MIGS Success Secrets

Glaucoma Expert Reveals All

DR. CONSTANCE OKEKE

MIGS Success Secrets in Your Hands

Dr. Constance Okeke's vision is to prevent blindness through education, innovation and inspiration.

If you are a doctor who treats patients for glaucoma, you already know that we are in very exciting times! Over the last decade there has been an explosion of micro-incision glaucoma surgery (MIGS) options that have allowed us more tools to treat our glaucoma patients effectively.

Where do I fall in with this rapid evolution?

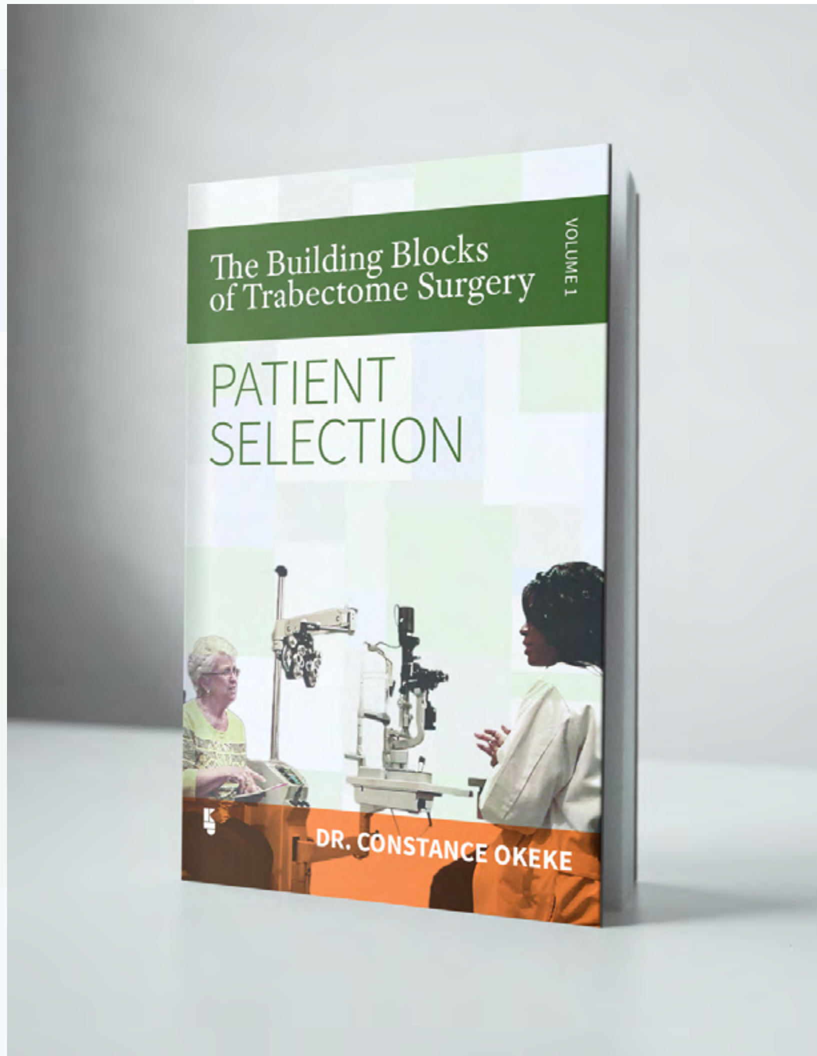
- You may be a comprehensive ophthalmologist who has begun to venture into MIGS with a few monthly cases,
- You may be a glaucoma specialist who has used a number or all of the available MIGS procedures,
- You may be an optometrist who wants to know more about the MIGS options that are available for intraocular pressure lowering in your glaucoma patients with or without cataracts,
- You may be a surgeon-in-training who is trying to get some MIGS training under your belt before you venture out on your own, or
- You have not started yet with any MIGS because you have been somewhat hesitant to the thought of adopting something new.

Regardless of what stage you are in, in the next pages I am going to share with you my MIGS Success Secrets that can help you on your journey of blindness prevention for your patients while staying on the cutting edge. Let's dive in!

What's Inside This Booklet

1. Reveal of the Book Containing *MIGS Success Secrets*
2. Words from a MIGS pioneer
3. Dr. Steve Vold's comments on *MIGS Success Secrets* Book
4. *MIGS Success Secrets* Book Table of Contents
5. Sampler of *MIGS Success Secrets*
6. Words from a MIGS patient
7. Other MIGS Secrets Loaded in Book
8. What Other Doctors Are Saying
9. Helpful MIGS Features for Surgeons-in-Training
10. How to Get MORE *MIGS Success Secrets*

The MIGS Success Secrets Book



"***Dr. Okeke has written an extremely useful book, not only for surgeons using the Trabectome, but for all MIGS surgeons.*** *Her writing is approachable, honest, and thorough. This book will be a valuable tool for years to come because it deals with issues of patient selection, gonioscopy, patient consent, reimbursement, and a comprehensive list of other topics that are applicable to all ab interno angle surgery. It's practical instruction is useful for both the beginning and experienced MIGS surgeon. I highly recommend it."*

Steven R. Sarkisian, Jr., MD

Clinical Professor, Glaucoma Fellowship Director Dean McGee Eye Institute, University of Oklahoma

*"****This book is a 'Must Read' for both optometrists and ophthalmologists when it comes to understanding MIGS!*** *Dr. Okeke breaks it down into key learning pearls and easy to follow 'Action Items' which is the most important part…taking the next step. As optometrists, we need to have an understanding of these key procedures, like the Trabectome, to help improve the quality of life for our glaucoma patients. Dr. Okeke makes it easy. This book will help to improve the care and services we can offer to our mutual patients. Thanks Dr. Okeke!"*

Walter O. Whitley, OD, MBA, FAAO

Director of Optometric Services, Virginia Eye Consultants

Words From a MIGS Pioneer

Constance Okeke, MD, MSCE is assistant professor of ophthalmology at Eastern Virginia Medical School and leads the glaucoma team at Virginia Eye Consultants. She is an Ivy League trained, board certified glaucoma specialist with experience in over 1000 Trabectome surgical cases. Dr. Okeke shares her experience of over seven years pioneering micro-incision glaucoma surgery, or MIGS, through this book, research, authorship in prominent ophthalmology and optometry publications, surgical training videos, live hands on training, speaking and personal coaching. She resides in Hampton Roads, Virginia, with her husband and three children. For more information on Dr. Okeke, go to **www.DrConstanceOkeke.com**.

"As the MIGS era unfolds, one question comes to the fore-front: ***Which patient will benefit most from the available technologies?*** I myself have been challenged with that question and have been asked it frequently. As I performed research specifically looking for characteristics for success with Trabectome (see publication at: **http://bit.ly/2rNi5TV**) and gained experience in the clinical setting over 8+ years with various MIGS techniques, I developed answers. These answers became the inspiration for this book.

My goal in creating ***The Building Blocks of Trabectome Surgery: Patient Selection***, is to reveal an interesting, practical, informative, action-oriented and personal approach to choosing good candidates for MIGS and knowing how to avoid poor candidates. I designed this book to be a welcome companion to many glaucoma specialists, anterior segment surgeons, optometrists, and eye care doctors-in-training involved with treating glaucoma and desiring to have less invasive surgical options, but who are uncertain about which approach to take. Though the focus of the book is on Trabectome, any MIGS doctor can find value in the detailed secrets revealed in this book."

Dr. Steve Vold's Comments on Dr. Okeke's MIGS Success Secrets Book

Steve Vold, MD
MIGS Pioneer; Chief Medical Editor of Glaucoma Today; Founder of Vold Vision in Fayetteville, Arkansas

"As we enter what I believe to be a new era in the management of glaucoma, my dear friend and colleague Dr. Constance Okeke brings the ophthalmic community a timely, thoughtful and extremely practical resource in assisting our transition to intervening earlier in the glaucomatous disease process. In the recent past, glaucoma was managed primarily as a medical disease with incisional glaucoma surgery generally being considered a treatment option of last resort. Dr. Okeke does a masterful job of preparing ophthalmologists to think differently about our glaucoma patients.

