Eye to Eye

Spring 1998

Table of Contents

• Living with Glaucoma
• Column: Doctor, I Have a Question
• Column: From the Desk of the Executive Director
• The Foundation’s First Glaucoma Awareness Day
• Supplement to Grant Approvals from the Winter ’98 Edition
• The Glaucoma Foundation Attends the American Academy of Optometry Convention
• Brimonidine--Another Glaucoma Medicine
• Let’s Get Acquainted with the Medical Support Network
• 4th Annual Glaucoma Golf Classic
• A Very Special Offer: Coping with Glaucoma
• The Readers’ Corner
When people compliment my eyes, I tell them: “You should see them from the inside out.”

After about 15 years of dealing with glaucoma, you can get used to things like visual field tests, eye drops, pokes in the eye, operations for glaucoma, retina surgeries, cataracts, implants, and other procedures.

What you don’t get used to, if your vision keeps deteriorating, is the fear of going blind. That fear stays with you and each time you struggle to see you are reminded of it.

Of course, you put the fear aside, as best as possible, and continue working, supporting your family, trying to live as normally as possible.

You keep hoping the doctors will find that “miracle” to relieve you of the stress and burden you are under.

You joke about getting a bionic eye but hope that reality will arrive before the year 2014 when you may not be here or no longer care.

When your doctors, among the world’s best, can’t relieve your anxiety, a feeling of helplessness overtakes you, but that too passes and you square your shoulders and go on.

For the individual whose glaucoma is discovered very early and only requires eyedrops, I must implore: “Take your medication faithfully!”

Those whose problems are more serious should understand by now that new medications to reduce pressure, new procedures to reduce scarring, new operational techniques are being advanced continuously, and, even New Age holistic and natural remedies are being explored.

My advice to one and all is:

Don’t give up!

Keep searching for solutions!

If one doctor can’t help you, look for another.

Get as much information about glaucoma and your own case as you possibly can.

Finally, understand that the choice is yours:

You can choose to be a well person who happens to have glaucoma (in which case, it becomes an inconvenience).

OR
You can let the glaucoma dominate your daily life and thus deter you from enjoying life. I wish you all well!

Doctor, I Have a Question

Medical Director, The Glaucoma Foundation Professor of Clinical Ophthalmology and Chief of Glaucoma Service The New York Eye and Ear Infirmary

Q: An optometrist recently said I was "pre-glaucoma." What does this mean and what should I do about it? Thank you.

A: This is another way of saying that you are a glaucoma suspect. Briefly, a glaucoma suspect is someone who might have glaucoma but it's too early to tell. This term includes patients with ocular hypertension (persons with elevated intraocular pressure but no detectable disc or visual field damage), and patients with large cup/disc ratios and normal visual fields who may or may not have early normal-tension glaucoma. Since you have been diagnosed as a glaucoma suspect, it is important that you see your eye care specialist regularly to monitor your condition so that you do not experience any loss of vision.

Q: If a person gets glaucoma under the age of 50, does this mean they have more of a chance of losing some or all of their vision versus a person who gets glaucoma in their 60's or 70's? I keep reading about how fortunate a person is to get glaucoma late in life instead of around age 50. This is quite disturbing for a person who gets glaucoma at 50.

A: Not necessarily. It is the kind of glaucoma, not the age of the patient, that determines the potential for loss of vision. This is why we emphasize the importance of glaucoma testing for early detection of the disease. The earlier a patient begins treatment the more able we are to prevent vision loss regardless of the age of the patient.

Q: Why do some people with glaucoma only need one eyedrop and another person may need two or even 4 eyedrops? Does this mean their glaucoma is more serious resulting in more problems in their future?

A: Some people may have a more advanced case or more serious case of glaucoma and require different drops to assist their eyes with different functions. This does not
necessarily mean that they will have more problems but they may require closer monitoring by their eye doctor.

Q: I've heard that infrared lights (i.e., heat lamps and similar lights) are detrimental to glaucoma patients. Is this true?

