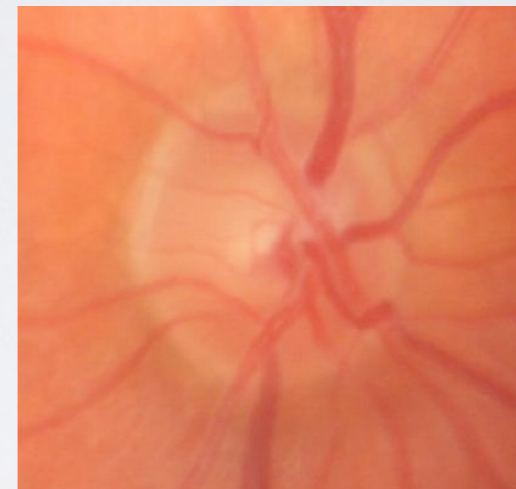
**Underwent ICCE with Anterior Vitrectomy with
Goniosynechiolysis OS**

-
-
- **Va OS: 20/80 (with +10 lens)**
 - **Ta OS: 8 mm Hg**
 - **Scheduled for pupilloplasty and scleral fixation of IOL OS in 3 -4 weeks**



CASE 2

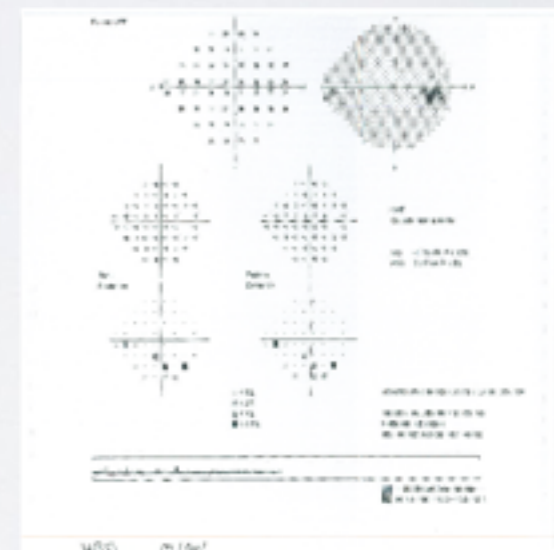
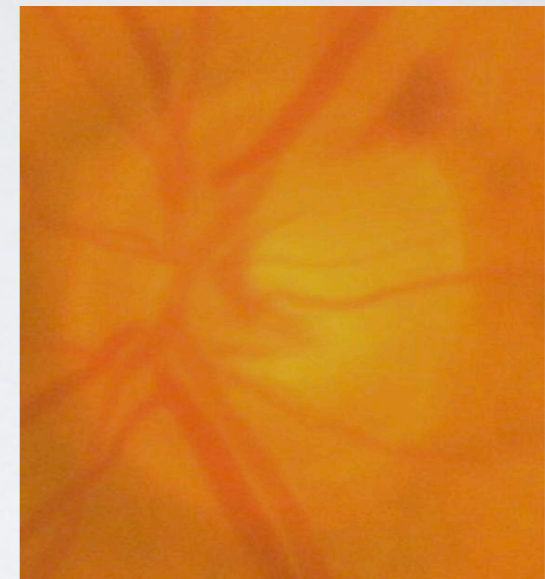
- 69 yr old F
- Va cc: 20/50; 20/40-2
- Tappl: 28; 26 on Lumigan
- CCT: 521;535 microns



-
-
- **S/p CE/IOL(TM Multi) with iStent OU**
 - **Va sc OU:20/20, J1+**
 - **Tappl: 16 mm Hg, no gtts**