If we truly value the quality of life of our patients, intervening with micro-incision glaucoma surgeries such as the Trabectome should be considered long before patients are on the verge of legal blindness. Clearly medical compliance for our patients is a major problem. Although helpful, glaucoma medications are clearly toxic to the aqueous outflow system and introduce numerous adverse effects such as periorbital pigmentation and fat atrophy, allergic conjunctivitis, ocular surface disease, cataract and cystoid macular edema not to mention systemic side effects including fatigue, depression, erectile dysfunction and systemic hypotension to name a few. Patient forgetfulness and medication cost must be included in any discussion of patient medical adherence challenges as well."

Dr. Steve Vold's Comments on Dr. Okeke's MIGS Success Secrets Book

Dr. Okeke signs her book for **Dr. Vold** at the American Glaucoma Society annual meeting where the book was launched.

"In addition to their glaucomatous disease, many glaucoma patients suffer from significant visual disability due to concomitant cataract. By not offering procedures such as the Trabectome at the time of cataract surgery, surgeons are almost certainly offering inferior care to their patients. Dr. Okeke's extensive experience with the Trabectome and giftedness as an educator allows her to bless us with an incredibly detailed and successful approach to truly enhancing the lives of our glaucoma patients in this situation. Why should glaucoma patients be relegated to a life of feeling they are living in the prison without walls of taking chronic glaucoma medication while suffering with vision that does not allow them to carry out their activity desires when technologies like the Trabectome have been available to cataract surgeons for over 10 years with a superb insurance reimbursement profile?

I want to personally express my gratitude to Dr. Okeke on the completion of this immense labor of love. While we live in an age when the amount of medical information currently available to us is almost over-whelming and not necessarily worthwhile, this book is eminently worth your time to read from cover to cover. This resource is easily readable, comprehensive and offers information up in a very practical fashion. Her use of patient case examples and pearls learned from less than ideal patient outcomes allow us to optimize our Trabectome outcomes with-out using the trial and error method of learning. Her utilization of a MIGS calculator in patient surgical decision-making is particularly instructive. Thanks to physicians like Dr. Okeke, the day of refractive glaucoma surgery has finally arrived!" **Steven Vold, M.D.**

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Sampler of MIGS Success Secrets

- Real Clinical Case: Good Candidate
- Personal Notes
- Pearls
- Common Errors and Good Practice
- Warnings
- Your Angle to Success – Take Action

Real Clinical Case: Good Candidate

6

Real Clinical Cases: Good Candidates

6.1. Case 1 – Pseudoexfoliative Glaucoma and Visually Significant Cataract
6.2. Case 2 – Mixed Mechanism Glaucoma and Visually Significant Cataract
6.3. Case 3 – UGH Syndrome with Pigmentary Component
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6.6. Case Presentations of Good Potential Candidates for Trabectome
6.7. Your Angle to Success – Take Action!

In this chapter, you will find clinical cases from my practice that are presented to you in a way that will allow you to go through the process of evaluating a patient, weighing the options of a surgical plan, step-by-step decision making thoughts, the real outcomes and discussion pearls to take home. While there are a number of possible options of good candidates, I limited the number to five. Following those detailed cases is a list of additional possibilities of brief cases that you can review. These suggestions can help you find patients in your practice that could be good candidates for Trabectome.

6.4 Case 4. Early and Advanced Chronic Angle-Closure Glaucoma, Visually Significant Cataracts

6.4.1 Pre-surgical Patient Description and History

A 83-year-old male presents for a glaucoma evaluation of narrow angles from a referring optometrist. He had initially been seen for complaints of blurred vision in the left eye that had been progressive for the last nine months. He was found on exam to have IOPs of 21 OD, 24 OS, bilateral cataracts of 3+ NS, a very narrow angle OD and an occludable angle OS. Lumigan was initiated OU and a successful Yag PI was performed OS.

The patient on follow-up of the YAG PI had complaints of decreased vision in both eyes. He could no longer see his golf ball very well and he was having difficulty driving and seeing street signs until very close to them. He also complained of glare at night with oncoming traffic and

Real Clinical Case: Good Candidate

needing more light to read. When he did read, he also noticed that his vision fluctuated and constantly teared. He was actively using Lumigan qhs OU.

6.4.2 Exam Findings

His exam findings are presented in Table 10. On gonioscopy he revealed OD superiorly to top of TM, nasally to top of TM, temporally no structures seen, and inferiorly to top of TM. With indentation, TM was visible with no PAS notable and 1-2+ pigment. In the initial view upon presentation OS gonioscopy he had no structures seen in any quadrant and with indentation the top of TM was visible. PAS formation was questionable and there was 1-2 pigment. After YAG PI, gonioscopy OS showed visibility to TM in all quadrants except inferior which was to TM/SS. His optic nerve exam revealed a CDR of 0.6 OD 0.85 OS with inferior thinning near to the disc rim OS. His initial visual fields and OCT G are seen below (Figs. 10,11). A target was set for the mid-teens OD and the lower teens OS.

Table 10. Clinical exam findings for Case 4.

	OD	OS
DVa cc	20/20	20/25
BCVA	20/20	20/25
BAT	20/400	20/400
IOP applanation	20	17
Tmax	21	24
CCT	512	512
HVF stage*	1	3
Gonioscopy	top of TM superiorly/ nasally/inferiorly, closed temporally; on indentation open to TM in all quadrants, 1-2+ pigment, no PAS	closed in all quadrants; on indentation top of TM in all quadrants, 1-2+ pigment with questionable PAS; after PI open to at least TM in all quadrants
Slit Lamp Exam	mild MGD, inferior 1+ SPK, quiet and mildly shallow AC, 3+ NS	mild MGD, inferior 1+ SPK, quiet and mildly shallow AC, patent PI, 3+ NS
C/D Ratio	0.6	0.85

DVa sc – Distance visual acuity with eyeglasses; BCVA – Best Corrected Visual Acuity; BAT – Brightness Acuity Testing; Tmax – Highest IOP recorded; CCT – Central Corneal Thickness (mm)
*ICD -10 grading