A: Not that I know of at this time.

Q: Can glaucoma patients use over the counter cold medicines?

A: Yes. Over the counter cold medicines are meant to be used for a short period of time and have a smaller dosage of the active ingredients that help ease cold symptoms. However, you should check with your doctor before taking any additional medications, so that he or she can determine whether or not your glaucoma treatment will be adversely affected.

Q: I take 2250 mg of niacin a day. Does niacin raise intraocular pressure?

A: No.

Q: Does exercise lower intraocular pressure?

A: Aerobic exercise can lower intraocular pressure for a time. However, other forms of exercise can increase the pressure. You should check with your eye doctor before starting any exercise program.

Q: I was diagnosed with acute angle closure glaucoma in my left eye and have had laser surgery. I also have macula degenerative eye disease and cataracts. Since I depend mostly on my left eye to see, I have been very apprehensive about cataract surgery on this eye. Is there increased danger? I use Pilocar .01% four times daily. Should I get a second opinion?

A: It depends on the exact findings of your condition. You should get a second opinion from a glaucoma specialist to determine the risk factors.
Q: I have been using Trusopt along with two to three other eye drops. I think I may be allergic to the Trusopt. None of my other eye drops worked as well as they do with the Trusopt. Do you know of any other drop that can do the work that Trusopt does or if there is any new eye drop coming out that does? I know there are pills that do the same as Trusopt but I have heard of the many side effects and dread taking them. Thank you.

A: Diamox sequels have the least side effects when taken at bedtime. Xalatan (described in volume 7, issue 3 of Eye to Eye) and Alphagan (described on page 8 of this issue) are other new drops you might want to discuss with your eye doctor.

Q: I am 82 years old and have been fighting glaucoma for 37 years. I have had surgery in both eyes and have lost vision completely in my left eye. What causes the "fog" in my remaining vision? I take Timoptic and Alphagan2. Is the foggy vision I have due to the eye drops, or is this part of going blind?

A: The cause of the fog can only be determined after a careful examination and consultation with your eye doctor. Conditions such as these vary from patient to patient so there is no one answer.

Q: A relative of mine was told that her blood pressure went up when her eye was dilated. Since she has a heart problem, this caused difficulty. Under what circumstances would such a rise in blood pressure occur?

A: The use of phenylephrine (Neosynephrine®) which is used to dilate the pupil, can elevate blood pressure. We used to use 10%; now we use 2.5%. There have been reports of severe reactions such as stroke and heart attack immediately after being dilated; however, this is rare. Neosynephrine acts systemically by raising the blood pressure. Again, it is important that your eye doctor be informed of any medical problems or changes in your medical history at each appointment so that every effort can be made to avoid serious reactions.

Q: After months of trying to control pressure in my left eye with various combinations of drops and pills, a trabeculectomy was performed after which I was diagnosed with malignant glaucoma. Several steps of treatment have resulted in successfully controlling the
pressure now. I have searched for information on malignant glaucoma but can find nothing. Can you tell me something about this condition?

A: Malignant glaucoma is also known as "aqueous misdirection" and presents the greatest diagnostic and treatment challenge of any of the angle-closure glaucomas. In aqueous misdirection, aqueous (the fluid in the eye) is secreted into the vitreous (a gel-like substance that fills the center region of the eye), building up the pressure in the vitreous, and pushing the lens forward into the trabecular meshwork (area that the fluid drains through) to cause angle-closure glaucoma which does not respond to iridotomy (a surgical procedure) and can lead to an angle-closure glaucoma attack. Aqueous misdirection is difficult to understand, not always easy to diagnose, and difficult to treat successfully. Patients with this condition need argon laser peripheral iridoplasty (another kind of surgical procedure) to break the attack and then definitive treatment for whatever mechanism is causing the aqueous misdirection after the iridoplasty. Unfortunately, we don't know at this time what causes this condition or why it is hard to locate. Congratulations on your successful treatment!
From the Desk of the Executive Director

Not yet, but we made progress during the first National Glaucoma Awareness Month in January, 1998. A combination of screenings, community education events, and press coverage continued to move glaucoma towards the universal awareness level needed to prevent unnecessary blindness from this disease.

