



SEARCHLIGHT ON GLAUCOMA

The Glaucoma Service Foundation to Prevent Blindness

GLAUCOMA SERVICE STAFF AT WILLS EYE INSTITUTE

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REGISTER NOW! Announcing the 2nd Annual CARES Conference *A Year of Progress Through Research*

As you may know, Glaucoma is the most common cause of irreversible blindness in the world, however, if detected and treated early, Glaucoma-induced blindness can almost always be prevented.

That is why the Glaucoma Service Foundation to Prevent Blindness is hosting the **2nd Annual Glaucoma Service Foundation CARES* Conference**

(***C**ommitted to **A**wareness through **R**esearch, **E**ducation and **S**upport) on **Saturday, September 20, 2008**, at Wills Eye Institute from **9:00 AM to 2:30 PM** - to further educate those suffering from Glaucoma and those at risk.

This exciting event will be held on the 8th floor of Wills Eye Institute and will once again provide information sessions and lectures by physicians on the Wills Eye Glaucoma Service, as well as resources available to patients

living with glaucoma. Each session will end with questions and answers. Representatives from pharmaceutical companies with patient assistance programs, Low Vision Services, Associated Services for the Blind, The Glaucoma Research Center and assisted living facilities with low vision services, will all be on hand.

The day will begin with a continental breakfast and exhibition. Topics include: An Overview of Glaucoma, Quality of Life Issues, Adherence/ Compliance, New Medications and New Surgical Trends, Results of Population Studies, Pediatric Glaucoma, and Intraocular Pressure Reconsidered.

We look forward to seeing you there! If you have any questions, please call the Foundation office at 215-928-3190.

Register by:

- Calling: 215-928-3190
- E-mailing: Nancy Petrongolo at npetrongolo@willseye.org
- Mailing your information to: Nancy Petrongolo, Executive Director, Glaucoma Service Foundation, 840 Walnut Street, Suite 1130, Philadelphia, PA, 19107

2nd Annual Glaucoma Service Foundation CARES Conference
Saturday, September 20, 2008
Wills Eye Institute, 8th Floor
9:00 AM Registration
www.willsglaucoma.org

There is no charge to attend, but space is limited so please register early. ■



Letter from the Executive Director

Happy New Year! I hope this issue of *Searchlight on Glaucoma* finds you well.

We are busy preparing for the 2nd Annual **CARES** Conference. The conference will be held on Saturday, September 20th from 9:00 AM to approximately 2:30 PM. We are excited with the program and hope to see you there! Please remember to register early.

There have been a few changes here at the Glaucoma Service Foundation that I would like to share with you. We are sad to report that our Program Director, Ms. Kathy Kuzmanich, has left the Foundation. Kathy was an asset to the Foundation and her contributions will be sorely missed. We certainly wish her well with her future endeavors. As many of you know, long-time Glaucoma Service physician, Dr. Richard Wilson retired from

his private practice. Dr. Wilson recently resigned as the Secretary/Treasurer of the Foundation and we are happy to report that Dr. L. Jay Katz has agreed to fill that position.

In closing, I would like to thank the Foundation's many friends who have so generously supported the work we do. It is with that help, that we continue to make a difference in the lives of glaucoma patients locally, nationally and internationally, through programs such as the **CARES** Conference, the Foundation's website, *Searchlight on Glaucoma* and our clinical and research fellowship training. We couldn't do it without you!

Sincerely,

Nancy Petrongolo

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Glaucoma and Obesity, Is There a Connection?

By: George L. Spaeth, MD

Many years ago, a relationship was found between body weight and the likelihood of people with glaucoma having progressive damage due to glaucoma. In the latest issue of the *Journal of Glaucoma*, the study by Akinci and colleagues from Turkey showed very clearly that overweight children have an intraocular pressure which is markedly higher than children of normal weight.

It took years for the damaging effects of cigarette smoking to be sufficiently accepted that laws were passed to prevent smoking in places where the cigarette smoke could affect those

who were not smoking. Thank goodness those laws were passed. The world is better off because of them. However, it seems both unlikely and unwise to pass laws that make it illegal to be overweight. That is not the solution! However, there is a virtual epidemic of obesity in the United States, and indeed other countries as well. The causes for this have been studied by many, but in the simplest terms the only cause for being overweight is eating more than the body needs. It is a remarkable truth that the overwhelming majority of those I see in the office who are seriously overweight deny that fact. They say

something like, "Well it could not be that I eat too much because I eat like a sparrow." And it may indeed be true that they do eat like a sparrow, but whatever it is they are eating is too much. The amount of food one metabolizes varies with one's genetic nature, one's level of activity, and the types of foods that one eats. Protein, for example, as is found in milk or beans or meats, requires carbohydrates for it to be metabolized. Thus, 1,000 calories of protein presents less of a caloric load to the body than 1,000 calories of carbohydrates.