Real Clinical Case: Good Candidate

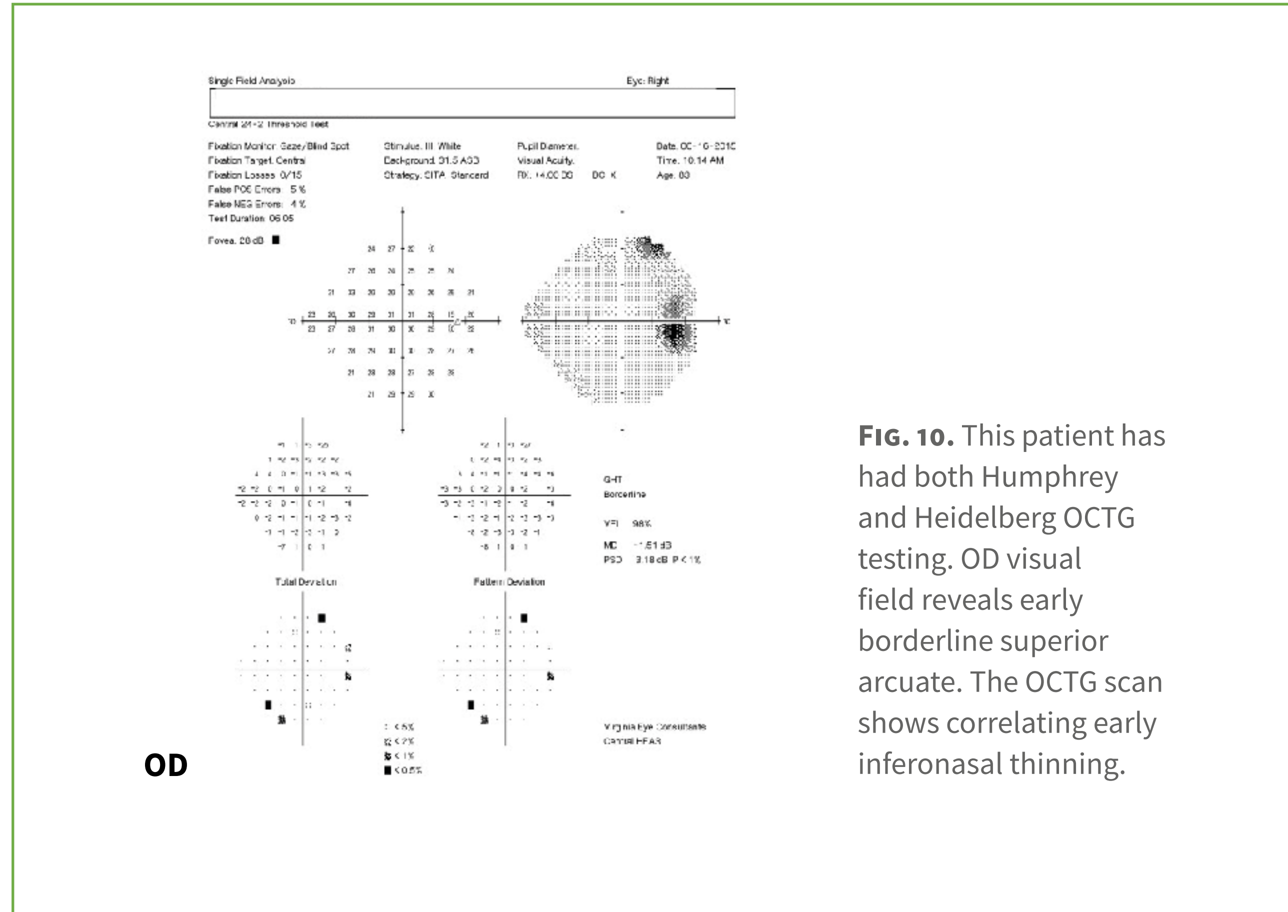
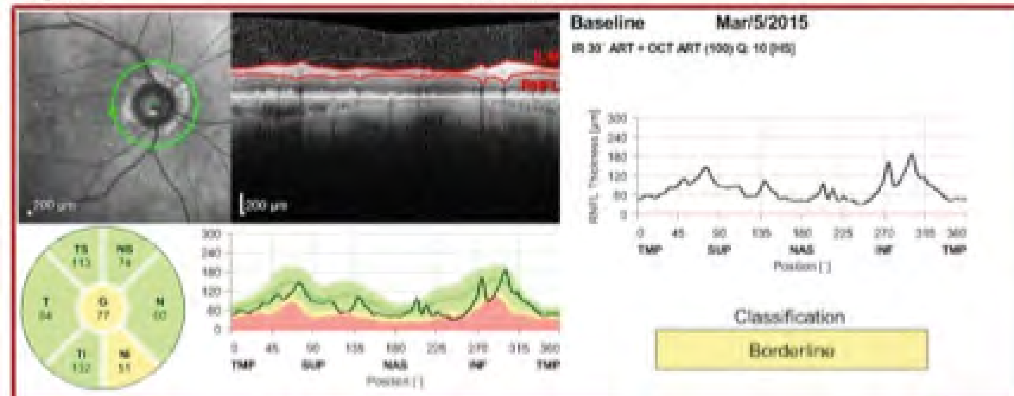


Fig. 10. This patient has had both Humphrey and Heidelberg OCTG testing. OD visual field reveals early borderline superior arcuate. The OCTG scan shows correlating early inferonasal thinning.

Real Clinical Case: Good Candidate



Real Clinical Case: Good Candidate

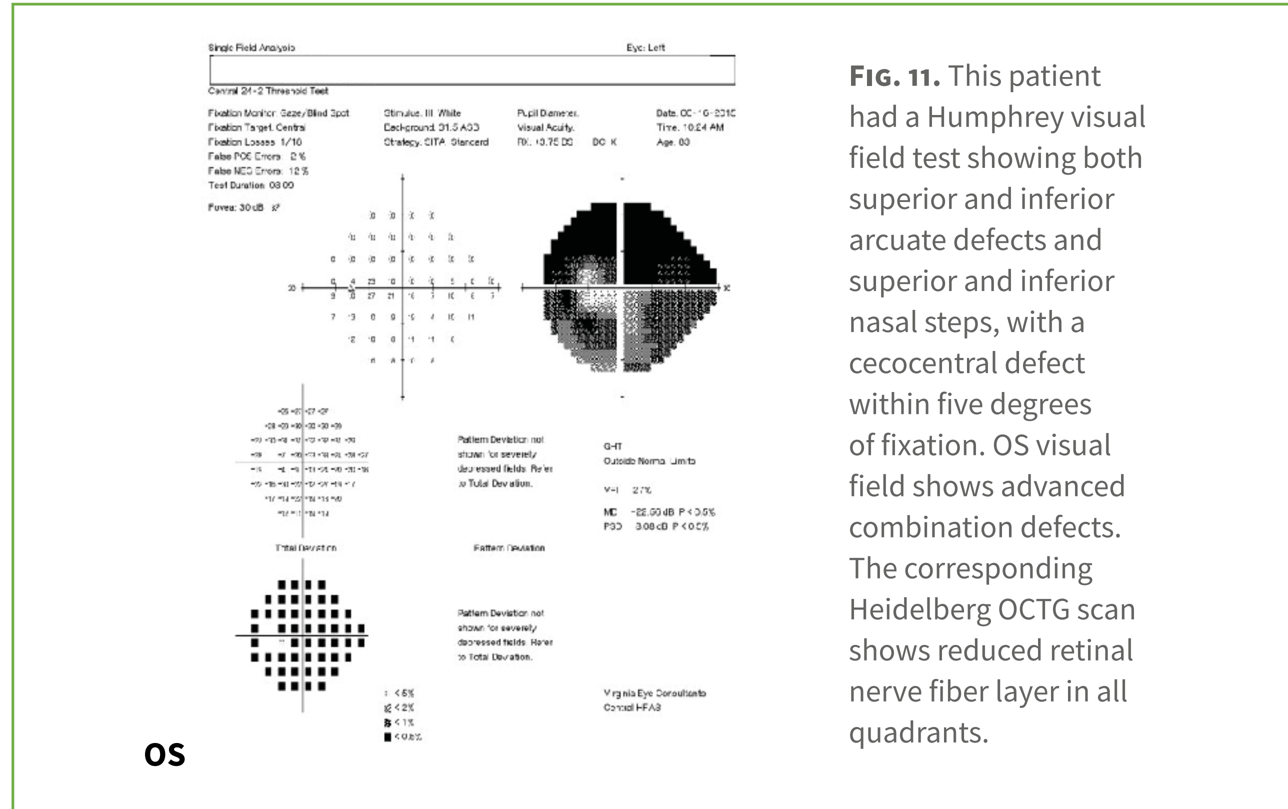
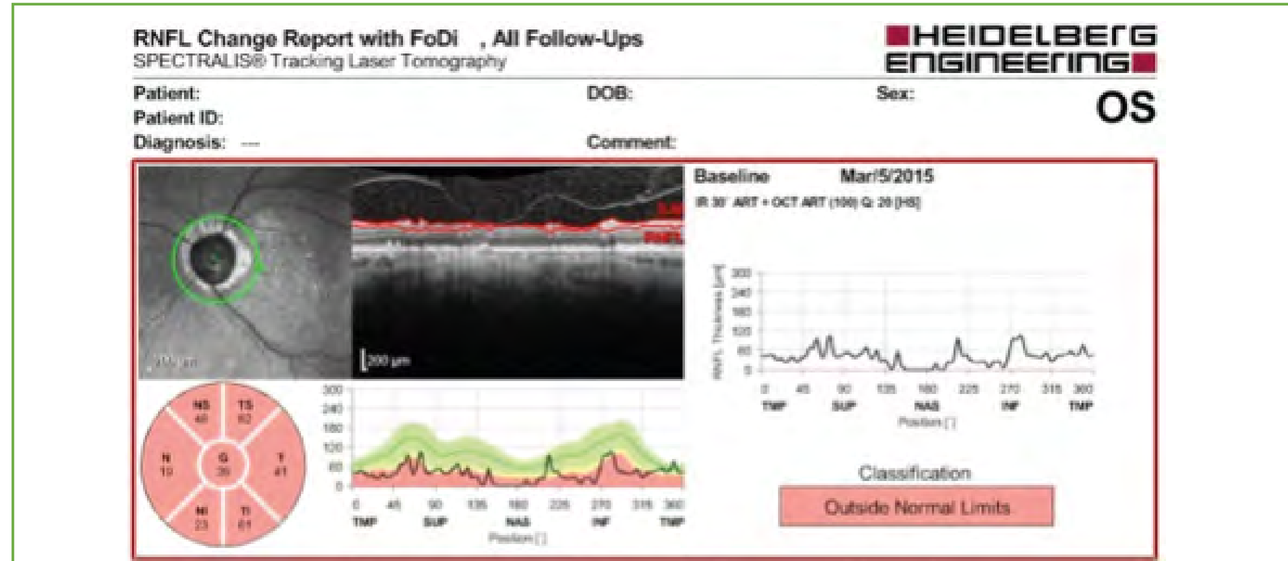


Fig. 11. This patient had a Humphrey visual field test showing both superior and inferior arcuate defects and superior and inferior nasal steps, with a cecocentral defect within five degrees of fixation. OS visual field shows advanced combination defects. The corresponding Heidelberg OCTG scan shows reduced retinal nerve fiber layer in all quadrants.

