



Board of Trustees: Dr. Zeff Lazinger, President • George L. Spaeth, MD, Director of Medical Research and Education
L. Jay Katz, MD, Secretary • Jeremiah White, Vice President • Richard Smoot, Treasurer

Bonnie Carr Long • Steve Harmelin, Esquire • Jeffrey D. Henderer, MD • Hyman Lovitz, Esquire • Jonathan S. Myers, MD
E. Lewis Pardee • Leonard Rosenfeld, PhD • Irvin Schorsch • George Strimel • Chris Urban • Elaine Watson • Richard P. Wilson, MD

Honorary Trustees: Francesco & Charlotte Bonmartini • James Kim

Announcing the 4th Annual CARES Conference

Another Year of Progress Through Research You Still Have Time to Register-Please Register Now!!

Since January 2007, the Glaucoma Service Foundation to Prevent Blindness at the Wills Eye Institute 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 170 patients and their families from around the United States (primarily Pennsylvania, New Jersey, Delaware, and New York) attend this conference at Wills Eye Institute.

The event includes lectures given by Wills Eye glaucoma physicians. Free screenings for glaucoma are offered and encouraged. In addition, education resources and information are available at the CARES Conference to patients living with glaucoma.

The Glaucoma Service Foundation to Prevent Blindness is hosting the 4th Annual Glaucoma Service Foundation CARES* Conference (*Committed to Awareness through Research, Education, and Support) on Saturday, October 23rd, 2010, at Wills Eye Institute from 9:00 AM to 2:30 PM to further educate those suffering from glaucoma and those at risk.

Representatives from pharmaceutical companies with patient assistance programs, Low Vision Services, Associated Services for the Blind, and the Glaucoma Research Center will be on hand. Guest speakers will include Ray Kornman, Outreach Specialist of the Seeing Eye, Inc. Mr. Kornman will present “Is a Seeing Eye dog right for you?” and discuss the benefits of owning a guide dog and the prerequisite skills required to be successful working with a dog. Cherie Bank, former

Channel 10 medical news reporter and Wills Eye Patient will also be a featured speaker.

The day will begin with a continental breakfast. We look forward to seeing you there!

Here is the list of some of the exciting lectures that will be presented:

- Doctor Do I have Glaucoma?
– Dr. Spaeth
- Glaucoma: Looking into the future– Dr. Katz
- Laser iridotomy for narrow angles
– Dr. Fudenberg
- New glaucoma surgeries
– Dr. Pro
- What eye pressure is safe for me?
– Dr. Niknam

(continued on page 2)

MEETING THE CHALLENGE OF GLAUCOMA THROUGH EDUCATION AND RESEARCH

Please consider us when you are planning your estate. Help us to fight this progressive disease. Please contact Dr. Zeff Lazinger, Chairman of the Board at 484-362-8800 to make an appointment.



Announcing the 4th Annual CARES Conference

(continued from page 1)

- Epidemiology of Glaucoma
– Dr. Henderer
- Are some doctors better than others? - Dr. Schmidt
- How does your doctor decide if your condition is deteriorating? How do we measure progression?
– Dr. Moster
- Limitations of eye drops
– Dr. Myers

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

There is no charge to register. Space is limited, however, so please register now.

Register by email, website or telephone

E-mailing:

Rita Stern (rstern@willseye.org)
or Robert Kump (rkump@willseye.org)

Via Phone:

Please call Rob Kump at 215 928-3190. We will need your name, address, phone number, and number of guests.

Website:

www.willsglaucoma.org/cares2010.htm. This takes you to a web page dedicated to CARES with information on registration, parking, accommodations, etc.

There is no charge to register but space is limited, so please register NOW!

Suggested Treatment for Irritated Lids, Tired Eyes and Dry Eyes

George L. Spaeth, M.D.

As tissues become traumatized, they lose some of their natural functions. Normally the tissue that covers the surface of the eyes – the conjunctiva – secretes a mucous that helps keep the eyes lubricated. Also, many glands in the margins of the lids secrete a fatty material that also lubricates the eye, so that the surfaces do not dry out. This allows the lid to move up and down over the front of the eye without “scratching” it. Things that traumatize these tissues include the preservatives in eye drops, a dry environment and age itself. The glands tend to get plugged up as a result of which not only do their valuable lubricants not do their job, but also the bacteria which are in abundance on all of us multiply and can cause problems.

