

Optometry Town Hall Meeting

Meeting with the Executive Director of the POA (Joe Ricci) as well as the POA lobbyists (Ted Mowatt, Mike and Amy Long).

Will discuss the current legislation being introduced that will impact the Optometric field.

Youngwood Fire Hall

104 S 2nd St, Youngwood, PA 15697

Sunday April 30th 9am to 11am

About 2 miles from the New Stanton exit of the turnpike.

Any questions, contact Ed Brajdic (724)989-8973 or myself (412-200-8588.)

Selective Laser Trabeculoplasty

Like Another Drop

Christopher N. Carver, OD
Sightline Ophthalmic Associates
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Setting stage for my presentation today

Consider yourself, in the exam room, face to face with a patient.

All of your testing and exam work has been completed.

Determined that patient has glaucoma (new diagnosis) or a current glaucoma patient has progressive changes.

Diagnosis.....Prognosis.....Treatment

Mr./Mrs. Jones...I have determined through my exam and testing that you have glaucoma/your glaucoma is getting worse.....I believe we need to.....

Why is this important??

Glaucoma is the second leading cause of blindness in the world according to the World Health Organization

1. Cataracts
2. Glaucoma
3. Age Related Macular Degeneration

May I digress for a moment... Glaucoma Diagnosis

Generally speaking, it is PROGRESSIVE optic atrophy

Diagnosis based upon:

- Case History (family history, medical history, age, race)
- IOP
- Slit lamp exam (angles, pigmentation, pseudoexfoliation, etc.)
- Optic Nerve appearance (DFE as well as photos)
- Pachymetry
- Visual Field
- OCT (Retinal Nerve Fiber Layer and Ganglion Cell Complex)
- VEP/ERG

“Typical Optometric Training”

Glaucoma Treatment Progression:

1. Drops
2. Laser
3. Surgery



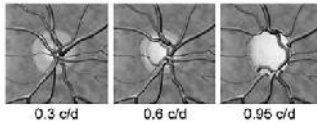
Due to ALT damage?

Goal of Treatment

Lower IOP and MAINTAIN lowered pressure

- Done to limit optic nerve damage
- Goal is to prevent long term vision loss

Glaucoma progression
(measured in cup-to-disc ratio)



Options to Lower IOP

Drops - multiple categories

Laser Treatment - SLT and ALT

Ciliary Body Treatment (ie. cyclophotocoagulation)

Surgery - tubes, trabs, shunts, MIGS

Homeopathic - diet, exercise, supplements, sleeping position

Benefits of Eyedrops for Glaucoma Treatment

THEY WORK!!

- Backed by years of use and numerous studies
- We are comfortable in prescribing

Low Risk

- Allergies
- Interactions

Lots of choices



Typical Glaucoma Patient "Look"



Issues with Eyedrops

Side Effects

- Prostaglandin Analogs - possible changes in eye color and eyelid skin, PAP, stinging, blurred vision, eye redness, itching, burning, inflammation, macular edema, reactivation of HSK, eyelash lengthening
- Beta Blockers - low blood pressure, reduced pulse rate, fatigue, shortness of breath; rarely: reduced libido, depression
- Alpha Agonists - burning or stinging, fatigue, headache, drowsiness, dry mouth and nose, relatively higher likelihood of allergic reaction

Issues with Eyedrops

- Carbonic Anhydrase Inhibitors - in eye drop form: stinging, burning, eye discomfort; in pill form: tingling hands and feet, fatigue, stomach upset, memory problems, frequent urination
- Cholinergics (miotics) - brow ache, headache, pupil constriction, poor night va

- Study of 4,017 patients showed 57% experienced at least one symptom after drop instillation

Issues with Eyedrops

Cost

- Drop prices and Copays increasing
- Costs to your practice - phone calls (patient and pharmacy), authorizations, refills, etc.

Administration

- Dexterity
- Aim

Issues with Eyedrops

Refills

- Getting refill submitted and picking up

Perceived benefit vs lack of concern for vision loss

- with limited symptoms, patients have a hard time believing there is benefit from treatment

Issues with Eyedrops

Finally.....

