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Searchlight on Glaucoma

The Glaucoma Service Foundation to Prevent Blindness

Announcing the 8th Annual CARES Conference Please Register Now!!!!!

The Glaucoma Service Foundation to Prevent Blindness is hosting the 8th Annual CARES Conference on Saturday, April 25, 2015, in the Dorrance H. Hamilton Building at Jefferson Hospital, 1001 Locust Street, Philadelphia, PA from 8:00 AM to 2:00 PM.

Since January 2007, the Glaucoma Service Foundation located at the Wills Eye Hospital has held a day long conference called the "CARES Conference." CARES stands for "Committed to Awareness through Research, Education, and Support." This is a patient directed, educational conference about glaucoma. Last year, over 230 patients and their families from around the United States (primarily Pennsylvania, New Jersey, Delaware, and New York) attended this conference at Jefferson Hospital.

The event includes lectures by Wills Eye Glaucoma physicians. Free screenings for glaucoma are offered and encouraged.

Representatives from pharmaceutical companies with patient assistance programs, Associated Services for the Blind, and the Glaucoma Research Center will be on hand. Guest speakers include Brittany Morgan (glaucoma patient), Dennis Steiner (President/CFO of VisionCorps), and Joseph Saunders (Chairman of the Board for the Center for the Blind and Visually Impaired).

The conference begins with a continental breakfast and ends with a luncheon. We look forward to seeing you there!

Following is a list of the exciting lectures that will be presented:

Dr. Eddie Amilari
What is Glaucoma?

Dr. Noelle Pruzan
Who Gets Glaucoma?

Dr. Marlene Moster
iStent Surgery: What is it and For Whom is it Best?

Dr. Sarah Kuchar
How is Glaucoma Treated?

Dr. Ryan Edmonds
Low Vision Strategies Related to Glaucoma

Dr. Scott Fudemberg
Trabeculectomy Surgery

Dr. Courtland Schmidt
Effective patient-doctor communication

Dr. Michael Pro
The Glaucoma Examination

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A Message From the President

As President of the Glaucoma Service Foundation Board of Trustees, it is my pleasure to work with a group of dedicated board members who are committed to preserving and enhancing the health of all people with glaucoma. Unfortunately many people with glaucoma are not diagnosed in its early stages. In fact, "an estimated 50% of Americans with glaucoma do not even know they have it." They are losing sight daily and every bit of sight lost will never be regained. This is why it is so critical that we raise awareness of glaucoma and its consequences.

The Foundation's community outreach initiatives highlighted in this edition of the ***Searchlight*** are designed to increase knowledge about glaucoma especially within at-risk populations in the Greater Philadelphia area (African Americans, Hispanics, Asians and everyone over age 60). First you will read about our upcoming CARES Conference to be held April 25th on the campus of Thomas Jefferson University. This conference brings together more than two hundred individuals annually who seek the most current information about glaucoma. The conference is open to everyone interested in learning more about glaucoma, the importance of early diagnosis, and the latest treatment options. Attendees also have the opportunity to receive onsite screening and if they are diagnosed as a potential glaucoma patient, they are given a referral to a Wills Eye Glaucoma physician for further evaluation.

Our outreach activities also utilize community networks, health fairs, newsletters, and speaking engagements to reach at-risk populations in the Greater Philadelphia area. Do read the article about Vine Memorial Baptist Church, a successful community intervention that we expect to be a model for future outreach initiatives. The Foundation's goal is to identify and work with community partners to raise awareness about the importance of early diagnosis and treatment of glaucoma. Look for updates about our community programs in future ***Searchlights.*** Please let us know how we can best serve you and your community.

Sincerely,
Maxine Colm, President
Glaucoma Service Foundation

Announcing the 8th Annual CARES Conference

(continued from front page)

Dr. Jonathan Myers
Examining the optic nerve in glaucoma

Dr. Jenina Capasso, MF, CGF
Pediatric glaucoma

A special thanks to the Robison D. Harley Fund for Glaucoma Education and Research for sponsoring this event.