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Glaucoma and Obesity, Is There a Connection?

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Furthermore, certain foods, such as sugars, cause a secretion of agents such as insulin, which tend to stimulate the appetite. But how foods are metabolized varies hugely from culture to culture and person to person. The undeniable fact, however, is that people who are overweight are eating more than their body is metabolizing.

The recent study by Lee in the Journal of American Medical Association showed that it was possible to predict life expectancy very accurately on the basis of a few measures, one of the most important of which was "body mass index" (BMI) which is calculated as the weight in kilograms divided by the height in meters squared. Many other studies have found BMI to be correlated with illness: hypertension, various cancers, shortness of breath, diabetes, kidney disease and many others.

For many years I have considered a responsibility as a physician caring for patients with glaucoma to speak with those patients who are overweight and indicating to them that for health reasons they should lose weight. The major reason for this is that losing weight is likely to improve their quality of life.

There are many things in the world that we cannot control, but how much we weigh is not one of those things. Unfortunately, many people continue to believe that how much they weigh is not related to how much they eat. It is long past time for that untruth to continue to unfold. ■

Yoga, good for your health... bad for your glaucoma?!

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Yoga exercises have increased in popularity as a part of an active lifestyle. In addition to physical fitness, yoga has been promoted as an alternative form of therapy for chronic illnesses.

Nevertheless, recent studies have described an elevation

in intraocular pressure following Sirsasana (headstand) yoga posture, particularly in patients with glaucomatous optic neuropathy. Would that rise in the intra ocular pressure be harmful?. We report our experience with a case of progressive glaucomatous optic neuropathy in a patient with a history of congenital glaucoma that has been performing the Sirsasana headstand posture during yoga exercises for the past 5 years. She was a 47-year-old Caucasian female with a history of congenital glaucoma, presented with progressive optic neuropathy and decreased visual acuity in the left eye. She had undergone goniotomy in both eyes in the first year of life and filtration surgery on the left eye 17 years prior to presentation. She recently had cataract extraction on her left eye. At presentation, her best-corrected visual acuity was 20/20 in the right and 20/80 in the left eye. The intraocular pres-

sure was 13mmHg in the right and 24mmHg in the left eye with medical treatment. The IOP was unchanged after dilation in both eyes. The optic nerve showed a small healthy cup in the right eye and larger shallow cupping with a full healthy rim in the left eye.

Despite the fact that her intra ocular pressure was apparently controlled in all her check-up visits, there was evidence of progressive optic neuropathy and visual field defects in the left eye. Knowing that she performs yoga exercise, the IOP was measured with the Tonopen XL before, during and after the headstand position. The patient's IOP rose significant from 13 mmHg before the headstand position to 35mmHg in the right eye and from 24 mmHg to 50mmHg in the left eye, during the headstand position. The intraocular pressure after the headstand position decreased to 18 mmHg. The patient reported that she would routinely continue this position for ten minutes approximately three times a week. It is difficult to make a direct causal relationship between the headstand posture and glaucomatous progression, but in patients with pre-existing glaucomatous optic neuropathy, the dramatic change in intraocular pressure is potentially harmful. The sudden increase in pressure may cause ischemic as well as mechanical pressure related damage to the optic nerve fibers. So we would like to raise the attention of the physicians and patients to the possibility of having the Yoga exercise as an underlying factor that may cause worsening of the condition in the predisposed glaucoma patients. ■



FROM THE "CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

Depression in Newly Diagnosed Glaucoma Patients

Moderator: How common is depression in newly diagnosed patients.

Dr. Rick Wilson: As depression is such a subjective problem, it needs to be assessed with developed questionnaires that have been validated on several populations before being used in a study. In a study by Roy Wilson et al., depression scores for patients with glaucoma did not differ significantly from scores of control patients.

In both questionnaires, having past or present mental illness was the only consistent predictor for depression. Among glaucoma patients, the level of visual acuity, the severity of visual field loss, and the use of topical beta blockers were not predictors for depression. (Several earlier studies had suggested that beta blockers could aggravate depression.)