Solutions:

- 1)** Avoid very dry situations,
- 2)** Avoid preservatives, if possible,
- 3)** Heat the tissues so that the fatty material in the lids is liquefied and is more easily secreted, and
- 4)** Have a diet which provides the proper nutrients to keep the fatty material healthy and more fluid.
- 5)** Stopping aging is not a reasonable option.

1) Avoid very dry situations. Keep the environment in which you live and work reasonably moist.

This can be accomplished by having lots of houseplants, keeping the thermostat down, and/or using a humidifier.

2) Avoid preservatives, if possible. Almost all eye drops are required to have preservatives in them so that if they become contaminated with bacteria, the bacteria do not multiply and cause a problem. Using eye drops is often necessary to preserve the health of the eye, but such a use is always a two-edged sword; eye drops should only be used when needed (as in many people with glaucoma). Some artificial tears have preservatives in them, and using them may actually make “dry eyes” worse. Some artificial tears, now, however, are manufactured without preservatives, and they can be helpful.

3) Heat the tissues. Heating the tissues is one of the most valuable general measures to help preserve health. That is why hot baths, saunas, steam baths, etc. have been used by almost every culture in the world. Giving the eyes a hot bath can be very helpful, increasing blood flow to the area, cleansing and liquefying substance such as fatty materials that become more solid when they are cooler.

(continued on next page)



Suggested Treatment for Irritated Lids, Tired Eyes and Dry Eyes

(continued from previous page)

4) Diet. Certain substances, such as fish oil, flaxseed oil and primrose oil can change the basic composition of the fats in the body. That is why they are sometimes advised for people who have elevated cholesterol, and have been found to be effective in reducing the agents of heart attacks. Recent evidence has shown that Omega-3-containing substances affect the way chromosomes age, and may be able to slow down the normal process of aging. There is some evidence that people with “dry eyes” can decrease their symptoms by using such agents.

How to Use Hot Compresses

Fill the sink with hot water from the tap. It does not need to be boiled water from the stove. It should be hot. It should not be hot enough that it burns your hands, but it should be hot enough that it is a little bit uncomfortable on your hands. Place a face cloth or a small towel in the hot water in the sink. Bend over the sink. Close the eyes. Fold the towel so it is crumpled up so it is about two inches wide in the vertical direction and about six inches wide in the horizontal direction. Put the hot towel over the closed lids and press moderately against the towel so the towel pushes against the closed

lids. Hold the towel in that position for about one minute. By that time the towel will have gotten cool. Put it back in the hot water in the sink and again put it on the closed lids for about a minute. Do that about five times for a total of five minutes.

Note: the lids should be closed, the water should be hot, and there should be some pressure placed against the lids by the hot towel. Do not try to do this using cotton balls or small compresses. That will not do anything beneficial. Those small cotton balls do not hold enough heat to make a difference. Running hot water from the shower on the closed lids is not a substitute for the hot compresses. Shower water is not as hot, and by the time it lands on the lids it is cooler, and the tissues do not get as heated as with the hot compresses.

I suggest purchasing the flaxseed oil in capsule form. It usually comes in 1,000 mg. capsules. There may be an advantage in buying organic flaxseed oil, but that has not been demonstrated. Flaxseed oil can also be purchased in a bottle, so that the required dose can be taken by a spoon or used on a salad or in some other way. Europeans use flaxseed oil this way, and also use the whole grain flaxseed on their cereals.

Omega III and Omega VI Fatty Acids

Primrose oil is similar in composition to flaxseed oil, but tends to cost more.

Fish oil comes in various forms. Purchase a type which is high in Omega-3. Cod liver oil is not the best in this regard. A problem with fish oil is that the oil usually comes from the liver of the fish, and livers serve as ways the body filters out harmful products. Consequently, mercury tends to be concentrated in the liver. Some fish liver oils have toxic levels of mercury, especially those made from salmon, as salmon is one of the fish which is most likely to have toxic levels of mercury. When you are purchasing fish oil, purchase a brand which says in a believable way that it does not contain mercury.