Thank you to Allergan and Carl Zeiss Meditec for their continued support of the CARES Conference.

Register by e-mailing:
Rita Stern at
stern@willsglaucoma.org

Please call our office at (215) 928-3190 or Rita Stern at (484) 678-4535. You will need to provide your name, address, phone number, number of guests, and email address.

Website:
The following link takes you to a web page dedicated to CARES with information on registration, parking, accommodations, etc:
www.willsglaucoma.org/cares

There will be no charge to attend but space is limited, so please register NOW! ■

E B Spaeth Oration – January 22, 2015

Rita M. Stern

The Glaucoma Service Foundation celebrated the annual E B Spaeth Oration on January 22, 2015 at the College of Physicians. David E.I. Pyott, CBE was the keynote speaker. Mr. Pyott is the Chief Executive Officer of Allergan, Inc. and the Chairman of the Board. His lecture was titled "How industry, academia, and venture-backed companies interact to drive innovation: How to increase the likelihood of success and minimize failures."

This was the 38th year of the event which honors Edmund B. Spaeth, who was a busy, internationally respected physician and teacher. Edmund Spaeth passed away at the age of 86 in 1976. The evening, devoted to celebrating great teaching and great teachers, brings together fellows, residents, medical students from Wills Eye Hospital, Temple, Jefferson, Scheie Institute, Drexel, Children's Hospital of Philadelphia, and Philadelphia College of Osteopathic Medicine and ophthalmologists from all over the Greater Delaware Valley. Representatives from Accutome Inc., Akorn Inc., Alcon, Allergan, Icare, Mobius Therapeutics, and Wills Eye and Board Members from the Glaucoma Service Foundation were also in attendance. Accutome Inc., Akorn Inc., Alcon, and Allergan were the joint sponsors for this wonderful and informative evening. The intent of this unique event is to broaden and deepen ophthalmologists' understanding of the art and science of medical practice. It is an educational evening both academically and socially. The event is also part of the Greater Philadelphia Ophthalmic Society's series of programs. ■

David E.I. Pyott
Photo: Howard Pitkow

Adherence with Glaucoma Therapy

Anand Mantravadi MD, FACP, Wills Eye Glaucoma Service • Assistant Professor, Jefferson Medical College

Sticking to a program of medical therapy is the name of the game with many chronic diseases. But, to a large extent, regardless of the disease, regardless of the science, regardless of the vast resources spent in developing new targets and medical options, the effectiveness of medicines depends largely on one's ability to use them. In this article, we shall explore the concepts of adherence as it relates to glaucoma care, which is ultimately defined as the degree to which patients are able to follow prescribed treatment regimens for a defined time period.

What we know about glaucoma is that it is often silent, chronic by definition, potentially blinding, but is most importantly, treatable and manageable. Although the word "cure" is rarely used when dealing with a chronic condition, "effective management" is the goal for every individual afflicted so ultimately vision is maintained at a level such that patients can preserve their vision for the remainder of their lives.

There are a number of features about the glaucomatous disease process that further create challenges for patients on adherence, that are common to many chronic conditions. Glaucoma offers little reminders of its presence. Unlike a sore throat that may declare itself provoking one to seek medical attention, glaucoma is insidious in its onset. Furthermore, in contrast to conditions such as infection whereby the effects of an antibiotic maybe immediately realized, in glaucoma management the benefits of therapy are not immediately realized. Slowing or in some cases halting the rate of glaucoma damage is the fundamental goal for every patient, and thus the effects of treatment are not typically "felt". The notion that someone may be on some form of therapy for life is also a set up for lapses in adherence for many patients.