Glaucoma screenings were a key feature of the Awareness program. For the first time, we spread our network and resources to Pennsylvania and New Jersey. Our screening team appeared at the offices of Merck & Co., Inc., in West Point, PA; Whitehouse Station, NJ; and (in early February) Rahway, NJ, as well as at Continental Airlines at the airport in Newark, NJ. We also conducted a screening at the New York Stock Exchange. All told, during a 30-day period, nearly 1,000 people received glaucoma tests and literature. Many more were exposed to our message that early detection and treatment are crucial to preventing blindness from glaucoma.

Our community education program featured the first ever Harlem Glaucoma Awareness Program, conducted in one of the largest African-American communities in the United States. Our purpose was to draw attention to the fact, which is not well known either among the public at large or among people of African descent, that glaucoma strikes this community at a rate 4 to 6 times higher than it affects Caucasians. (See article on page 1 of this newsletter.)

Our well-established success in attracting press coverage of glaucoma continued through this period:

- Newspaper articles in eleven states brought us more than 594 telephone requests for information, literature and medical referrals.
- CBS This Morning, the network's national morning news program, interviewed doctors and patients made available by The Glaucoma Foundation and presented an excellent report, explaining the disease and encouraging everyone to have regular, comprehensive eye exams.
- A half-hour nationwide cable TV special on glaucoma provided probably the most in-depth coverage of the disease ever broadcast, featuring interviews with doctors and patients and an on-camera demonstration showing that a glaucoma test is simple, quick and painless.
- Ophthalmology Times, widely read by ophthalmologists throughout the U.S., published a full-page public service announcement underscoring how important it is for glaucoma patients to follow their doctors' instructions on taking medicine. The PSA, prepared by CIBA Vision, included a message from The Glaucoma Foundation, inviting readers to call us toll-free at 1-800-GLAUCOMA.
- Continental Airlines, in the January 1998 issue of its in-flight magazine, featured a story about glaucoma and about the screening we conducted at its headquarters. This story carried our message around the world for 30 days!
- In the Salt Lake City, Utah, area, 50,000 leaflets which included an educational message from The Glaucoma Foundation were distributed during January by Cole
Vision Corporation to shoppers in six Super Target store optical departments. Consumers also received copies of our patient literature.

The goal here is really simple: encourage everyone, everywhere to get tested for glaucoma. Achieving the goal is the challenge. Maybe you have an idea for a new approach to spreading the word. If so, call us at 1-800-GLAUCOMA. Thank you.

The Foundation's First Glaucoma Awareness Day in Harlem, New York

by Ali Hodin, Program Coordinator

Joined by dedicated community leaders and glaucoma specialists, The Glaucoma Foundation launched its first education and awareness campaign in New York City's Harlem community on January 26, 1998. Glaucoma is 4 to 6 times more likely to affect individuals of African descent, progresses more rapidly, and results in a higher rate of blindness. This educational event, the first of its kind ever organized by The Glaucoma Foundation, carried an important message to the Harlem community: the need for regular eye examinations, early detection and proper treatment of the disease.

Speakers during the program included: Will Brown, Director of General Services for the Adam Clayton Powell, Jr. State Office Building, which hosted the event; Mark Leeds, Director of the Mayor's Office for People with Disabilities; David Dinkins, former Mayor of the City of New York; Florence M. Rice, President of the Harlem Consumer Education Council; Drs. Alyson Hall and Lanita Scott, glaucoma specialists; Keith Lockhart, a representative from The Foundation's Board of Directors; and Edith Marks and Rita Montauredes, author and co-author of Coping with Glaucoma.