CASE 3

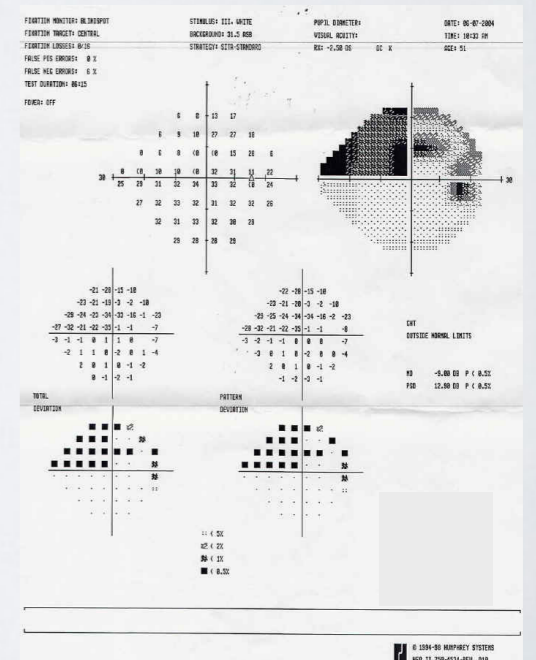
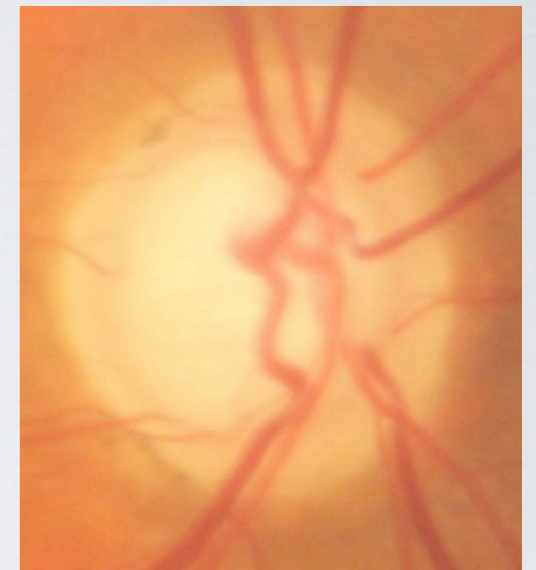
- **79 yr old F**
- **Va cc OD: 20/80-2, OS:20/60**
- **Tappl: 32, 28 mm Hg**
- **No gtts**
- **CCT: 575, 574 microns**
- **Slit Lamp: PXF OU**



-
-
- **S/p CE/IOL with iStent OU**
 - **Va: 20/20-2, 20/20**
 - **Tappl: 18,16 mm Hg at last followup**

CASE 4

- **84 Male with Advanced POAG**
- **Lumigan, Combigan gtts OU**
- **Caregiver for wife**
- **Va cc 20/70, 20/400 (eccentric fixation)**
- **Tappl 20-23 mm Hg OU**
- **CCT: 536, 538 microns**



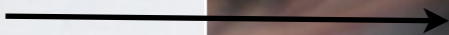
-
-
- **CE/IOL with iStent OD**
 - **Va cc OD: 20/30+2**
 - **Ta: 11 (timolol qam)**

CASE 5

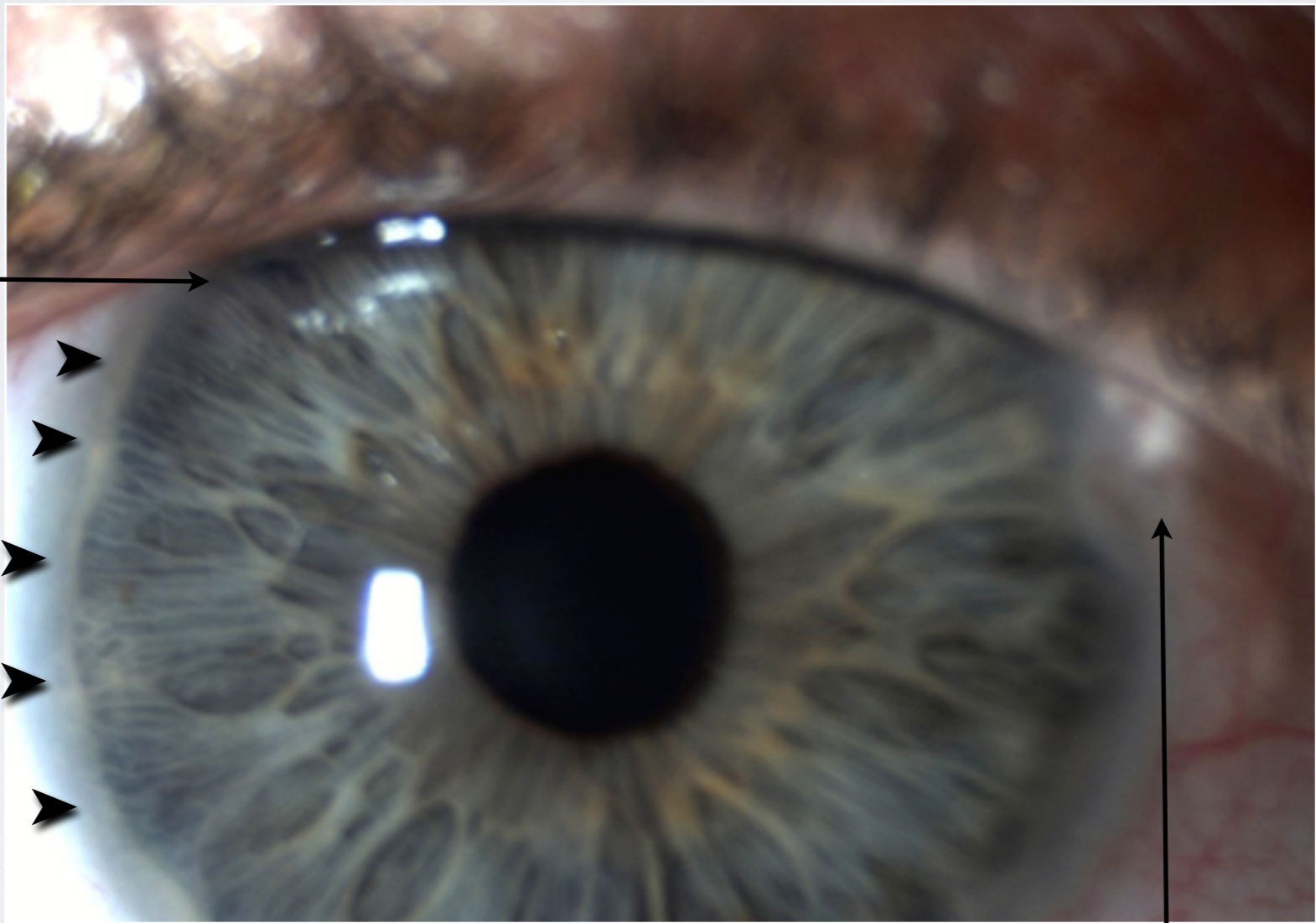
- **34 yr Firefighter referred for high IOP. C/o of episodes of blurring of vision OD and headache off and on x1 month**
- **POH: Shot with metal dart OD 6 years ago**
- **PMH: Healthy**
- **Meds: None**
- **BCVA: Plano +0.25 x 65 20/10**
-0.75 +0.75 x 170 20/10