There is data to support that poor adherence to treatment increases the potential for worsening of disease,

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Adherence with Glaucoma Therapy

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whether it is glaucoma or any other chronic condition such as diabetes or hypertension. From a physician's perspective, when developing a treatment plan, a critical consideration is to what degree a patient maybe able to adhere to a treatment plan. If a medicine is used for glaucoma, and the pressure in the eye did not sufficiently respond as hoped, this maybe a consequence of the medicine not getting in the eye despite its potential to be effective. It may also be a consequence of the medicine getting in the eye and simply not working to lower the pressure, as we would hope. How to distinguish between these two scenarios is a real challenge.

Although the doctor-patient relationship hinges on trust, it is clear that doctors are not great at detecting a patient's adherence to medication. It can be impossible in glaucoma management to truly have a grasp on a patient's adherence if medications are used cyclically. For example, I always use the personal example of how I tend to floss a lot more right before I go to the dentist. To some extent I don't want to disappoint the dentist. Similarly, if medicines are used sporadically, irregularly, and around the time of one's appointment, it maybe the case that the pressures seem great, but we truly don't have adequate pressure control for periods of time.

There are some ways to measure adherence to medicines for study purposes beyond self-report which is commonly the primary way in clinical practice. There are electronic measures such as drop instillation devices. Furthermore based on medication refill rates and claims data from large patient databases, there are medication possession ratios (MPR) that can be calculated. The latter is primarily for research purposes and in the clinic we primarily rely on what a patient reports to us regarding medication use.

There are a number of barriers to adherence that we are aware of that always must play into choosing a certain medication regimen for a patient. There are environmental factors such as social and lifestyle circumstances that affect adherence. Patient's who work late shifts, travel, have experienced major life events, or a number of other environmental circumstances that play into how well one can take their medicine regularly, are important to consider. There are factors affecting adherence that relate to the medication itself. Specifically, what are the drug costs to the patient, the complexity of dosing frequency, drug availability from insurance formularies/pharmacies, which are a constantly changing dynamic.

There are also patient-related barriers to adherence, meaning any potential for difficulties instilling the medicine based on a patient's own physical dexterity and abilities, as well as how this medicine fits with other medicines they maybe taking. Patients vary vastly in their medical knowledge or medical literacy. Chances are if you are reading this, you are an active information seeker on issues related your health and treatment programs. There are many who learn everything about their medical conditions passively in the brief visits with their respective physicians. A lack of information can indeed be a set up for lapses in adherence as well.

When it comes to glaucoma treatment, we are at a watershed moment with a number of new and exciting modalities to offer patients. We are excited about new medication choices that we currently have and new medical options on the horizon. Medical therapy plays a critical role in treatment of glaucoma in conjunction with laser and other surgical options. There is ample evidence to support medical therapy in the effective management of glaucoma but this clearly hinges on how well people are able to access, use, and tolerate medicines. How to improve adherence to medical therapy in a patient is a complicated challenge. On the medical side of things, simpler regimens, with easier administration of treatments would be ideal. On the patient and physician side of things - there are strategies aimed towards enhancing communication, and patient education. To a large degree in this information era, the resources for such information are present and out there and require patient-driven behavior to seek this out, consume, comprehend, and apply. Employing support systems when available such as family and friends, can also positively impact medication adherence.

In summary, greater adherence often leads to better outcomes. Although it is a complex challenge to identify specific ways to improve adherence, there are a number of small ways that have tremendous potential both for patients and physicians. ■

Taking Glaucoma Treatment into Your Own Hands

Wanda D. Hu MD and Marlene R. Moster MD

It is known that patient compliance with any type of chronic medication is low. It is even lower when you can't "feel the disease", such as with glaucoma. Some believe that noncompliance and lack of follow up can even be considered the leading cause of glaucoma blindness. This is something that you, as the patient, can change.

Often times the reason for skipping a drop here and there may be because they cause your eyes to turn red or because the costs are too high. Sometimes it is because you just simply forget. Patients are often scared to tell the doctor the truth because they want to be a "good patient". Despite not taking drops for several months in between visits, they may start to take drops right before their visit to get a "good" pressure in the office. This creates a false sense of security, while glaucoma is slowly uncontrolled and eating away at the optic nerve.