Real Clinical Case: Good Candidate



Real Clinical Case: Good Candidate

6.4.3 Treatment Options and Discussion

1. Cataract surgery alone, continue on meds.
   a. Since the patients IOP was uncontrolled on the current regimen, and because there was a potential phacomorphic component of the narrow angle, one could consider utilizing the IOP altering effects of cataract surgery alone to lower the IOP.
   b. Since the patient was not maxed out on medications, one could consider adding more medications if the pressure was not low enough after surgery.
   c. The patient expressed interest in being able to not have any drops after surgery as he noted that he had trouble getting them in and had to rely on his wife to help.
   d. It would seem advantageous to more proactively address the IOP and vision in the same setting, especially as the left eye stage of glaucoma was already advanced, so not addressing the IOP in the surgery did not seem to be the best option.
2. Cataract surgery alone, combined with SLT before or after.
   a. This is a possible option, but the concern is that the SLT would not provide enough efficacy to keep IOP controlled preferably without drops.
   b. This would cause additional trips to the clinic to set up before or after and inconvenience the elderly patient.
3. Cataract surgery combined with micro-incision glaucoma surgery.
   a. Trabectome could be added to help better control IOP and possibly reduce drop dependence.
   b. Performing Trabectome could potentially avoid needing more traditional surgery. Even though this is a more moderate to advanced case, one can opt for Trabectome first, as the results can be favorable. It would be important to discuss the potential need for additional surgery if the IOP was still not adequately controlled.
   c. Reduction of medications can help with the patient's dry eye issues.

4. Cataract surgery combined with traditional surgery (Trabeculectomy/Tube shunt).
   a. Given the risks involved with traditional surgeries, one could opt for a lower risk option.
   b. If someone is novice to use of Trabectome, this may not be one of the best initial cases. One would want to make sure that the technique is solid to gain the best result. Also if the outcome is not optimal, one could get discouraged about what the Trabectome procedure is capable of doing.

TABLE 11. MIGS Patient Selection Calculator Score for Case 4

	OD	OS
Stage of Outflow	6	5
Angle Characteristics	4	4
Pre-surgical Hx	9	9
Goals/Expectations	6	6
Total Score	**25**	**24**

Hx - History
These findings are suggestive that the patient could be a good Trabectome/Cataract candidate OU.

Treatment Course
The patient had combined cataract and Trabectome surgery performed OS, then OD nine months later. His post-operative treatment course included one drop of Atropine POD#1 and POW#1, Durezol QID for one week, then tapered down to qd for two weeks, then stop, Ilevro qd for five weeks, and Vigamox TID for one week. He had excellent IOP reduction OU that has maintained over a year without medications. His visual field and OCTG has also remained stable (Fig. 12).

Real Clinical Case: Good Candidate

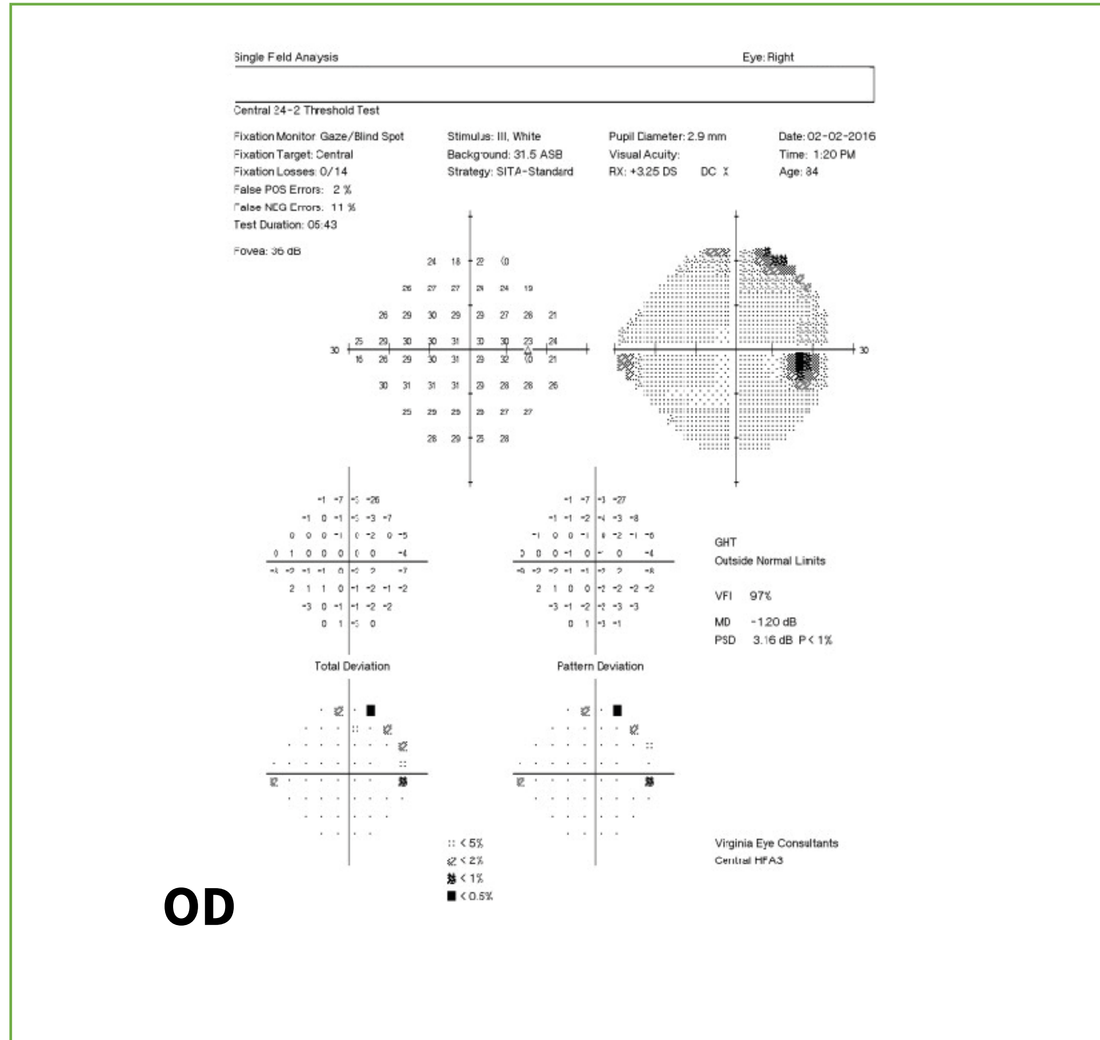
Outcomes

Visual acuity improved to: OD sc 20/20-2 OS sc 20/25

TABLE 12. IOP measurements pre and post-surgery for Case 4.