The studies which have demonstrated a beneficial effect on the cardiovascular system have mostly been done with fish oil. Some of those who have studied the effects of these agents, however, believe that the Omega-6 compound is also important, and there tends to be more Omega-6 in flaxseed oil than there is in fish oil. Taking one 1,000 mg. capsule of Omega-3 fish oil and one 1,000 mg. capsule of flaxseed oil or primrose oil makes sense, as it may provide the widest range of beneficial compounds. ■



Welcome New Fellows



Dr. Shelly Gupta received her medical degree from Northeastern Ohio Universities College of Medicine where

she graduated with Honors in Ophthalmology, Surgery, Radiology, Family Medicine, Pediatrics, Internal Medicine, and Obstetrics and Gynecology. After graduation, she did an Internal Medicine internship at Good Samaritan Hospital in Cincinnati, Ohio. Dr. Gupta then completed her ophthalmology residency

at The University of Alabama at Birmingham. During her time at The University of Alabama at Birmingham, Dr. Gupta was awarded the Lynn B. McMahan, M.D. Award for Outstanding research, she served on the Board of Directors of the Alabama Academy of Ophthalmology, and she participated in numerous community outreach projects both locally and abroad.

When asked about her thoughts for this coming year, Dr Gupta replied, "I am extremely excited to be a Glaucoma Fellow at the Wills Eye Institute. I find glaucoma fascinating

because of its diversity of presentation, its challenge of diagnosis, and its broad scope of treatment. I look forward to learning about the cutting-edge imaging modalities and seemingly endless surgical advancements from the experienced and well respected physicians at Wills Eye. I am also eager to build close relationships with the patients of the Glaucoma Service as we work together to prevent vision loss and save sight. Serving patients as a glaucoma specialist will truly be an honor for me."



Dr. Kathryn Burleigh Freidl graduated from Jefferson Medical College with Honors in several disciplines, includ-

ing Ophthalmology. In addition to her studies there, she spent several years as a member of the student government and received the Helen and Gabriel Levine Scholarship for medical research endeavors. After graduation, Dr. Freidl traveled a few blocks north to complete her medical internship at the Albert Einstein Medical Center of Philadelphia. Dr. Freidl then went on to complete her Ophthalmology residency at Mount Sinai Medical Center in New York City.

Dr. Freidl has now returned to Philadelphia to complete a Glaucoma Fellowship. She was asked why she chose to pursue her glaucoma fellowship at Wills Eye Institute. "I am so excited to work with the people here.

It is a wonderful patient population and there is such diversity in patient backgrounds, ages and treatment challenges. I am looking forward to a great year with the doctors of the Glaucoma Department at Wills Eye. These doctors are excellent clinicians, surgeons, teachers and scientists, but even more importantly, they are good people. Glaucoma is an exciting field with options like medi-

cines, lasers or surgeries, but the most important aspect is your relationship with your patients. I am passionate about preserving vision, and I love helping people to see better. Changes in vision alter the way we interact in the world. But the day- to-day joy of coming to work is really about the good long term relationships we have with our patients."

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

Current and archived chat highlights are available for review 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 specific topic, please let us know.



Rob Goulet comes to Philadelphia from his hometown of Indianapolis, Indiana. His medical school, internship, and residency were all completed in Indianapolis on the campus of Indiana University School of Medicine. He served as chief resident of the Methodist Hospital transitional year in 2008/2009 and as academic chief resident in ophthalmology

in 2009/2010. As an elected member of the Gold Humanism Honor Society, he has been recognized for his "demonstrated excellence in clinical care, leadership, compassion and dedication to service."

His chairman at Indiana University is a former Wills glaucoma fellow and offered this assessment of the fellowship: "In my opinion, it's the best in the country." "As you progress through your medical training, you become very aware of the responsibility owed to your patients in regards

to providing the highest quality of clinical care. Eventually, we all must leave the sides of our mentors to fulfill this responsibility on our own. The quality of those individuals with whom you have trained has an enormous impact on your evolution into an independent physician," states Dr. Goulet. "It is an honor to be able to continue this process with the patients, staff, and physicians that make Wills Eye such an esteemed and respected institution."