Why is this dangerous?
Compliance with any medication is crucial. If you do not take your medications correctly, you are not getting the full benefit from the medications. If your pressure seems well-controlled in the office but your glaucoma is getting worse based on your doctor's examination, your doctor in reality may escalate your treatment when you just need to take the drops correctly. Escalating treatment simply means adding another glaucoma drop, or it could mean a laser procedure or even surgery.

What can I do to fix this problem?

1. Communicate with your doctor- Tell your doctor if you are having trouble taking the drop due to costs, the bottle shape, or if the regimen is too difficult to keep up with. Your doctor is here to help you come up with a regimen that will work long-term for your lifestyle. We cannot help if we do not know about these issues.

2. Keep a journal- Have the doctor write the instructions at each visit so you understand the new drop regimen. Make sure this is written down in large letters and write down what color the caps are. It is also important to keep a journal so you can remember which medications did not agree with you and what the side effects of the drops are. This way, you will have a good record on the different side effects of medications in case you end up switching glaucoma doctors in the future.

3. For the tech savvy, there are new smart phone applications that have been developed to help you take your eye drops on time. These applications set alarms as a reminder to administer your drops. Some of these applications have the option to use voice activation as some with glaucoma are visually impaired.

4. Take your drops correctly- If you need to take 2 or 3 eye drops at the same time, make sure you separate them out by at least 5 minutes to allow the medication to absorb and to prevent the drop from washing out. Also, place your index finger for 1 to 2 minutes along your tear duct (inner corner of the eye) to prevent the drop from going down into the tear duct and into the bloodstream. This will help lessen the systemic side effects of some of your drops.

5. Bring a friend or family member to your appointments- Friends and family can lend their support and can help you write things down and remember details you might forget. Often times in the office, we are flooded with new information and unfamiliar vocabulary. It is always helpful to have a

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Knowing whether your condition is stable or worsening is important to you and your doctor: how you can determine that.

George L. Spaeth, MD

The tragic truth is that even alert, intelligent people lose their vision from glaucoma. There are four major reasons why this happens.

(1) Because we have two eyes
(2) Because the loss is usually slow
(3) Because we learn how to cope with change
(4) Because there is no physical pain

1. Except for way to the right and way to the left side, everything we see we see with both eyes. The vision that is lost first in glaucoma is the vision on the other side of the nose from the eye that is seeing. That is, sight in the right eye is lost close to the left side of straight ahead, and sight in the left eye is lost just to the right side of straight ahead. Because the vision in the two eyes overlaps in the straight ahead position, that is both eyes see straight ahead, when one eye loses straight ahead vision or vision that is just a little bit to the side of straight ahead, the person doesn't notice that visual loss because that area is still able to be seen by the other eye. So, when one has both eyes open and loses sight in one eye only, that loss of sight isn't noticed. This is true in glaucoma, because visual loss occurs in only one eye first, and only later does the loss of vision affect the other eye. Consider this! All of us have an area in our visual field that is completely blind. This is true for both eyes. And we never notice it. We all have a blind spot due to the absence of any retinal receptors overlying the place where the optic nerve joins the back of the eye. Every one of us has about a 15 degree area of blindness in both eyes. It is extremely rare that a person actually notices this. In fact, in all the years I have been practicing, only one patient has ever mentioned to me being aware of their own blind spot. So, people don't notice visual loss because they have two eyes and vision is always lost in one eye first!

2. The visual loss occurs slowly. It is impossible for us to detect the motion of the small or even the large hand on a clock unless the face of the clock is huge. The retinal receptors are simply not packed close enough together that they can detect such small changes. In contrast, we are immediately aware of something as small as a mosquito flying in front of us.