Interval post-surgery	IOP – OD	IOP-OS	# MEDS
Target	15	12	n/a
Pre-surgery	20	17	1 OU
1 MONTH	11	10	0 OU
3 MONTHS	13		0 OU
6 MONTHS	11	13	0 OU
1 YEAR	9	12	0 OU

Real Clinical Case: Good Candidate



Real Clinical Case: Good Candidate

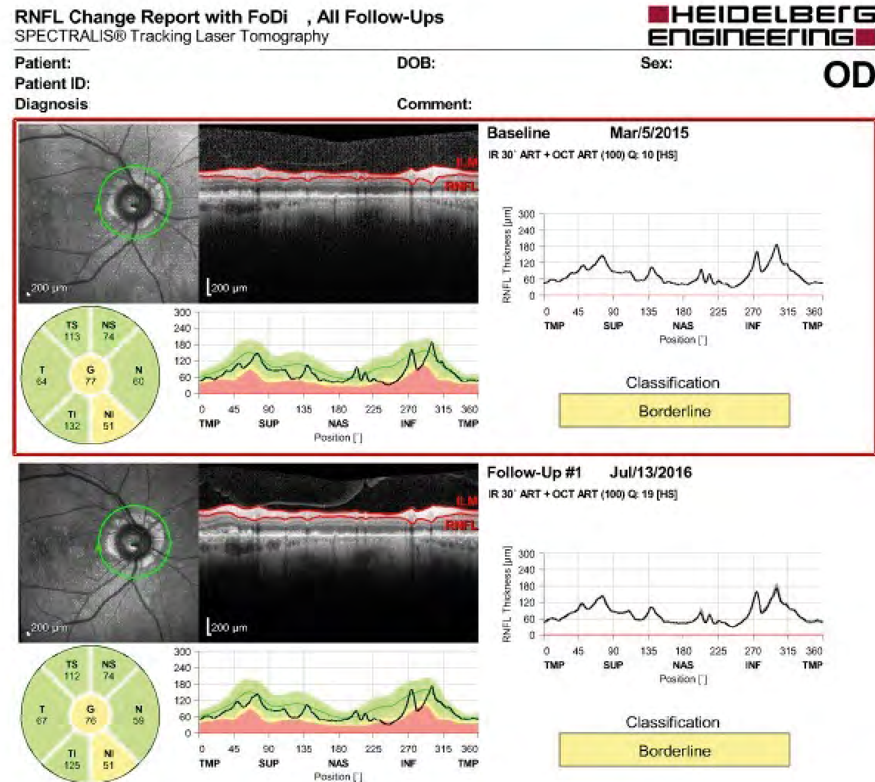
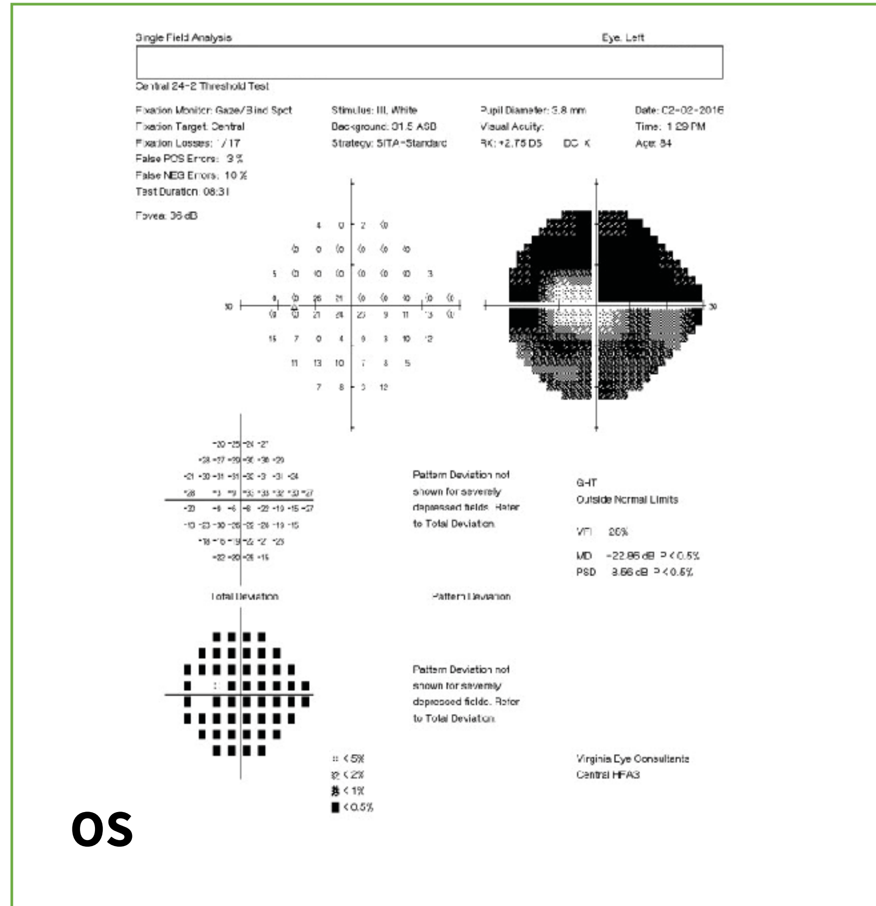


Fig. 12. OD – Post-combo Trabectome-Cataract Surgery. Stable early superior arcuate. This patient has had repeat Humphrey visual field and Heidelberg OCTG testing. Both tests show stability with the tests one year prior.

Real Clinical Case: Good Candidate



Real Clinical Case: Good Candidate

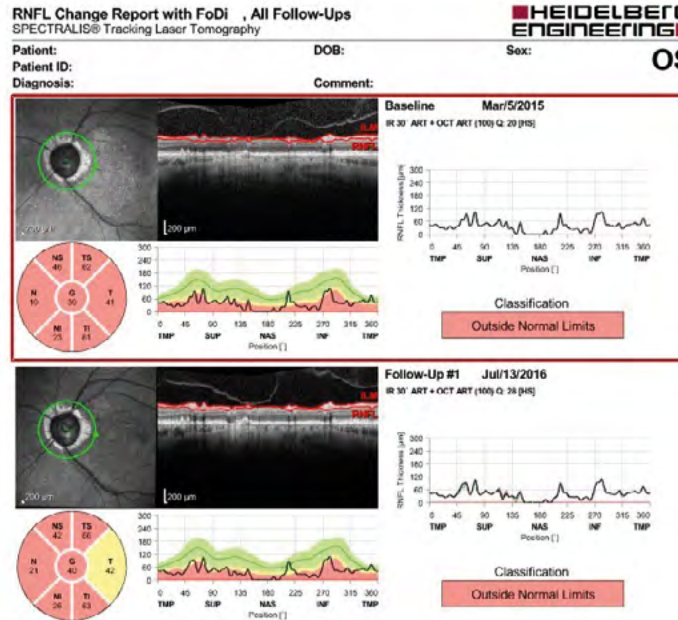


Fig. 13. OS – Post-Trabectome Advanced combination defects. This patient had a Humphrey visual field test showing both superior and inferior arcuate defects and superior and inferior nasal steps, with a cecocentral defect within five degrees of fixation. The corresponding Heidelberg OCTG scan shows reduced retinal nerve fiber layer in all quadrants.

Real Clinical Case: Good Candidate

BLOCK 4	SELECT – WHO TO CHOOSE FOR TRABECTOME?

Pearl: This is a very good case example of how early surgical intervention with Trabectome can be very ideal for a wide spectrum of glaucoma management from early to advanced glaucoma cases. In this case, the patient had a short history of using drops and uncontrolled POAG but already had significant visual field loss. The combined cataract and Trabectome procedure did help to lower IOP to target, stabilize the glaucoma progression and added significant improvement to his quality of life without the need for topical medications.

Personal Notes

These are comments pertaining to my personal experiences and decision making choices that I put in to practice currently.

Personal Note: Based on this evidence and my own clinical experience, any time I see a patient with PXF glaucoma, that is either controlled or uncontrolled on medications, I will always consider Trabectome when combined with cataract surgery. Or, in a patient requiring additional treatment post drops and trabeculoplasty, I consider Trabectome alone strongly as a next option before filtering or tube shunt procedures, even if the IOP is high on maximal medications.