	OD	OS
Lids	normal	normal
Conj	normal	normal
Cornea	<i>scar nasally at the limbus, iris adherant</i>	clear
AC	<i>360 degrees PAS</i>	<i>normal</i>
Iris	<i>TIDs, LPI</i>	normal
Lens	<i>cortical changes</i>	<i>normal</i>
Fundus	normal	normal

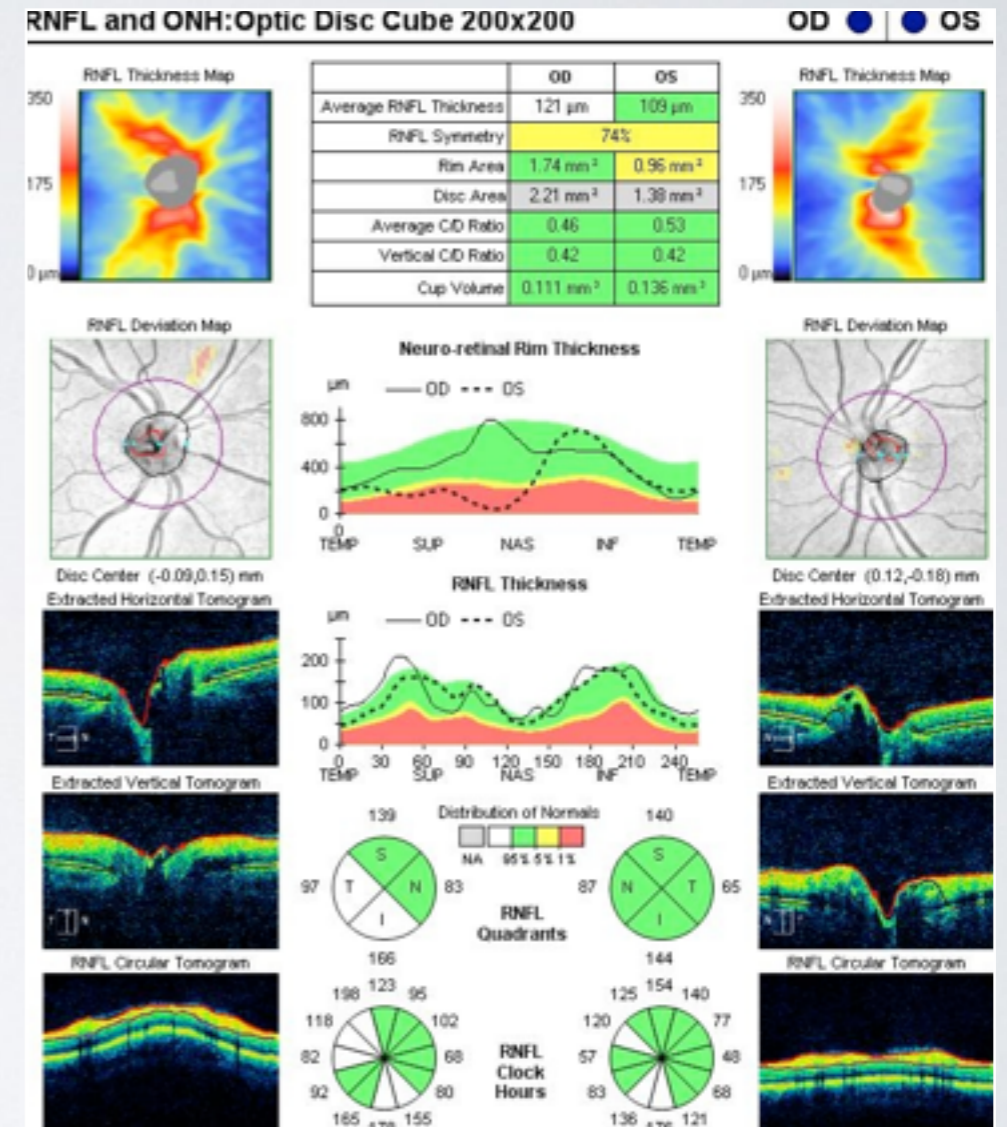
LPI

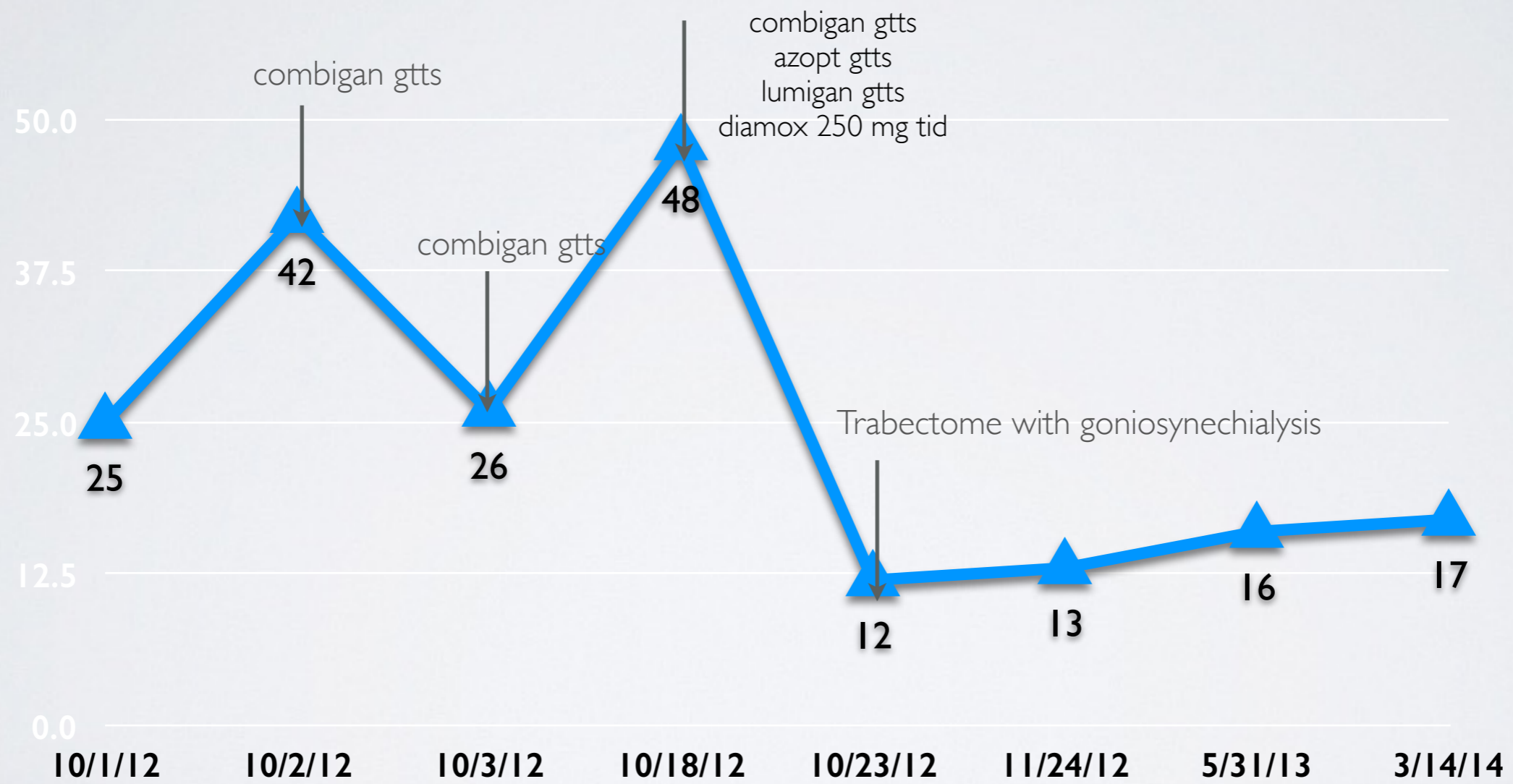


PAS



K scar





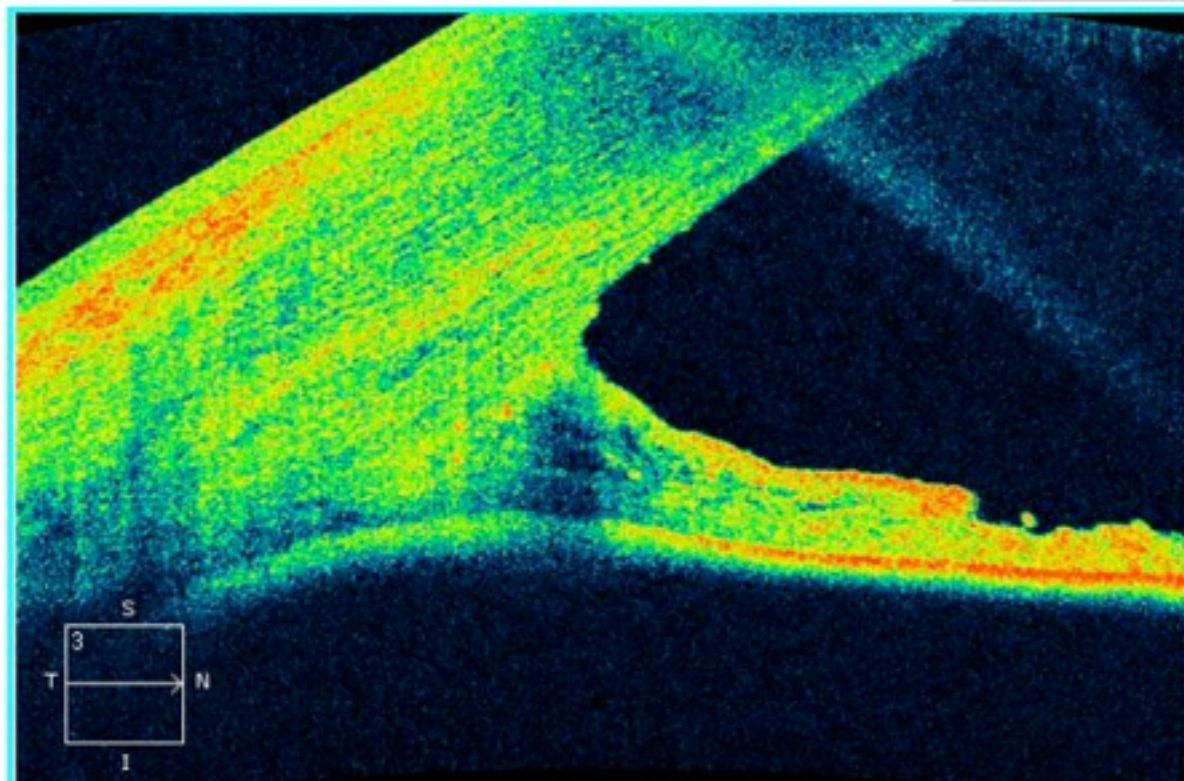
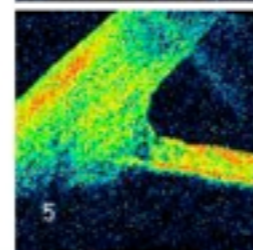