FROM THE "CHAT HIGHLIGHTS" OF THE GLAUCOMA SERVICE WEBSITE

"Am I a candidate for new glaucoma surgery?" Chat Highlights June 2, 2010

Steven Beck, Editor

On Wednesday, June 2, 2010, Dr. Michael Pro, a glaucoma specialist at Wills, and the glaucoma chat group discussed "New" Glaucoma Surgery.

Moderator: The topic tonight is "Am I a candidate for new glaucoma surgery?" Dr. Pro, what are the new surgeries under consideration.

Dr. Pro: It's a great topic, I think. Let's talk about the ECP, Canaloplasty, ExPress Shunt, and Trabectome if time allows.

Moderator: OK. Do you want to start at the top with ECP? What is ECP?

Dr. Pro: ECP (Endocyclophotocoagulation) is in an interesting subset of glaucoma treatment modalities. See, with most glaucoma surgeries you are working on the outflow side of the equation. So, the IOP is too high and you are basically making a new drain.

That's what we do with trabs and tube shunts, but ECP belongs to the subset of "cycloablative" surgeries where you are trying to reduce the amount of fluid that the eye naturally makes, basically "turning down the faucet". ECP is a special probe that is inserted into the front of the eye, most often during routine cataract surgery, and on a monitor the surgeon applies laser energy with the probe to shrink the glands that make aqueous fluid. These glands are called the ciliary body and are located right under the iris.

P: Can ECP follow a failed trabeculectomy or shunt implant surgery? Is it a "last ditch" plan?

Dr. Pro: It can be. In a sense right now we see the ECP used in two ways. First, it is frequently used in patients who are undergoing routine cataract surgery. A patient may have early glaucoma or ocular hypertension and be on one or two drops. ECP can be done during surgery in the thought that the IOP could be controlled post-op and the patient may not



"Am I a candidate for new glaucoma surgery?"

(continued from page 5)

need more drops. Second, ECP can be used in patients with "refractory glaucoma." These are patients who have had several glaucoma procedures. Perhaps there isn't really room for another tube shunt and the ECP can be considered as an attempt to control the IOP.

P: Can ECP be done as a stand-alone surgery or is it always in conjunction with cataract surgery?

Dr. Pro: It is most often done with the cataract surgery, but it can be done as a stand-alone. It is technically easier to do at the time of cataract surgery as the view of the ciliary body through the probe is often clearer than in an eye that had cataract surgery years ago.

P: Can too much ciliary processes be effected and the eye not produce enough fluid post ECP surgery?

Dr. Pro: Yes, hypotony (a low IOP) is a possible adverse outcome. It is more common with the predecessor of ECP which is trans-scleral cyclophotocoagulation (TSCPC). That procedure is a non-cutting surgery where a probe delivers laser energy through the eye wall to shrink the ciliary body. It is often reserved for more poorly sighted eyes.

Moderator: Shall we discuss canaloplasty?

Dr. Pro: OK. Canaloplasty is a newer procedure, more like a trab in the sense that you are trying to improve on aqueous outflow. It is limited to open angle glaucoma. It is often performed as a stand-alone procedure, but can also be done at the time of cataract surgery. The approach is a bit like a

trab, but in this surgery a fiberoptic cannula is advanced through the Schlemm's canal, a collector channel that runs around the eye. A fine suture is tied off in the canal and this dilation of the canal improves the outflow of aqueous fluid from the eye. In addition some aqueous fluid percolates out from where the flap incision is located at the top of the eye.

P: What makes a good candidate for canaloplasty?

Dr. Pro: Well, you need to have an open angle. Angle closure patients won't work because their natural drain is scarred shut. Also we don't yet have great data comparing this surgery to standard trabeculectomy, so it might not be as good at getting the IOP quite as low as in a trab. Persons with normal tension glaucoma who need a really low IOP might do better with a trab. It might be better for someone with early glaucoma, or someone who would do better without a high bleb (like a person who insists on continuing contact lens wear after glaucoma surgery).

Moderator: Excellent. Let's move on to ExPress shunts.