The campaign and its message were well received by those living and working in the Harlem community, as well as by members of the press, all of whom visited throughout the day at the State Office Building. This location, which serves as a magnet in the community, provided a successful forum for informing the public about glaucoma and actively disseminating our educational materials. With approximately 75 people attending the program and more than 50 registering for The Foundation's free mailing list or a future community screening, this event paved the way for The Foundation's future involvement in the Harlem community.

Will Brown was very instrumental in helping The Foundation secure the personal participation of each member of the community's Health and Safety Committee. Because we received a high level of participation from community leaders, we hope to fulfill our mission of educating their constituents - who are affected in disproportionate numbers - about glaucoma.
The campaign was further supported, in spirit and in writing, by New York State Governor George A. Pataki and New York City Mayor Rudolph Giuliani, who each proclaimed this day "Glaucoma Awareness Day" in New York State and New York City, respectively.

Once the presentation ended, members of the public took advantage of the informational tables dispersed around the room to learn more about glaucoma and other eye-related health services. Set up similarly to a health fair, services at each table allowed community members to:

- Register for The Glaucoma Foundation's free mailing list
- Receive The Glaucoma Foundation's free literature and brochures on glaucoma
- Get referrals to a glaucoma specialist
- Test their knowledge of personal risk factors
- Speak to a glaucoma specialist about any eye-health concerns
- Discuss their experiences with a panel of glaucoma patients
- Sign up to participate in an upcoming glaucoma screening in Harlem
- Learn more about low vision equipment and services made accessible through the National Association for the Visually Handicapped (NAVH)
- Obtain information about the free services of the American Foundation for the Blind (AFB)
Supplement to Grant Approvals from the Winter '98 Edition

Evan Benjamin Dreyer, M.D., Ph.D.
University of Pennsylvania, Department of Ophthalmology

Glutamate Excitotoxicity in Glaucoma

Experimentally, eye damage caused by the injection of glutamate (a salt or ester of an amino acid named glutamic acid) into the eye is almost identical to the damage caused by glaucoma. Dr. Dreyer's study will explore whether or not drugs that block glutamate toxicity can also block glaucomatous damage, thereby preserving vision. Studies have also proven that increased glutamate can produce nerve damage (as has been studied in trauma, stroke, epilepsy and AIDS dementia patients, among others).
The Glaucoma Foundation Attends the American Academy of Optometry Convention

From December 11-14, The Glaucoma Foundation attended the American Academy of Optometry Convention in San Antonio, Texas. Our staff hosted an informational booth at this annual conference which brings together optometrists from around the world for continuing education, workshops, and an exhibitor convention to highlight the services and products available from both corporate and not-for-profit organizations.

As a non-profit exhibitor, our goal was to encourage optometrists to utilize the free services that we offer to all eye care professionals, including free patient literature for the office waiting room, and the opportunity to join our mailing list and receive our newsletter. Our booth was visited by approximately 400-500 optometrists, who welcomed The Foundation to the convention and expressed interest in learning more about The Foundation and its programs.
Brimonidine--Another Glaucoma Medicine

Brimonidine is a new drug marketed under the name "Alphagan" by Allergan, Inc. Brimonidine is a highly selective alpha2-adreno-receptor agonist, meaning it stimulates a class of cell surface receptors which reduce aqueous humor production. Instilled twice daily, the drug offers long term intraocular pressure (IOP) control for patients with glaucoma or ocular hypertension and it is currently the only alpha2-agonist to have received FDA approval for chronic treatment.

The IOP lowering capacity (mean 5.9 ± 3.2 mmHg to 7.6 ± 3.6 mmHg at peak) appears to be comparable to that of timolol 0.5% when used as the only therapy. These studies have shown a minimal drift in IOP within one year's time.

The drug appears to be generally well-tolerated by patients and has a favorable ocular and systemic safety profile, but, as with any new drug, this requires long-term follow-up. The potential for allergy, which is common in other common alpha agonists, has been clinically tested - and compared to apraclonidine, brimonidine .2% has a lower reported rate of ocular allergy.