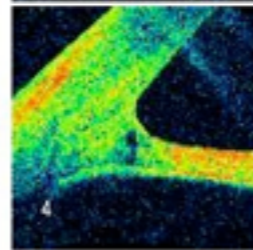
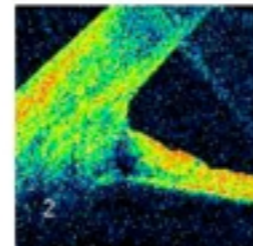
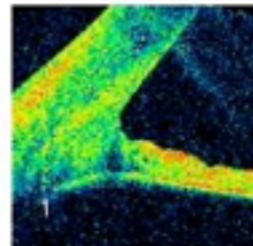
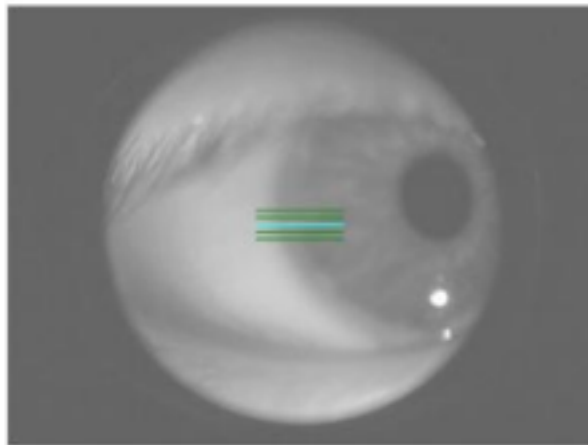
High Definition Images: Anterior Segment 5 Line Raster