3. As the vision is lost, we learn how to adjust for it. Subconsciously, our brain fills in areas that are blind, guessing at what is actually there, in order to help us cope.

4. Slowly developing glaucomas are not associated with any physical pain. They never cause enough pain to produce disability or decreased quality of life.

So, the way to determine whether sight is disappearing is (1) to test for it, one eye at a time. And, (2) to test for it at intervals which are sufficiently far apart that it is possible to notice a change. Changes can only be noticed when there is a stable baseline against which to pair. Thus, when one tests one's own vision to see if it is stable or worsening, (3) one has to look at the same sort of thing, with the same amount of light, and with everything as standard and stable as possible. One way to do this would be to stand about a foot in front of a large painting, cover the left eye and then look right at the center of the painting, doing the testing when the amount of light on the painting is the same as all the other times you are testing. Look at the center of the picture for about a minute, not staring, but keeping the eye relatively still, and see what you can see in the way of the picture. When you look at the center of the picture, can you see the frame on the outer edges? Is the frame equally clear at all the outer edges? Is there any part of the picture that seems to be missing? How bright is the picture?

Does the painting look washed out anywhere? Then cover the right eye and look with the left eye, observing the same things. Try to figure out whether you think there is a difference between what you see with the left eye in comparison with the right eye. Then do the same exercise all over again. Write down on a notebook that you keep specifically for this purpose a comment as to whether (1) you think the vision is the same in the two eyes, or (2) is it different, and (3) if different, how is it different? Repeat this same practice the first Sunday of every month. As you repeat this you want not only to answer whether there is a difference between the right and left eye, but also whether, as best as you can remember, (4) is the right eye the same as it had been before, and is the left eye the same as it had been before? If you notice when you first test the eyes that the two see about the same, but then later you are quite sure that one is not seeing as well as the other, then you know that at least one of them has gotten worse. Or if you note that when you first test them the right eye sees better than the left eye, but then a couple months later the two eyes seem the same, then you know that the right eye has gotten worse.

This type of testing is not as likely to find small changes as can be found with visual field testing. Furthermore, visual field testing is expensive, only happens at rather infrequent times, and is not easy to interpret. Testing one eye at a time costs nothing, can easily be done once every month, and can note changes of importance. It can detect the sorts of changes that are sufficiently large that they indicate with certainty that a person is getting worse. Knowing that is beneficial to being able to preserve your sight.

Do it! ■

Best health and medical apps to use with your iPhone or iPad – help you to take care of YOU

MJ Jaffe, Managing Director, Innova Medical Communications, LLC

If you have an iPhone or iPad, educating and training yourself on a variety of health-related topics to take better care of yourself just got easier. Have a look at some of the apps (applications) and their descriptions listed below. All of these can be found by going to either:

http://apr.iphonewrd.com/pc/kenko.html

OR

http://apr.iphonewrd.com/pc/iryo.html

Many of these apps are available at no cost or $0.99. Have a look at the following list and see which interest you the most.

EATING

Fooducate - Healthy Weight Loss, Food Scanner & Diet Tracker - Count Calories & their Quality to Lose Weight & Keep it Off
By Fooducate, Ltd

iTrackBites - Points Calculator with Weight Loss Exercise Tracker and Calorie Lose Counter for Diet Nutrition Watchers
By Ellisapps Inc

FITNESS

RunKeeper - GPS Running, Walk, Cycling, Workout and Weight Tracker
By FitnessKeeper, Inc.

DIABETES AND HIGH BLOOD PRESSURE MANAGEMENT

Glucose Buddy - Diabetes Logbook Manager w/syncing, Blood Pressure, Weight Tracking
By Azumio Inc.