In another study (American Journal of Ophthalmology, August 2007), patients enrolled in a randomized clinical trial were interviewed about their quality of life. Researchers determined that the odds' ratio of reporting mood indicators and symptoms of depression increased with the patients' perceptions of worsening visual function, but not with actual worsening in visual acuity or visual field.

That study says people, especially introspective people --who were more likely to interpret their daily function as decreasing -- were more likely to become depressed, even if their actual visual function was not decreasing.

P: Can frequent self-testing of vision be misleading?

Dr. Rick Wilson: To almost anyone who concentrates on testing his or her own vision and is worried about progression, the tendency is to perceive that they don't see as well as they did last month. Without objective proof, it is easy for them to believe they are losing vision.

Since most glaucoma is controlled with eye drops and laser surgery, most glaucoma patients are stable or

only progressing slowly. A saying in glaucoma is that we only need to maintain vision till mortality, not eternity. That means a slow progression may be acceptable, if it does not result in the patient developing noticeable worsening of visual abilities during his or her lifetime.

P: I thought depression was a common side effect of beta blockers. Is that wrong?

Dr. Rick Wilson: One study of thousands of glaucoma patients in New Jersey found that the use of antidepressants was not any higher in those patients taking beta blockers than it was in those not taking beta blockers. The inference was that beta blockers did not lead to depression.

P: I had functional depression for almost a year after diagnosis of glaucoma. I stopped using Lumigan. After two weeks, my energy returned. At three weeks, I felt completely like my pre-diagnosis self. At four weeks, my appetite returned. Could Lumigan have caused my depression?

Dr. Rick Wilson: Systemic side effects from prostaglandins like Lumigan are infrequent but well known. The most common are muscle aches and pains, with a mild flu-like feeling. I have not heard of prostaglandins leading to depression, but I cannot say that is impossible.

P: Do you find that most people think that a diagnosis of depression is a stigma?

Dr. Rick Wilson: Because depression is a malady of the mind and its chemical balance, and not the body, most people feel it is a stigma -- that depression is too close to having something wrong with your mind.

Depression can be genetic, with a chemical imbalance in the neuro-active chemical agents affecting the brain, but it can also be caused by a life situation, such as the diagnosis of glaucoma, a sight-threatening disease.

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"CHAT HIGHLIGHTS" Depression in Newly Diagnosed Glaucoma Patients

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P: It seems that patient education is one tool to overcome depression in newly diagnosed glaucoma patients. I think it also helps to have a place to get reliable information and talk to others.

Dr. Rick Wilson: That's absolutely correct. I think

it is crucial for the diagnosing doctor to explain that most of the vision lost to glaucoma occurs before the patient sees the doctor and is diagnosed. Once the patient is being treated, further progression usually can be limited.

Moderator: Thanks, Dr. Wilson.

Three New Clinical Fellows on the Glaucoma Service



Dr. Scott Fudenberg

received his Medical Degree with a Distinction in Research from St. Louis University

School of Medicine. Following an internship at St. Louis University Group of Hospitals, he completed an ophthalmology residency at the

University of Kansas School of Medicine and was a co-chief resident. Dr. Fudenberg is interested in glaucoma because of the opportunity to develop close, long-term relationships with his patients. When asked to comment on his choice, he replied, "I am encouraged by prospects of what glaucoma specialists will be able to offer patients in the near future. Increased applica-

tion of new technology in glaucoma management, such as retinal nerve fiber layer analysis, illustrates the significant advances taking place in glaucoma. I am particularly excited by the potential of research in both neuroprotection and the role of central corneal thickening that will provide insight that will help glaucoma patients in the future."



Dr. Anand Mantravadi

received his Medical Degree from Indiana University School of Medicine,

Indianapolis. After finishing an internship at the University of Illinois Medical Center in Chicago, he completed his ophthalmology residency

at The Eye Institute, Medical College of Wisconsin in Milwaukee, where he was a chief resident. Dr. Mantravadi recently commented on his reasons for becoming a glaucoma specialist. "My interests in glaucoma simultaneously began with a research opportunity with Dr. Louis Cantor at Indiana University. As a resident, what began as a curiosity regarding a fascinating disease,

became a strong desire to pursue a career in the sub-specialty as I gained exposure to clinical and surgical glaucoma of adults and children, and had the opportunity to establish long-term relationships with my patients." Dr. Mantravadi is pursuing an academic career with ambitions to combine teaching, research, clinical, and surgical practice at Loyola University in Chicago, IL.