The Elephant in the Room....

Issues with Eyedrops

**DROPS
ONLY
WORK
WHEN
TAKEN!!**

Adherence and Persistence

Adherence - patient's "willingness" to stick to treatment

Compliance - patient's "comply" with doctor's orders

Persistence (Discontinuance) - sustain use of medication

White Coat Adherence - use of medication as directed around the time of an appointment

My patients are lying to me!!!

Hard to measure Adherence and Persistence - survey vs. mechanical vs. pharmacy records

In the Glaucoma Adherence and Persistence Study (GAPS), 89% of people reported taking their medication everyday, by pharmacy records, these patients only had 64% of the medication required to take every dose

Over half of the 10,620 participants (55%) stopped and restarted their meds within a 12 month period

Only 10% of participants filled their prescriptions continuously for 12 months

In another study 25% of the participants (2,440) filled an initial prescription but never filled a second.

Another study of 3,623 patients revealed that nearly half discontinued all medications by the end of 12 months

Liar, Liar, Pants on Fire!

Adherence to Glaucoma Medications Over 12 Months in Two US Community Pharmacy Chains

Michael Feehan 1,6*, Mark A. Munger 1, Daniel K. Cooper 2, Kyle T. Hess 2, Richard Durante 3, Gregory J. Jones 4, Jaime Montuoro 5, Margaux A. Morrison 6, Daniel Clegg 6, Alan S. Crandall 6 and Margaret M. DeAngelis 6*

J. Clin. Med. 2016, 5(9), 79; doi:10.3390/jcm5090079

As has been reported extensively in the literature, adherence was considered unsatisfactory if medications were not available at least 80% of the time.

Overall, approximately 2/3 of patients did not possess enough medications to use as directed!

Travatan Dosing Aid Study

CONCLUSIONS:

Nearly 45% of patients using an electronic monitoring device who knew they were being monitored and were provided free medication were non-adherent!!

Pants are Still on Fire!!

According to Schwartz and Quigley, research brings the “unwelcome conclusion that persistence with initial glaucoma medication is as low as 33%–39% at one year”.

My patients follow my instructions!

Do you have patients who:

- Say they use their drops
- Have consistently good IOP's
- Attend most if not all of their post op visits
- BUT THEY SHOW PROGRESSION IN FIELD LOSS OR NERVE FIBER LAYER LOSS.....

- MORE THAN 80% OF PATIENTS ADHERE TO THE PRESCRIPTION 5 DAYS BEFORE AND AFTER A SCHEDULED APPOINTMENT!!

My Patients Are Adherent...

Most of the studies have concluded that physicians are poor at predicting the degree of patient compliance and patients consistently over represent their degree of adherence.

Ways to improve adherence to prescribed drops

Ask patient questions in a non-judgmental or threatening manner

What drop are you taking? Don't know = worse compliance

Issues with taking the drops? Cost, running out/refills, forgetting, side effects, administration (ask them to demonstrate their technique)

Ask when they last used their drop and how often they miss or skip a drop. Skipped drops is very specific for nonadherence

Ways to improve adherence

Discuss dosing schedule and how it fits into the patient's schedule.

- Leave drop at work if they forget in the morning
- Leave drop near coffee pot or toothbrush
- Set up cell phone reminder

Poor attendance to follow up exams = poor adherence

- Phone call reminder works best

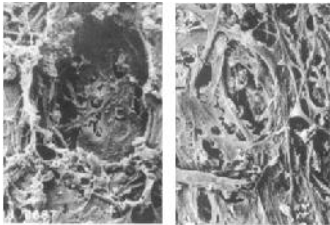
Where do you go from here?

Wouldn't it be nice to have a drop, with limited to no side effects, that continues to work after it was administered...

SLT ... the "other drop"??