BLOOD PRESSURE COMPANION

Maxwell Software
Blood Pressure Companion is a blood pressure, heart rate and weight tracker.
By Maxwell Software

SLEEPING

Sleep Cycle alarm clock
An intelligent alarm clock that analyzes your sleep and wakes you in the lightest sleep phase – the natural way to wake up feeling rested and relaxed.
By Northcube AB

PHARMACY

Epocrates
Pill identification, drug interaction, disease description, notifications, and lab data
By Epocrates

Pill Monitor
Medication Reminders and Logs
Take your pills and other medications on time with this app.
By Maxwell Software

GENERAL

AmplyPhone
Personal hearing amplifier

Use your iPhone as a hearing aid. Just keep your left earbud plugged in. Nothing else to buy.
By Andrea Gatti

The apps that you see listed above received high ratings by users and that is why they are included here. There are many, many more apps available and most are either inexpensive or available at no charge. Have a look. Explore. Give us feed back and let us know what you think.

CHAT SUPPORT GROUP

Join Moderators Vivian, Steve and Brittany for a chat about glaucoma hosted by a glaucoma specialist.

1st Wednesday of the month 8:30 pm – 9:30 pm
Hosted by a Wills Glaucoma Specialist

For a complete schedule visit:
http://willsglaucoma.org/chatsched.htm

All chat highlights are available on our website www.willsglaucoma.org If you do not have access to a computer, call the Foundation to have a printed copy mailed to you. If you are interested in a topic, please let us know.

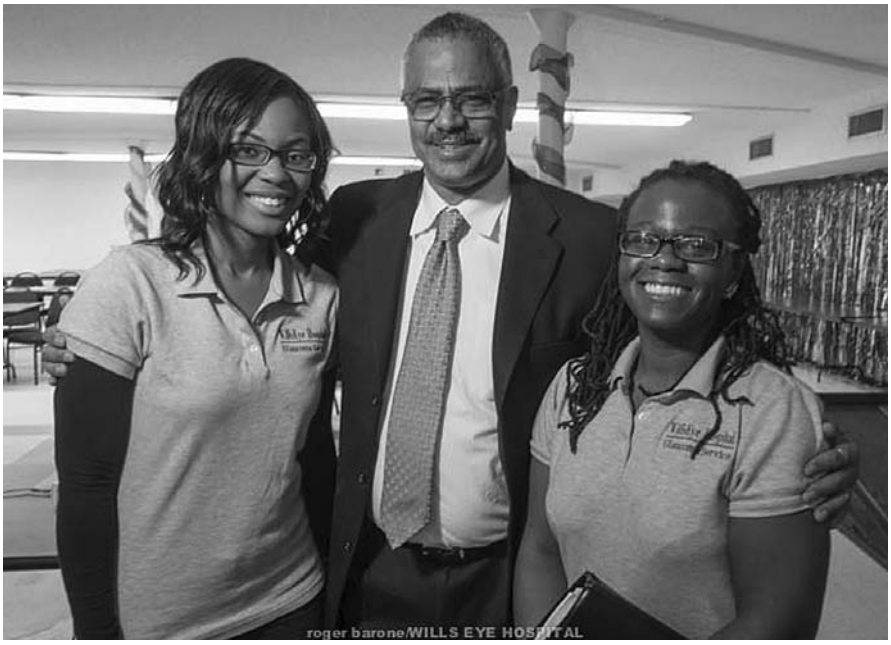
FACEBOOK SUPPORT
Become a fan on Facebook at www.facebook.com/willsglauco-

Vine Memorial Baptist Church Outreach Initiative

On Saturday October 24th, the Glaucoma Service Foundation held what we plan will be the first of many community lectures in Philadelphia on the dangers of glaucoma, and what Wills Eye Hospital can offer in terms of screening and reduced cost care. This event was made possible by the generosity of the Thomas Skelton Harrison Foundation.

The lecture was given by Shayla Stratford, MPH (Manager of Community Partners) and Deiana Johnson, MPH (Manager of Community Health), two employees of the Wills Eye Hospital Research Center who have been speaking on glaucoma for four years. The event was also attended by Jeremiah J. White, past President of the Glaucoma Service Foundation, Robert Kump, a member of the Foundation's staff, and Mrs. Fannie Campbell, head of the Nursing Unit at Vine Memorial.