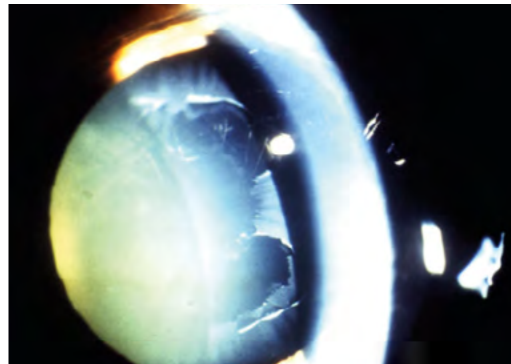


Fig. 2. Fluffy white pseudoexfoliative material presented on the anterior capsule.
(Courtesy Eydie Miller-Ellis, MD)

Personal note: I began using atropine post-operatively several years ago when I was doing combined Trabectome cases with Crystalens implants. Since I did not want to limit the visual potential of the lens in any way, I complied with the suggested use of atropine immediately post-operatively and in the subsequent two clinic visits. I reached a dilemma, however, since I had up until that point routinely used pilocarpine post-operatively with Trabectome cases. I went with the atropine and was surprised to find that not only did I still have good IOP outcomes, but the cleft in the angle made by the Trabectome remained patent without peripheral anterior synechiae (PAS) formation and the eyes did better with reduced episodes of prolonged inflammation that I had been seeing quite a lot of with my use of Pilocarpine. The mechanism of rotating the ciliary body and deepening the AC from the cycloplegia, along with the removal of the cataractous lens to also help deepen the chamber and the removal of inflammatory stimulus of pilocarpine, in my opinion all helped to improve my surgical outcomes via the healing process.

Pearls

These are pearls with general acceptance to take with you and begin implementing right away.

Pearl: Gonioscopic evaluation is important to perform to help decide mechanism of IOP elevation. If the AC is quiet and clear of cells, it is likely a steroid response. Look at the nasal angle for patency or early closure of the Trabectome cleft with PAS formation (Fig. 26). I recommend performing gonioscopy at every post-op visit to monitor the appearance of the cleft, in a similar manner to the way we assess blebs at every visit.

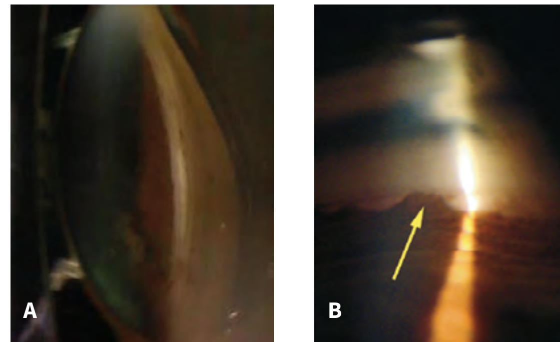


FIG 26. A) Gonioscopic view of the nasal angle showing a patent Trabectome cleft for at least 3 clock hours. B) Gonioscopic view of an area with early peripheral anterior synechia formation.

CHAPTER 2

3. After straightening the eye pieces, angle the microscope about 30-45 degrees TOWARDS the surgeon – this is needed to get the necessary axial view (Fig. 16).

FIG. 16. Set up for Trabectome surgery. The microscope is tilted about 30 deg toward the surgeon, and the patient's head is tilted away from the surgeon.

Pearl: Put a mark or a sticker on the microscope so that you can achieve the same amount of tilt each time (Fig. 17).

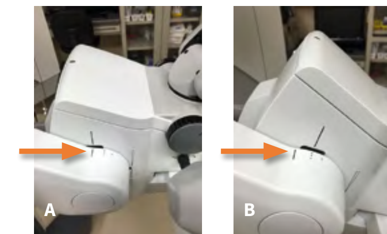


FIG. 17. A) The microscope is in its upright position as indicated by the marker. B) The microscope is tilted between 30-45 degrees and aligned at an additional permanent marking so that it can be easily found for each surgical case.

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Common Errors and Good Practice

Common Error: Gonioscopy should only be performed once at the time of diagnosis.

Good Practice: Gonioscopy should be performed on every glaucoma patient and suspect at least yearly. The angle configuration can change and should not be assumed to be stagnant, especially in phakic patients. As patients age, the lens grows in size, which can cause the angle to become more shallow with potential to precipitate pupillary block.

Common Error: Gonioscopy does not need to be performed again in phakic patients who have a patent peripheral iridotomy.

Good Practice: Phakic patients who have already had a successful PI performed are still at risk of angle closure with age. Lens-induced angle closure (phacomorphic) is the most common cause of an acute attack in aged adults.

Warnings

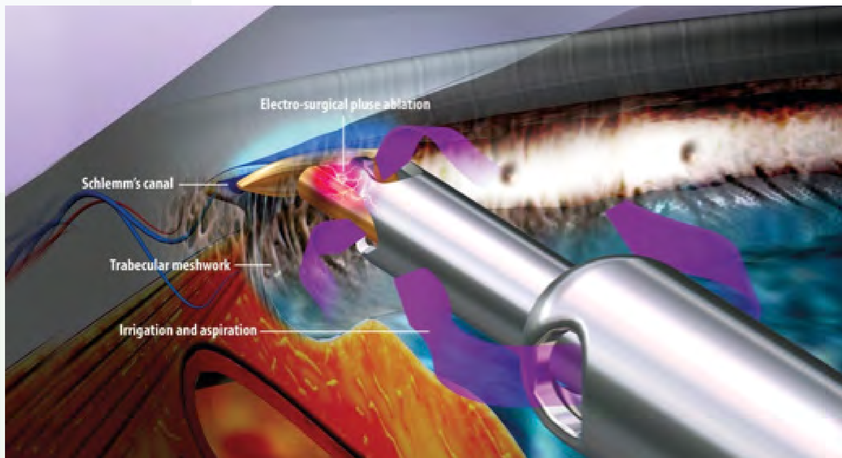
These are either common errors or myths that are made that I suggest you do not make or know to approach with caution.

WARNING: If a corneal incision is made wider than the provided 1.8 mm keratome, there is risk of excessive egress of fluid out of the AC, which in turn would cause a lower than ideal pressure with resultant corneal folds, blood reflux, more shallow chamber and more difficult view of the angle structures.

FIG 19. Gonioscopic view of gape from an excessively large corneal wound that could limit pressurization of the AC due to excessive egress of fluid though the wound.

Your Angle to Success - Take Action!

Your Angle to Success – Take Action!
Starting a new technique takes good intentions, but that does not always yield actual results. When coupled with encouragement, action, and accountability, those intentions can take flight to become reality. The section, *Your Angle to Success - Take Action!*, is at the end of each chapter. It provides action steps and tasks to complete to help take your journey to the next level. These actions have been actual steps that I have used over the years while embarking on new surgical MIGS techniques.



2.10 Your Angle for Success – Take Action!

Step 3: Research the Trabectome product.

Task #1: There are a number of resources available to you to begin learning more about the Trabectome – the www.neomedix.net website should be the first stop.

- There is a library filled with helpful videos, both surgical and clinically oriented about doctors experiences under the Physician-Library Link:
  - *Steps of the surgery:* www.trabectome.com/Learning/Library/Videos#89
  - *Patient Talks:* www.trabectome.com/Learning/Library/Videos#74
  - *Glaucoma:* www.trabectome.com/Learning/Library/Videos#53
  - *Pearls Trabectome Surgery:* www.trabectome.com/Learning/Library/Videos#52
  - *Patient Video:* www.neomedix.net/Learning/Library/Videos#100
- There is access to a large number of Trabectome related publications in pdf format that you can gain access to if you request it under the Physician- Publication Link www.neomedix.net/Publications/PeerReviewedJournals
- There is also access to a library of my own personal Trabectome surgical videos on the iGlaucoma YouTube Channel and EyeTube.net that you may also find of benefit.

(For Step 4 of *Your Angle to Success - Take Action!*, see Chapter 3.)

Words from a MIGS Patient

Jay Youngblood, Trabectome/Cataract patient of Dr. Okeke

www.neomedix.net/Learning/Library/Videos#74

"I had cataract surgery in both eyes combined with Trabectome. After you have the surgery, the drops are really no concern any more because it is not a part of your life like it used to be. The surgery overall was a good experience because I was comfortable with everything."