OD ● | ○ OS

Scan Angle: 0°

Spacing: 0.25 mm

Length: 3 mm



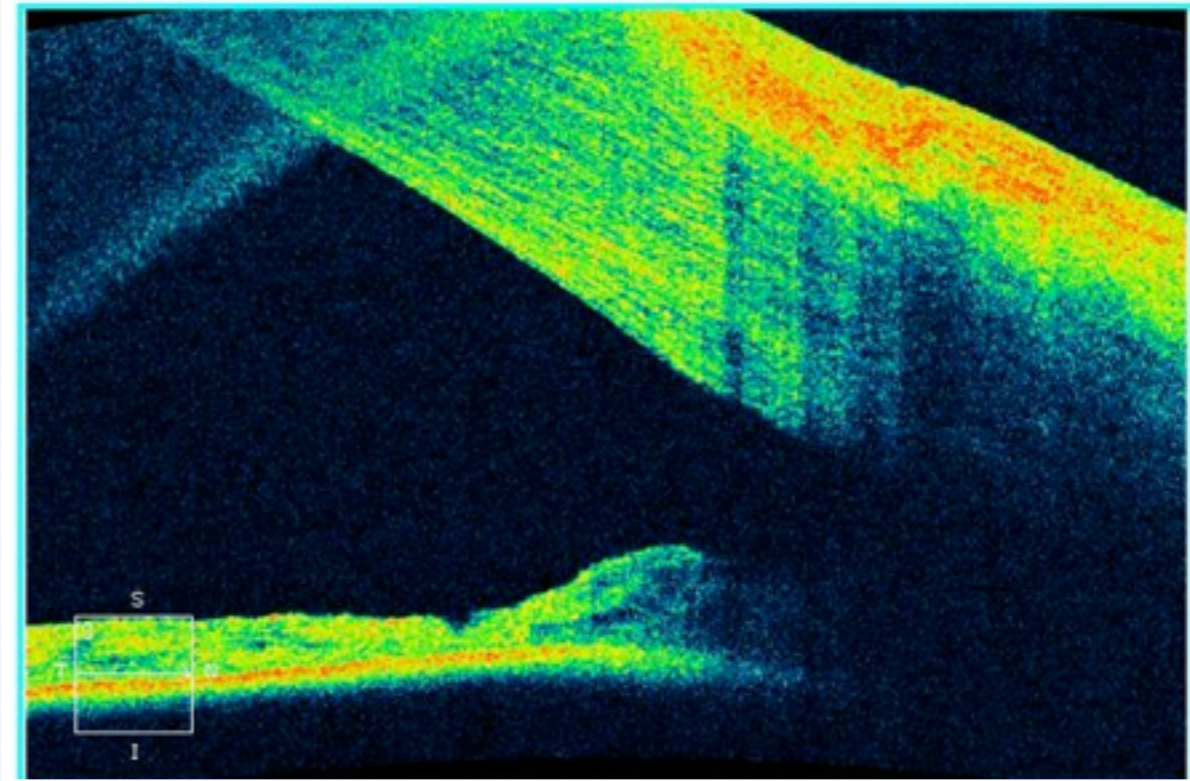
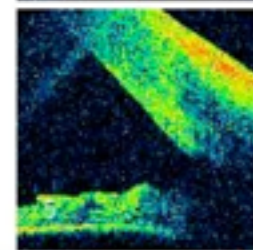
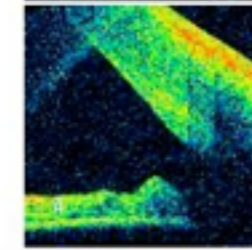
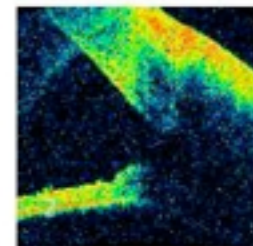
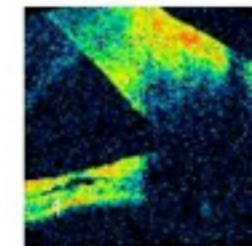
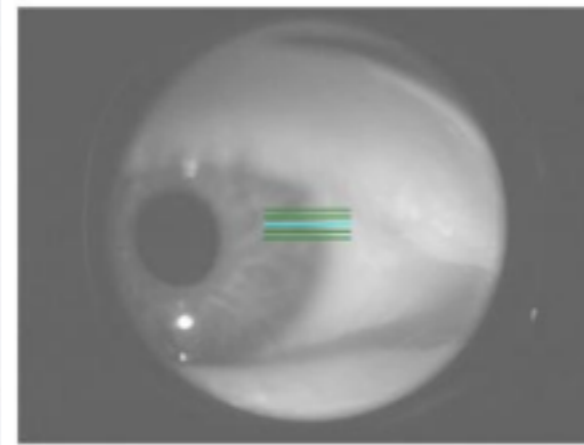
High Definition Images: Anterior Segment 5 Line Raster