The twenty congregants of Vine Memorial who turned out for Saturday's lecture were well served by Ms. Stratford and Ms. Johnson. They shared information as to the definition of glaucoma, who is at risk for it, who to call for a screening, and the availability for free or reduced cost treatments. At the end of the lecture, nine participants expressed an interest in setting an appointment at Wills Eye. Three participants were already patients for other eye conditions, and one was already a patient at the Wills Glaucoma Service.



Shayla Stratford, MPH (Wills Eye Hospital Manager of Community Partners), Jeremiah White, Trustee, Deiana Johnson, MPH (Wills Eye Hospital Manager of Community Health)
Photo: Roger Barone

Every attendee was given a directory of who to call at Wills Eye for general eye check-ups, glaucoma appointments, and to check eligibility for reduced cost care. Each was also given a business card for Mr. Kump in the Foundation staff office, and told to stop by when at the hospital to receive a prize. Business cards and directories were also left with Mrs. Campbell in the Nursing Ministry and this offer was made to the first forty Vine Memorial congregants who come to Wills Eye Hospital.

The administration of Vine Memorial was very pleased with the presentation, and hopes to work with the Glaucoma Service Foundation again in the future. In fact, they invited lecturers Ms. Johnson and Ms. Stratford to attend their flu shot day on October 29th to share more information on glaucoma and where to turn for care. In addition, the church's administration plans to advertise heavily the upcoming Glaucoma Service Foundation's CARES Conference to be held Saturday, April 25, 2015 from 8:00 AM to 2:00 PM in the Dorrance H. Hamilton Building, 1001 Locust Street, Philadelphia. ■

"CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

What Is Low Vision?

January 7, 2015
Guest Speaker – Dr. Michael Pro
Lorraine Miller, Editor, Chat Topic Researcher

Moderator: Happy New Year and welcome to our first moderated chat of 2015, "What Is Low Vision?" We are very pleased to have Dr. Michael Pro, a glaucoma specialist at Wills. Dr Pro, let's start with the topic question: What is low vision?

Dr Pro: The definition of legal blindness, according to the Social Security Administration, is 20/200 vision or worse in the better seeing eye or a visual field of less than 20 degrees. Low vision is not an exact medical term with a clear definition but it refers to a condition where the visual function is impaired due to a medical condition. The most common causes in the U.S. are diabetic retinopathy, macular degeneration, and glaucoma.

P: What is a visual field of less than 20 degrees? I have copies of my visual fields. Where do I find this information?

Dr Pro: The visual field requirement was defined on the older Goldmann device. But modern tests can be substituted. There are hash marks on the test printout that indicate the degrees from the central point. You can review this with your glaucoma specialist.

P: What are the symptoms of low vision?

Dr Pro: Symptoms can vary widely. In general, low vision refers to impairment in usual visual function such that common activities of daily living are affected. Reading, navigating an unfamiliar area, and recognizing faces are a few examples.

P: Are red-tipped canes only used by those legally blind or are they also used by those with low vision?

Dr Pro: There is no requirement of legal blindness to get a red tipped cane as far as I am aware. I think they help identify profoundly blind individuals to pedestrians and motorists around them. I think this is a safety issue.

P: Does it benefit the patient if he or she is classified as blind rather than low vision as far as available services are concerned?

Dr Pro: Yes, getting a legal blindness definition can help in obtaining services from federal and state agencies. This can include parking placards or help with transportation services.

P: The Snellen chart jumps from 20/100 to 20/200. Isn't that a large step in vision to classify a person as having vision to blindness?

Dr Pro: Yes, there are other charts that can record vision in between; for instance, the ETDRS chart. In addition, new digital wall charts may be able to record vision between 20/100 and 20/200. In these instances, vision recorded worse than 20/100 would meet the definition of "legal blindness." In other words, 20/160 would meet the definition.