Dr. Arun Prasad

received his Medical Degree from Keck School of Medicine of the University of Southern California, Los Angeles. He

then went on to Detroit Medical Center/Wayne State University for his internship, followed by his ophthalmology residency at Kresge Eye Institute, Detroit Medical Center/Wayne State University. Dr. Prasad became inter-

ested in ophthalmology at first as a medical student while assisting anesthesiology residents with cataract extractions, extraocular and intraocular trauma. His interest remained steadfast and after a particular glaucoma case, his desire to pursue this area of sub-specialty heightened.

"I saw a patient with primary open angle glaucoma who came into the clinic after several missed appointments over the past year. She complained of decreased side vision over

the past several months. Upon examination we realized that she had a small central window of visual field in both eyes. When I presented our findings to her, she was visibly distraught. She told me if she had only known the the consequences, she would have taken her medications as directed and would have made a greater effort to keep her appointments. That experience was powerful and taught me a valuable lesson."



A Piece of My Mind

By: George L. Spaeth, MD

Many patients in my practice today are elderly, a good proportion of them are comfortable from a financial point of view and many live in retirement homes. The overwhelming majority previously had a productive vocation. In response to a question that is a routine part of my history taking, specifically, "What are you doing with your time now?" the answer is almost always, "Nothing." Many feel bored, and almost none are involved in activities directed toward the wellbeing of others.

These individuals could be doing a great deal that would help our world's needs. Other people have had a similar thought, as a result of which there are a variety of opportunities for "retired" individuals to be active in a constructive way.

Several months ago, I asked an 85-year-old, vibrant, well-dressed woman, "What are you doing to make the world better?" Her response was one of stunned amazement. Why would I possibly ask that question? The issue seemed never to have crossed her mind. There was no answer. She immediately started describing her visual symptoms. For the rest of the day, I asked every patient the same question, interposed amongst other routine parts of history, such as, "Are you having any trouble using the eye drops?", "Do you think your visual ability is the same, better or worse than it was when I saw you last?" and other routine and expected questions. The query, "What are you doing to make the world better?" was presented just as if it were a usual part of history taking.

A few people were so dumbfounded that they simply ignored the question. Most were doing nothing that they thought was making the world better;

they justified this by detailing the difficulties they were having in just taking care of themselves. A small portion mentioned volunteer work such as being "active in my church," but on further questioning this involved arranging flowers, counting the money in the collection boxes, cooking for the parish get-togethers, etc.

What was certain was that none of those 30 or so patients that day were thinking beyond themselves, or in some cases their immediate families, or in a few others their parochial community.

The day left me discouraged. Here was a group of relatively wealthy, intelligent, productive people who were for all practical purposes essentially ignoring the current state of the world. The hundreds of thousands of Iraqi citizens dying as a result of an ill-conceived and probably unnecessary war were just too far away to be of concern, the millions of abused woman too distant, the millions of undernourished, sick children with no reasonable hope for things getting better just too remote. Periodically, since that day, I have asked occasional patients the same question, but not in a systematic way. I have difficulty keeping up to schedule and therefore was reluctant to add something to slow me down. One month later, when at the same office, I saw several of the patients again. One told me that, as a result of the question I had asked, she had signed up to go work with Habitat for Humanity in New Orleans. "It was the best week I have ever spent," she added. Another, Mrs. B told me that she had decided to use extra land she had for a camp to which she would invite young Palestinian and Israeli boys and girls to come spend a month together in order to get to know each other.

Two out of thirty is a relatively low percentage, but much higher than zero. Furthermore, if a single incidental question included amongst many others that are a part of the routine history-taking can trigger useful action in around six percent of people, the question would seem to be worth asking routinely.

A major proportion of those who live within the United States consult a physician at least once yearly. What would happen if at each one of those visits every physician asked, "What are you doing to make the world better?" as a routine part of the examination? My hunch is that it would have a significant effect on the patients, helping them to get past their fixation on themselves and their tiny surroundings. That in itself would probably help them to become healthier, happier people. Probably such a question would help broaden the physicians and their staffs as well. Additionally, the medical profession would come to be perceived as a group of people sincerely concerned about the wellbeing of the world, as well as their individual patients.

A well-done study seems appropriate, designed to determine if a simple question from a physician can affect the way patients behave on a broad scale. Until that question is answered, I think it is worth spending an additional 30 seconds or a minute with each patient asking, "What are you doing to make the world better?"