"I was taking drops three times a day. The drops are expensive. You have to take it in the morning when you are trying to get to work. Then you have to take the drops with you. If you get busy then you forget. Then you have to take them in the evening and you might forget. Then it gets frustrating. Then you have to go for your follow-up exam with your doctor who tells you that your pressure hasn't changed a whole lot and that you're not taking the drops like you are supposed to. So it kind of interferes with your daily life schedule.

If I was to advise someone about the option of Trabectome surgery I would say, 'Do not delay.' Go ahead and get it. You will see the benefits right away. Your quality of life will change. You will be able to plan and schedule things more without having to be concerned about whether or not you took your drops. Did I take them this morning? Did I take them this afternoon? Do I need to take them again? It really does improve your quality of life."

Other MIGS Secrets Loaded in Book

MIGS Patient Selection Calculator

- Chapter 4 is dedicated to discussing a patient selection tool that was designed through research to provide a series of 14 questions that can aid in proper patient selection for MIGS surgery. See page 10 in the clinical case above to see it put in action.

More Real Clinical Cases: Good and Suboptimal Candidates

- 8 detailed REAL cases outlining who to choose, who to avoid, how to think through options, pearls and use of the MIGS Patient Selection Calculator.

MIGS Frequently Asked Questions

- Over 30 need-to-know answers to top FAQs about MIGS from actual ophthalmologists, optometrists and doctors-in-training.

Review of all available MIGS devices

- Know what's available now and coming down the pipeline, with access to videos of surgery. The list of devices discussed include: Trabectome, GATT, Trab360, Kahook Dual Blade, iStent, Visco360, ABiC, Cypass, Xen, iStent Inject, Hydrus, iStent Supra and InnFocus Microshunt.

Financial Review of MIGS benefits

- Discussion of how to increase productivity and efficiency, with clear calculations and scenarios.

Clinical and Surgical Gonioscopy Review

- Over 30 pages of practical pearls and review of angle anatomy, step-by-step guide on gonioscopy techniques, good practices, common errors and a plethora of clinical and intra-operative pictures.

What Other Doctors Are Saying About Dr. Okeke's MIGS Success Secrets

Words From Ophthalmic Surgeons

"Dr Okeke compiled the finest source of information to date regarding the use of Trabectome for glaucoma patients. The book is unique because it addresses both the most mundane to the most complex issues surrounding the use and importantly misuse of MIGS. The information in these pages is useful not only to the novice but to the highly experienced anterior segment surgeon as well. Each page reveals her secrets of glaucoma surgery with pearls gleamed over years of compassionate clinical care. It is a treat to see this materialized into a good read on how to better care for patients with glaucoma."

Ronald L. Fellman, MD | Glaucoma Associates of Texas, Dallas, Texas

"In The Building Blocks of Trabectome Surgery: Patient Selection, Dr. Constance Okeke speaks in the tone of a true coach, guiding her players (those who want to adopt and even those who are skeptical about adopting a new surgical procedure) along the process of becoming a proficient Trabectome surgeon. The book provides a true '360 perspective' on Trabectome surgery, covering everything from contemplating Trabectome, to pre-operative planning, intra-operative steps with links to helpful videos, to postoperative management. The book is loaded with many helpful pearls, beautiful illustrations and a useful Trabectome patient selection calculator to aide in picking patients who would benefit most from the procedure. This book is a must read for anyone interested in performing MIGS surgery and will be a useful training guide for future MIGS surgeons

Louis R. Pasquale, MD, FARVO | Professor of Ophthalmology, Director Glaucoma Service, Harvard Medical School, Boston, Massachusetts

What Other Doctors Are Saying About Dr. Okeke's MIGS Success Secrets

Words From Ophthalmic Surgeons

"Dr. Okeke maps out the steps in a systematic fashion to allow beginning Trabectome surgeons to have a successful outcome with surgery. She writes in a fashion that draws the audience to her personal story. I think that having the patient scenarios was very compelling, as it was good to see how real patients performed. The patient testimonials were also powerful. I also like how Dr. Okeke notes the appropriate patients for Trabectome, but just as importantly, notes the patients who are NOT appropriate for Trabectome. Dr. Okeke draws on her personal experience with over 1,000 Trabectome surgeries in this book which can serve as a "How-to" manual for beginning Trabectome surgeons, and in a style that is a great read!

Leon W. Herndon, MD | Professor of Ophthalmology, Duke University School of Medicine, Durham, North Carolina

"When I first encountered Dr. Okeke presenting at a national meeting, I was astounded by her phenomenal surgical technique, well produced surgical video and extensive experience with micro-incisional glaucoma surgery. Her book, The Building Blocks of Trabectome Surgery not only provides a truly comprehensive analysis of Trabectome surgery, but also allows the reader to access Dr. Okeke's ample knowledge on the disease of glaucoma, optimizing patient care and delivering on the MIGS promise. I learned a lot and am confident that readers involved in many aspects of glaucoma care will gain from Dr. Okeke's book."

Nathan Radcliffe, MD | Director, Glaucoma Service, Clinical Assistant Professor, NYU Langone Ophthalmology Associates New York City, NY, USA

What Other Doctors Are Saying About Dr. Okeke's MIGS Success Secrets

Words From Ophthalmic Surgeons-In-Training and the Program Directors who train them

"Dr. Okeke's The Building Blocks of Trabectome Surgery is an excellent guide and resource for ophthalmologists in training who want to start learning more about MIGS and Trabectome. The book is full of useful pearls, interesting cases and a unique MIGS calculator that are all very practical and especially useful to the resident in training. This is an exciting time in the field of glaucoma, and this book highlights why MIGS and Trabectome are on the forefront of the newest treatment options that we can offer to our patients."
Luke Moore, MD | Resident, Eastern Virginia Medical School, Class of 2017

"As a glaucoma surgeon and program director, conveying novel surgical concepts to trainees in a manner that is easy to understand is of the utmost importance. Dr. Okeke's book is thought provoking, easy to follow, and encompasses ALL aspects of Trabectome surgery - including doctor-patient discussions and post-operative considerations. I especially enjoyed the case-based approach to patient selection. This is definitely a "must-read" for anyone adopting Trabectome (or any MIGS surgery, for that matter). "
Chandru Krishnan, MD | Assistant Professor of Ophthalmology, Director, Ophthalmology Residency Program, Tufts Medical Center, Boston, Massachusetts

What Other Doctors Are Saying About Dr. Okeke's MIGS Success Secrets

Words From Optometrists and Optometrists-In-Training

As an optometrist, I found the clinical applications in this book to be easily accessible and something I can utilize when evaluating glaucoma patients who are ready for cataract surgery or progressing under traditional therapy. In this book, Dr. Okeke lays a framework for any provider to establish whether a patient is a good or sub-optimal candidate for Trabectome, but in doing so, delivers so many clinical pearls, it will make you re-evaluate how you systematically examine your daily glaucoma patients. It is an excellent reference for Trabectome, MIGS, and glaucoma care in general.
Christopher Kuc, OD | Virginia Eye Consultants

This book was very interactively written. It felt as if Dr. Okeke was talking to me. The book was a very welcomed and organized read on a topic that can become complex very quickly when writing about. From a new optometrists perspective, this was a very informative and easy to understand resource for Trabectome. It taught me a lot and walked me through the steps in understanding patient selection, candidacy, technique, post-operative, and realistic outcomes.
Jillian Janes, OD | Optometric Resident, Virginia Eye Consultants

Dr. Okeke does a fantastic job walking readers through each element of the Trabectome, from the procedure itself to patient selection. Further, she does it in such a way that it's impossible not to want to get out there offer it to your patients! I really enjoyed the clinical cases. This is the perfect read for students and clinicians alike who want to learn more about a new procedure in order to provide new options to their glaucoma patients.
Amber Huleva | Optometry Student, Pacific University College of Optometry, Class of 2017

Helpful MIGS Features for Surgeons-in-Training

If You Teach Residents or Fellows...

- Do you have surgeons-in-training who are eager to get experience in the fundamentals of MIGS procedures?
- Are you hesitant to teach them in the OR because of your own need for growth in the MIGS space?
- Are you looking for teaching tools to help you help your students gain the skills they need to put them ahead of the curve when it comes to MIGS?