Brimonidine is thought to have other characteristics that could benefit glaucoma research, but the clinical significance of these findings is unknown at present. It has been reported that alpha2-receptor agonists such as brimonidine have neuroprotective activity in models of cerebral ischemia (poor blood flow in the brain) and optic nerve injury, and therefore, could possibly offer a mechanism for delaying optic nerve degeneration, protecting retinal neurons from death, or stimulating re-growth of optic nerve fibers. The drug may also prove to be an appropriate choice as an additive agent for patients whose IOP is not adequately managed with other therapy. Further studies involving brimonidine in simultaneous use with other drugs are required to validate these approaches.

Readers' Note: If you are interested in using brimonidine, you should consult your doctor.
Let's Get Acquainted with the Medical Support Network

Chris Johnson, Ph.D.
Director of Diagnostic Research & Senior Scientist
Discoveries in Sight
Devers Eye Institute

From time to time The Glaucoma Foundation profiles the background and career of those physicians and scientists who provide valuable assistance in directing The Foundation’s research program. This quarter we are pleased to profile a new member of the Scientific Advisory Board of The Foundation: Chris Johnson, Ph.D.

Chris A. Johnson is currently the Director of Diagnostic Research and a Senior Scientist at Discover-ies in Sight/Devers Eye Institute in Portland, Oregon. Dr. Johnson received a B.A. from the University of Oregon, a M.Sc. and Ph.D. from Penn State University, and conducted a two- year postdoctoral fellowship in the Department of Ophthalmology at the University of Florida. Prior to October 1, 1997, Dr. Johnson was a professor in the Ophthalmology Department at the University of California, Davis, where he had been a faculty member for the past 21 years. Dr. Johnson’s research interests are concerned with the development and validation of noninvasive diagnostic test procedures for glaucoma, with particular emphasis on perimetry and visual field testing. He is the author of more than 160 publications in peer-reviewed journals, and has received the Distinguished Service and Honor Awards from the American Academy of Ophthalmology, a Senior Scientist Award from Research to Prevent Blindness and the Glenn Fry Award from the American Optometric Foundation.
4th Annual Glaucoma Golf Classic

August 10, 1998 (Monday)

Nassau Country Club in Glen Cove, New York

This year’s Golf Classic will again feature the “Orange Ball” mini-tournament, and tennis has been added to the list of the day’s activities.

For invitations and information for all events, please call 212-504-1902 or 212-504-1903.
A Very Special Offer: Coping with Glaucoma

In the Fall, 1997 issue of this newsletter, we described this book which has been very well received by patients and doctors alike. Ms. Marks and Ms. Montauredes are working from a unique perspective: each has glaucoma and neither has a medical background. They simply felt that there was a need to address this disease through the eyes of the patient.

Through the efforts of Ms. Marks and Rudy Shur, publisher of Avery Publishing Group, who printed this fine work, The Glaucoma Foundation is able to make a unique offer to our newsletter readers. For each contribution of $100 or more to The Foundation, the donor will receive as a thank you for his or her generosity an autographed copy of Coping with Glaucoma. This is a limited time offer — donations must be received by August 1, 1998 and be accompanied by the coupon on page 15.
The Readers' Corner

Dear Glaucoma Foundation,

Thank you for the research you are doing for glaucoma. I surely appreciate all the valuable information I have been receiving.

I understand that progress is being made in locating the gene which causes glaucoma. I hope it will become a reality real soon.

Doris Johnson, Northwood, ND

Dear Glaucoma Foundation,

Your newsletter has been a source of inspiration for me. Reading the newsletter makes me feel great to know that this organization is committed to eradicating the world of blindness. Thank you so much.

Valeria Wood, Bronx NY

We invite all of our readers to comment, respond or state their views about glaucoma, the newsletter, or The Glaucoma Foundation in "The Readers' Corner." Letters can be published anonymously if desired. We are eager to hear what you think about what we are doing and hope to hear from you soon!