Dr. Pro: OK, the ExPress shunt has been around for a while now, but is getting more traction these days. It is a small stainless steel device that is used to augment standard trabeculectomy surgery. The device is seated under a scleral flap and may help improve post-operative success by creating a more controlled aqueous flow under the flap. Some surgeons also feel it helps create a more desirable bleb development.

(continued on next page)



"Am I a candidate for new glaucoma surgery?"

(continued from previous page)

P: What is the benefit of this shunt in combination with a trabeculectomy? What determines when the ExPress shunt is used in combination with a trabeculectomy and when a trabeculectomy should be performed without the shunt?

Dr. Pro: Well, there are no hard and fast rules. Some surgeons like to use the ExPress shunt when a standard trab has failed. Instead of moving on the larger tube shunt, an ExPress shunt can be tried. The thought is that maybe the patient would have a better outcome, with less chance of failure.

P: Will an ExPress shunt added to the trabeculectomy provide a lower IOP than just a trabeculectomy?

Dr. Pro: No. In fact one of the advantages of the Express may be that it prevents some cases of too low IOP which can be seen in standard trabeculectomy.

P: Is anyone at Wills Eye Institute trained in the ExPress shunt?

Dr. Pro: All of us are familiar with it and I would think just about all of us have used it. I perform ExPress shunt surgeries occasionally. Some of my colleagues are big proponents.

P: Dr. Pro, have you heard about the Gold Micro Shunt (by Solx)?

Dr. Pro: Yes, this is a device that has been in development for years now. It tries to improve outflow by shunting aqueous flow to the supraciliary space (a potential space between the vascular

plexus within the eye and the eye wall). Newer generations of this device have been developed and are showing promise to lower the IOP. We need more data on this device, but it may be a promising new surgical option.

P: Dr. Pro, do you want to say a word about trabectome? There's a lot to discuss in each of these new surgeries! What is a trabectome and who's a candidate?

Dr. Pro: Briefly, the trabectome is a new device which revives an old procedure. Angle surgery is usually done on congenital and pediatric glaucoma. The theory is that there is a membrane which is blocking aqueous outflow to the Schlemm's canal. In one technique a needle is passed into the eye and the membrane is opened. This can be very successful in pediatric glaucoma, but showed much less success in adult glaucoma. The trabectome is a device which is passed through the eye and which cuts through the eye tissue covering the Schlemm's canal. This "unroofs" the canal and has been effective in many patients. It can be done as a stand-alone procedure or at the time of cataract surgery.

P: Which new surgeries, when done, make it impossible to do a trabeculectomy or add a shunt in the future?

Dr. Pro: The canaloplasty needs a large superior conjunctival incision and may make another trab difficult to perform. So would the gold shunt or ExPress shunt.

(continued on page 8)



**GLAUCOMA SERVICE
FOUNDATION TO PREVENT
BLINDNESS**

Editor: Rita Stern
rstern@willseye.org

840 Walnut Street
Philadelphia, PA 19107-5109
215-928-3190
www.willsglaucoma.org

Printing and distribution of the Searchlight are made possible through generous contributions of our donors.

"Am I a candidate for new glaucoma surgery?"

(continued from page 7)

P: How many trabs and/or shunts have you ever seen in one eye?

Dr. Pro: I have seen three tubes in a single eye, with several failed trabs.

P: Is there data on the life of a trab with a shunt compared to just a trabeculectomy?

Dr. Pro: No, not yet.

Moderator: That about wraps it up! We're out of time.

P: This has been a lot of information. I think sometime in the future it might be nice to just have a discussion more in depth about one or two of these subjects.

Dr. Pro: I think that was a good chat! Thanks for all the great questions. Good night.

GLAUCOMA SERVICE STAFF AT WILLS EYE INSTITUTE

Mary Jude Cox, MD
Scott Fudenberg, MD
L. Jay Katz, MD
Marlene R. Moster, MD
Jonathan S. Myers, MD
Rachel Niknam, MD
Michael J. Pro, MD
Courtland Schmidt, MD
Geoffrey Schwartz, MD
George L. Spaeth, MD
Patrick Tiedeken, MD
Tara Uhler, MD