OD ● | ○ OS

Scan Angle: 0°

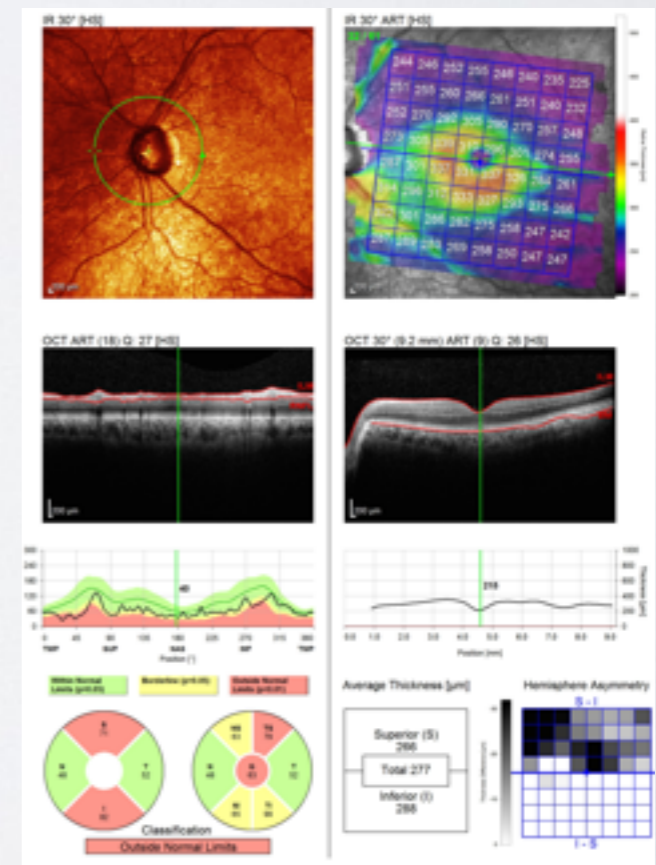
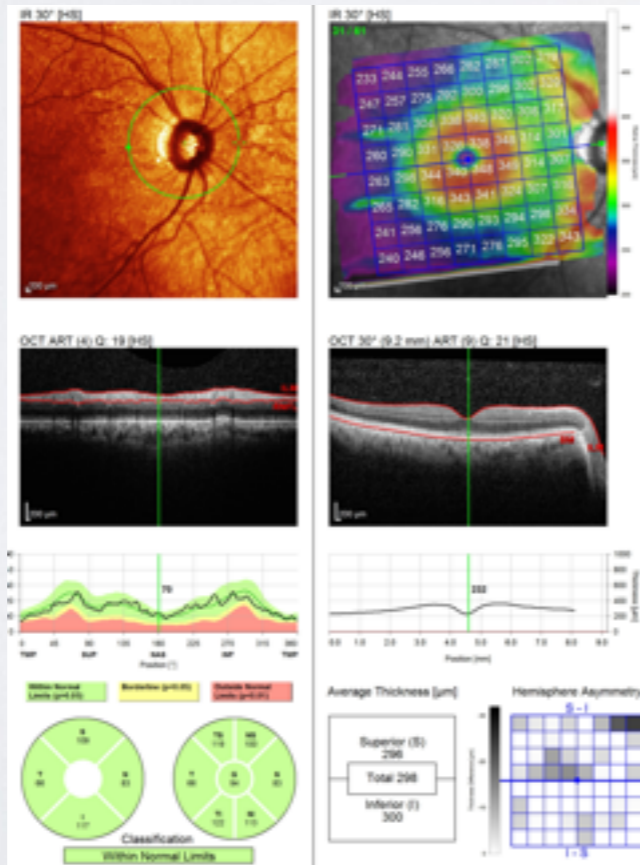
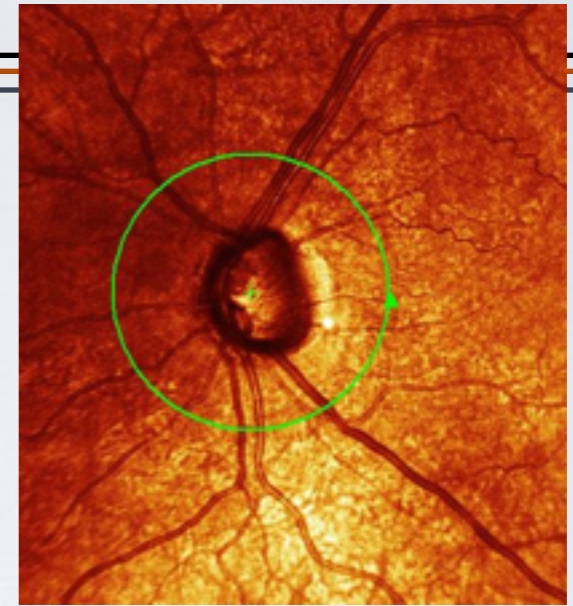
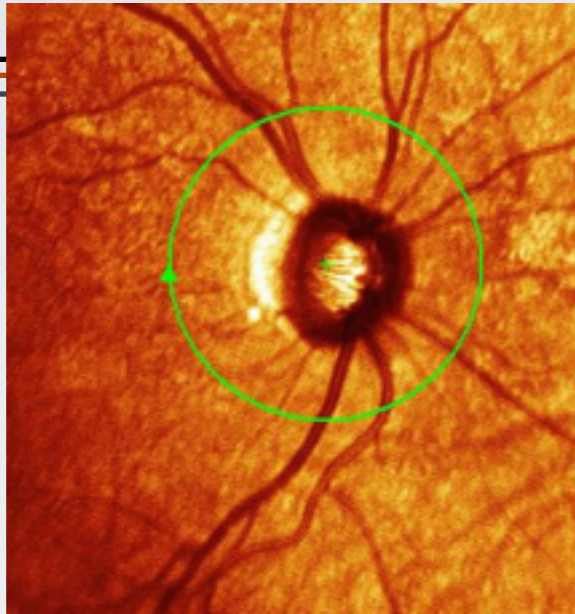
Spacing: 0.25 mm