P: At what point does a glaucoma specialist discuss low vision with a patient?

Dr Pro: That is a great question. We are confronted daily with patients who have impaired vision. I am often amazed how some patients with very poor vision seem to function without any obvious difficulty and others with seemingly great vision are unhappy. I try to refer to low vision services when the vision falls into the range that we have been discussing.

P: Are there questions I should ask my glaucoma specialist to assess my vision or vision loss?

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"CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

What Is Low Vision?

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Dr Pro: Well, it is instructive to ask whether one has a very constricted field as this can affect the ability to safely operate a motor vehicle. If you have a very constricted visual field, it may fall into the category of less than 20 degrees. Also you can ask what can be done to improve your level of visual functioning. This is where a low vision evaluation can be helpful. A low vision evaluation can determine which devices or behavioral modifications can maximize your visual function. This may include optimizing glasses for particular tasks such as reading, walking, watching TV, and behavioral modification such as deliberate head turning during driving for individuals with good acuity but limited peripheral vision.

P: Apart from some technological aids, are there any clinical ways to mitigate glare or other factors that cause low vision?

Dr Pro: Glare is a common complaint that I hear in my patients with more advanced glaucoma. I think some of this is due to dry eyes. Cataracts may also account for some glare, but some seems to be due to limited vision. I think that amber sunglasses can help, which is a less expensive option, as well as polarized sunglasses, a more expensive choice. It is also very important to do a monthly cleaning of the inside windshield (front and back) for those patients that drive.

P: How can I find a resource for low vision aids in my community?

Dr Pro: First, I like to direct patients to visit lighthouse.org which is dedicated to low vision services and can provide direction to local resources. Patients can contact city or local social services to find low vision resources. For example, down the street from Wills Eye Hospital is the Associated Services for the Blind & Visually Impaired (asb.org). Finally, there are optometrists who specialize in low vision and they can be located by inquiring about them from your glaucoma doctor or by a Google search. An excellent low vision service has been available within Wills Eye Hospital for more than 30 years.

P: Can a doctor predict how long a person with macular degeneration or glaucoma may retain their sight if their existing visual acuities are around 20/20?

Dr Pro: The answer is determined by review of the visual fields, evaluation of OCT or macular imaging in the case of macular degeneration, and review of the history of glaucoma progression. There is no exact science on this determination but a glaucoma specialist can get a gut sense of the risk of visual worsening based on clinical exam, history, and clinical experience with many other patients.

P: Could you describe some of the training that low vision specialists undertake? Are they optometrists or ophthalmologists?

Dr Pro: They are almost always optometrists. I cannot comment as to their training. I will admit that I was not exposed to low vision training during ophthalmology residency where the focus is more on surgical training and medical management of eye disease.

P: What values determine when a glaucoma patient should stop driving at night? Will you as a specialist advise a patient not to drive based on a visual field? Do you have to report it?

Dr Pro: There is a duty to report individuals who have visual impairment that is determined by individual state regulations. Yes, I do have to discuss driving with my patients and it can be a very diffi-

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GLAUCOMA SERVICE FOUNDATION TO PREVENT BLINDNESS

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"CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

What Is Low Vision?

(continued from page 11)

cult discussion.

P: Is degeneration of the optic nerve usually a steady thing or can it halt for a while after some progression?

Dr Pro: By degeneration I think you are referring to on-going damage to the optic nerve due to eye pressure too high for an individual's eye. This is the process of glaucoma and it can be halted in many cases by reducing the eye pressure to a certain level with drops, lasers, or surgery.

Moderator: Thank you so much, Dr. Pro and our chatters.

Dr Pro: Thanks to you and all the chatters. Great questions as

Please support the Glaucoma Service Foundation by making a donation today in the enclosed envelope

GLAUCOMA SERVICE STAFF AT WILLS EYE HOSPITAL

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Mary Jude Cox, MD

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