Consider Trabectome as a Starting MIGS Procedure for Your Beginners

What is the best MIGS procedure to start practicing with for a beginner?

It is difficult to answer this question. I feel whichever MIGS procedure you start on, if you master it, this will ultimately give you the foundational tools needed to become successful in any of the MIGS procedures. I started with the Trabectome and took time to master it. Subsequently, my adoption of additional MIGS procedures has been fairly straightforward because of the fundamentals I learned in Trabectome.

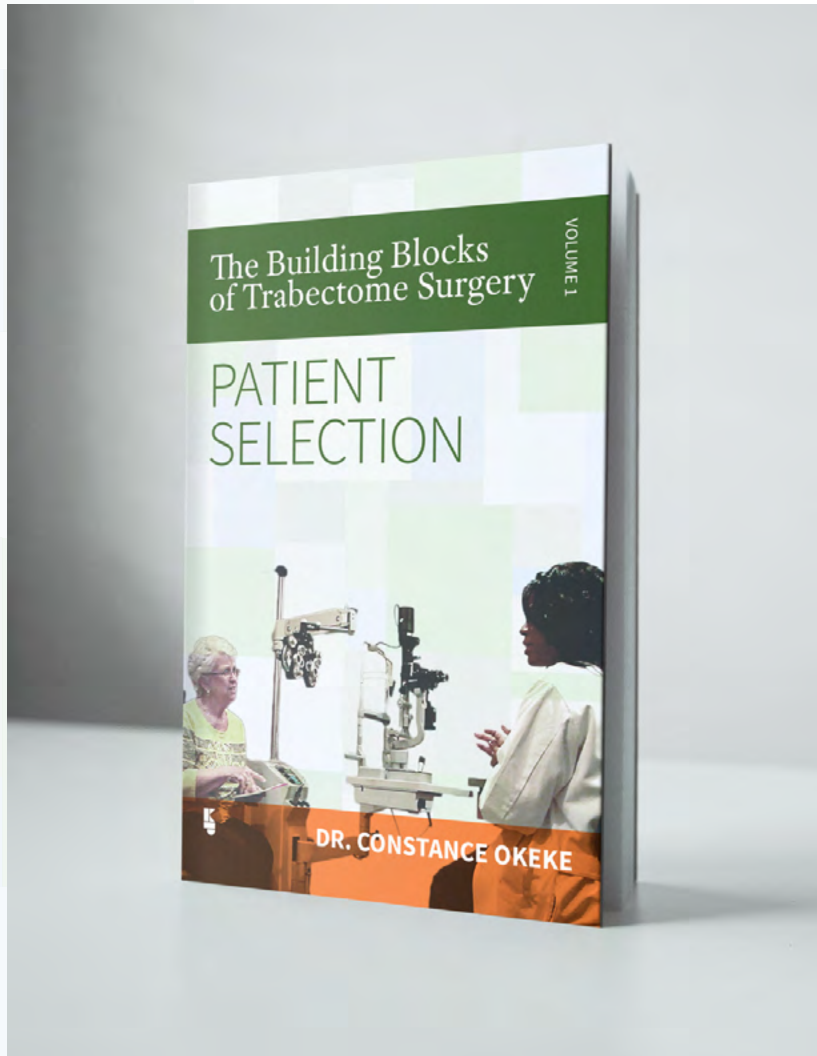
In actuality, I cannot say for certain though, that this would have been the same if I began with other techniques. The main reason is that because the Trabectome fluidic system offers constant pressurization of the chamber through irrigation and aspiration, it provides me with such an adequate view of the angle through a clear cornea. I did not have to spend as much effort on the steps with intraocular VE to maintain the chamber. This can be crucial in the novice stage where you can be very unclear of the anatomy and very hesitant to 'make the move'. While this hesitation is occurring, the VE that was pressurizing the eye can begin to ooze out, and there goes the chamber and the view, with folds in the cornea and bleeding from SC if an attempt to pierce the TM has already been made. You could have been right at that moment where you were going to engage in the TM, but then the view goes! You have to come out and refill the chamber with VE and hope that the clear view comes back again.

Therefore the two main features of Trabectome that makes the procedure easier to adopt as a first MIGS are:

1. Irrigation and aspiration provides better visualization due to stabile AC and not using VE so the angle view is optimized,
2. The TM is ablated and aspirated, not manually removed, therefore there is a certainty of removing the TM with a clean and assured cut.

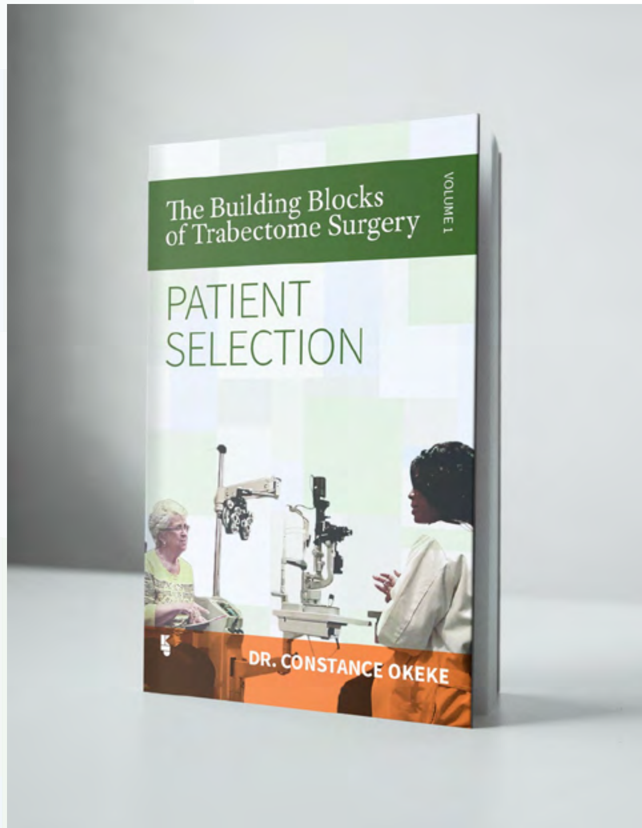
In my opinion, it is easier to learn MIGS with Trabectome as the first procedure. However, I may be biased as I learned Trabectome first and I find my adopting other procedures relatively easy.

This Book Is for You If...



- ... you are a glaucoma specialist who desires to learn more tools to offer in micro-surgical glaucoma treatment.
- ... you are an anterior segment surgeon who is contemplating a new MIGS procedure to stay on the cutting edge and help reduce glaucoma drop usage for your patients.
- ... you are an optometrist who wants to know more about the micro-incisional surgical options for intraocular pressure lowering in your glaucoma patients with or without cataracts.
- ... you are an ophthalmology or optometry student intern, resident or fellow who wants to learn more about a MIGS procedure and how to identify the best candidates for the surgery.
- ... you are interested in discovering new ways to increase your financial productivity and efficiency.
- ... you want to be a hero and give hope and more options to your glaucoma patients.

How to Get MORE MIGS Success Secrets



STEP 1. Buy the book!

Books Available NOW from Kugler Publications.
For a limited time, get a 10% discount at **www.kuglerpublications.com** using the code **TRAB17**.

STEP 2. Get personal training/coaching with Dr. Okeke

Trabectome is an ideal MIGS first procedure for doctors-in-training as highlighted in the booklet. If you or someone you know are interested in getting trained in Trabectome, as an official Trabectome trainer, Dr. Okeke can help facilitate that training. If you have Trabectome, but are in need of additional coaching to get started up again or get more advanced, Dr. Okeke can also help in that area as well. Dr. Okeke also can support coaching for several other MIGS procedures. Find help at:

www.DrConstanceOkeke.com/services

STEP 3. Stay up to date with MIGS

How? Find the latest on MIGS technology and other practical and useful information at **www.migs-secrets.com**.

STEP 4. Share this free booklet

Have friends and colleagues who can also benefit from the information in this booklet? Send them this link to get their own free copy of MIGS Success Secrets at **www.migs-secrets.com**.

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