Length: 3 mm



CASE 6

- **65 M**
- **VA CC 20/40, 20/30**
- **TA: 19, 24 MM HG**
- **NO DROPS**



-
-
- **UNDERWENT CE/IOL WITH ISTENT OD 4/22/15**
 - **VA SC 20/20-1**
 - **TA: 14, 20 MM HG (OS ON LATANOPROST)**

GENERAL CONSIDERATIONS POST SURGERY

- 1. REESTABLISH PERIMETRIC AND STRUCTURAL BASELINES**
- 2. MONITOR BLEB FOR SIGNS OF FAILURE**
- 3. AVOID CONTACT LENSES WITH BLEB**
- 4. PATIENT EDUCATION**

POST OP MANAGEMENT

- 1. AEI at 1 day and 2 week (gonio, DFE)**
- 2. Drop dosing schedule (enclosed)**
- 3. Glaucoma drops to continue**
- 4. Steroid induced response common**
- 5. Expect IOP fluctuations**

HARMOHINA “Mona” BAGGA
Curriculum Vitae
Updated: June 24, 2014

CONTACT INFORMATION

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2. Bagga H, Sekhar GC. Chapter on "Primary Angle Closure Glaucoma and Optic Disc Assessment. In: Clinical Practice in Ophthalmology, Jaypee Medical Publishers.

SCIENTIFIC PREENTATIONS

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HONORS AND AWARDS

1985 Academic Merit List□

1986 Academic Merit List□

2001 Best Paper in All India Ophthalmology Society
2001 Best Fellow Award in LV Prasad, 2000 - 2001
2006 Certificate for Academic Excellence and award of \$500 by Northwestern University
2008 Certificate for Academic Excellence and award of \$500 by Northwestern University
2005 Achieved overall Ophthalmic Knowledge Assessment Program (OKAP) scores of 98th percentile
2006 Achieved overall Ophthalmic Knowledge Assessment Program (OKAP) scores of 96th percentile
2007 Achieved overall Ophthalmic Knowledge Assessment Program (OKAP) scores of 97th percentile
2007 HEED Ophthalmic Foundation Resident and Faculty Retreat Awardee.

SCIENTIFIC JOURNAL REVIEWS

American Journal of Ophthalmology
Archives of Ophthalmology
Investigative Ophthalmology and Visual Science Ophthalmology
Journal of Glaucoma Indian Journal of Ophthalmology