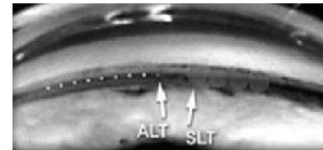
Alternative to drops Laser Trabeculoplasty

ALT approved 1979 and SLT approved 2001



ALT vs SLT

	ALT	SLT	Ratio
Energy (mj)	40-70	0.8-1.4	100:1
Fluence (mj/mm ²)	40,000	6	6000:1
Exposure Time	100,000,000 ns	3 ns	33,000,000:1



SLT Treatment Procedure

Check IOP

Determine angle is open and TM is accessible

Anesthetic drop (both eyes) and drop of brimonidine at time of procedure

Gonio lens place on eye and laser treatment starts.

Approximately 100 shots around 360 degrees

SLT Treatment Procedure

Patient feels no pain or irritation during treatment.

Patients notice some initial blur due to gonio gel.

Patients are asked to stay in the office or return in 45 to 60 minutes so we can check the post op IOP.

Typically see maximum results at 4-6 weeks post op.

SLT Treatment Procedure



SLT Treatment

Large spot
focused on
trabecular
meshwork
Note bubbles
when laser
activated



Benefits of SLT

Long Term Control - works 24 hrs/day independent of patient's actions
Can eliminate the adherence issues discussed previously
Limits IOP fluctuations over time

Effective

Works in 80% of patients
As first line treatment, expect 20-30% reduction
Most effective when used as first line treatment

Benefits of SLT

Repeatable

Since there is no thermal damage to TM, procedure can be repeated
First treatment is indicator for subsequent treatments
Second treatment shown to get IOP back to baseline of first treatment

Does not damage trabecular meshwork

Allow for retreatment
No effect on other treatment options (surgical or medical)

Issues with SLT

Potential for IOP spike post treatment
- Most likely in heavily pigmented angles
- Less than 5% of patients treated
- Almost always temporary, resolves in 24 hours
May not have measurable effect on all patients (80% have effect)

Issues with SLT

Treatment is not permanent and may need repeated
Not effective for all types of glaucoma
Post op inflammation
- This can be 50% or more of patients, believed to be some of the "effect", usually not treated, if significant could treat with an NSAID or steroid

Good Candidates for SLT

- Newly diagnosed glaucoma
 - Open Angle, Pseudoexfoliative, Steroid response, Pigmentary
- Patients who have had SLT or ALT
- Pt's not controlled with medications
 - Progression
 - Compliance

Good Candidates for SLT

- Patients with glaucoma suffering from side effects
- Prevalence of Ocular Surface Disease in Patients with Glaucoma using Topical Antiglaucoma Medications
 - **Results:** Among 110 glaucoma treated patients 83 (75%) had OSDI scores indicating mild to severe OSD. Among 50 patients without glaucoma 15 (30%) had OSDI score indicating mostly mild to moderate OSD.

Poor Candidates for SLT

- Pigmentary Glaucoma with high IOP
- Normal Tension Glaucoma with low IOP
- Glaucomas that will not benefit
 - Neovascular and Angle Recession
- Uncontrolled IOP w/ need for immediate decrease
- Patient's with very low target IOP or who may suffer from an IOP spike

SLT Compared to Latanoprost

Selective Laser Trabeculoplasty as Initial and Adjunctive Treatment for Open-Angle Glaucoma

McIlraith, Ian MD*; Strasfeld, Maurice MD; Colev, George MD; Hutnik, Cindy M.L. MD, PhD*

Journal of Glaucoma:

April 2006 - Volume 15 - Issue 2 - pp 124-130

Conclusions: Selective laser trabeculoplasty was found to be equally efficacious as latanoprost in reducing intraocular pressure in newly diagnosed open-angle glaucoma and ocular hypertension over 12 months, independent of angle pigmentation.

Ten reasons for you and your patient to consider SLT

1. SLT works like another drop (80% effective).
2. SLT works while you around the clock...even when sleeping.
3. SLT can decrease IOP fluctuations unlike drops.
4. Can not disrupt treatment like with drops. Once treated...continues to work.
5. SLT has been shown to be as effective as major surgery in some patients.

Ten reasons for you and your patient to consider SLT

6. SLT may blunt peak IOP.
7. SLT provides long term eye safety and can be repeated.
8. SLT can help reduce or limit drops for many patients.
9. SLT does not damage drainage network - cold laser vs hot laser for ALT, less energy than supermarket scanner
10. SLT does not cause the side effects of eye drops.