References

Action Without Borders

(www.idealists.org)

American Red Cross

(www.redcross.org)

America's Promise –
The Alliance for Youth

(www.americaspromise.org)

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AmeriCorps (www.americorps.gov)
 Elderhostel (www.elderhostel.org)
 The Executive Service Corps
 (www.escus.org)
 Experience Corps
 (www.experiencecorps.org)
 Generations United (www.gu.org)
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 (www.habitat.org)
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 National Retiree Volunteer Coalition
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Points of Light Foundation & Volunteer
 Center National Network
 (www.pointsoflight.org)
 Service Corps of Retired Executives
 (SCORE) (www.score.org)
 Senior Corps (www.seniorcorps.org)
 United Way of America
 (www.unitedway.org)
 USA Freedom Corps
 (www.usafreedomcorps.gov)
 Volunteer Match
 (www.volunteermatch.org)
 Volunteers in Medicine (www.vimi.org)
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 (www.volunteersofamerica.org)

CHAT SUPPORT GROUP

www.willsglaucoma.org

**1st and 3rd Wednesday of
 the month 8:30 – 9:30 pm**
*Hosted by a Wills Glaucoma
 Specialist*

Mondays, 8:00-9:30 pm
*Patients and family
 members only*

FROM THE "CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

Glaucoma and Blepharitis

P: Is blepharitis an infection, an allergy, an inflammation, or something else?

Dr. Pro: Blepharitis is very common and not unique to glaucoma patients. It affects people of all ages, with or without glaucoma, but it is not an infection. Rather, it is inflammation of the eyelids. Specifically it refers to a build-up of oil and debris on the lashes and lids. Most commonly, this is due to dysfunction of the oil-producing glands in the lids, the Meibomian glands.

P: How is it diagnosed? Are there specific blepharitis tests? Does it involve blood work or eye exams?

Dr. Pro: The diagnosis is clinical. There is no blood test or any specific exam tests. Rather the diagnosis rests on the appearance of the lids in the office as well as patient complaints. Patients often feel that the eyes are irritated, itchy and burning. The examiner may see red, inflamed lid margins and oily build-up. Also there is associated breakdown of the usual tear film and the cornea may be dry.

P: You say there is a breakdown in the tear film. Does blepharitis affect tear production?

Dr. Pro: Not directly, but the normal tear film is composed of three units. There is an aqueous part, an oil part and a mucus part. If any part is out of order then the

tear film does not coat the cornea properly and the eye feels irritated.

P: Is blepharitis of greater concern to patients who have had a trabeculectomy?

Dr. Pro: Perfect lead in! Yes, it is a problem in these patients because it can cause a bleb infection (blebitis) if the blepharitis is bad enough. Above I had spoken about the bacteria in the lids; in blepharitis the bacteria are sometimes over-represented by species that may cause infection.

P: Are styes and chalazia often seen in folks with blepharitis?

Dr. Pro: More frequently than with others, yes.

P: Do warm compresses help?

Dr. Pro: They help in resolving chalazia or styes.

P: Dr., are there any other implications for glaucoma patients specifically?

Dr. Pro: Well, the other area of concern is in patients that need surgery. If a patient has blepharitis I try to clear it up before surgery because there is a higher risk of post-operative infections in patients with moderate or severe blepharitis



The 29th Annual Wills Eye Institute Glaucoma Conference

By-Jonathan Myers, MD

Last week, two dozen glaucoma specialists and comprehensive ophthalmologists from across the United States and Canada joined together to discuss current issues in the diagnosis and management of glaucoma in the 29th Annual Wills Eye Institute Glaucoma Conference. The meeting followed the new format initiated last year in which every doctor was a participant: not just listening to talks by experts, but also presenting their own issues and discussing the other talks. In this active format each doctor presented a case or issue in the management of glaucoma, and after each presentation there was spirited discussion of the issues involved

by the entire group.

The topics discussed included current clinical challenges- such as patients with progressive glaucoma at low pressures- as well as more academic subjects such as the current knowledge of genetic causes of glaucoma. There were great discussions about medical therapy- how to choose regimens which are easier for patients, how good patients are at remembering to take their drops, and, given the costs and inconveniences of eye drops, how much medication it is reasonable to ask a patient to take before moving on to laser or surgical treatments. On the

last day, physicians shared and compared their surgical techniques for cataracts and glaucoma.

The meeting's greatest strength was the discussion that came out of busy clinicians listening to their colleagues' experiences and frustrations. Although there were few points on which everyone agreed, all of the participants found it valuable to hear what was and was not working for other physicians as they treated their patients, and I think we each took away more than a few ideas from the others that may help us to best take care of our patients with glaucoma. ■

Printing and distribution of the Searchlight are made possible through a grant from the Scholler Foundation and generous contributions of our donors.

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