Nathan Ratcliffe, MD

Things to say to patient

Quick, in office procedure
Lowers eye pressure in 80% of patients
Risk of doing procedure is nearly the same as not doing the procedure
Benefit is that we can limit need for drop or more drops
Procedure is not painful
Will need continued monitoring regardless if treated with drops or procedure

Public Service Announcement - PSA

PA Act 2010-110 Photo Identification Badges

As of June 1, 2015, the photo identification badge requirements will apply to all employees that deliver direct care to a patient or consumer at a health care facility, as well as to those employees delivering direct care to a consumer outside of a health care facility or employment agency and to employees of the private practice of a physician.

First Line SLT

"Despite having the best selection of medical IOP-lowering therapy ever available, some patients with glaucoma still go blind. Maybe the time for a paradigm shift is now. Maybe first-line SLT's time has come."

L. Jay Katz, MD August 2013 Eyeworld
Director Glaucoma Services
Wills Eye Hospital

Back to our patient encounter...

When we recommend a treatment for glaucoma, we must consider:

- Patient
- Cost (actual, patient and practice)
- Accessibility to recommended treatment (getting and using)
- Benefits and side effects of recommended treatment

Think about putting SLT at the top of your "Drop List"....

Sightline Bowling League



High Score of the night:

169

Lou
"Diamond"
Phillips, OD

Quick Review of Last Year's Presentation

Medical Marijuana Act – Act 16 of 2016 (signed April 17, 2016)

Makes PA the 24th state to legalize medical cannabis

Projecting it will take 2 years to implement

On January 17, 2017, PA Department of Health released permits for growers and dispensaries

Limits prescribing to MD's and DO's

Forms of Marijuana

(2) Subject to regulations promulgated under this act, medical marijuana may only be dispensed to a patient or caregiver in the following forms:

- (i) pill;
 - (ii) oil;
 - (iii) topical forms, including gels, creams or ointments;
 - (iv) a form medically appropriate for administration by vaporization or nebulization, excluding dry leaf or plant form until dry leaf or plant forms become acceptable under regulations adopted under section 1202;
 - (v) tincture; or
 - (vi) liquid.
- (3) Unless otherwise provided in regulations adopted by the department under section 1202, medical marijuana may not be dispensed to a patient or a caregiver in dry leaf or plant form.

“Serious Medical Conditions”

- (1) Cancer.
- (2) Positive status for human immunodeficiency virus or acquired immune deficiency syndrome.
- (3) Amyotrophic lateral sclerosis.
- (4) Parkinson's disease.
- (5) Multiple sclerosis.
- (6) Damage to the nervous tissue of the spinal cord with objective neurological indication of intractable spasticity.
- (7) Epilepsy.

“Serious Medical Conditions”

- (8) Inflammatory bowel disease.
- (9) Neuropathies.
- (10) Huntington's disease.
- (11) Crohn's disease.
- (12) Post-traumatic stress disorder.
- (13) Intractable seizures.

“Serious Medical Conditions”

- (14) Glaucoma.
 - (15) Sickle cell anemia.
 - (16) Severe chronic or intractable pain of neuropathic origin or severe chronic or intractable pain in which conventional therapeutic intervention and opiate therapy is contraindicated or ineffective.
 - (17) Autism.
- “Terminally ill.” A medical prognosis of life expectancy of approximately one year or less if the illness runs its normal course.

Rules for Employers

Employment.--

- (1) No employer may discharge, threaten, refuse to hire or otherwise discriminate or retaliate against an employee regarding an employee's compensation, terms, conditions, location or privileges solely on the basis of such employee's status as an individual who is certified to use medical marijuana.
- (2) Nothing in this act shall require an employer to make any accommodation of the use of medical marijuana on the property or premises of any place of employment. This act shall in no way limit an employer's ability to discipline an employee for being under the influence of medical marijuana in the workplace or for working while under the influence of medical marijuana when the employee's conduct falls below the standard of care normally accepted for that position.
- (3) Nothing in this act shall require an employer to commit any act that would put the employer or any person acting on its behalf in violation of Federal law.