

## IN-OFFICE PROCEDURES IN OPTOMETRY IN VERMONT

Nate Lighthizer, O.D., F.A.A.O.  
Professor, NSUOCO  
Dean  
Director of Continuing Education  
Chief of Specialty Care Clinics  
[lighthiz@nsuok.edu](mailto:lighthiz@nsuok.edu)

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## Nate Lighthizer, O.D.

- ❑ 2009 graduate of Pacific University Oregon
- ❑ 2009-2010 residency at NSU Oklahoma College of Optometry
- ❑ Joined the faculty in 2010
- ❑ Chief of Specialty Care Clinics
  - Where our laser procedures are done
- ❑ Director of Continuing Medical Education (CME)
- ❑ Dean

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## Laser Procedures States = 16

Oklahoma – 20+ years  
Kentucky – 2011  
Louisiana – 2014  
Alaska – July 2017  
Indiana – 2018  
Arkansas – March 2019  
Mississippi – March 2021  
Wyoming – April 2021  
Wisconsin – 2021  
Virginia – March 2022  
Colorado – June 2022  
South Dakota – March 2024  
Montana – April 2025  
West Virginia – May 2025  
Kansas – March 2026  
Tennessee – April 2026

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## Local Anesthesia/Injections States = 22

- Oklahoma
- Kentucky
- Louisiana
- Alaska
- Arkansas
- New Mexico
- Oregon
- Tennessee
- Wisconsin
- Virginia\* - Intralosomal steroid only
- North Carolina\* - Intralosomal steroid only
- Utah
- Mississippi
- Wyoming
- Iowa
- Colorado
- Washington
- South Dakota
- Montana
- West Virginia
- Minnesota
- Kansas

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## Laser Procedures, Injections, Lesion Removals, etc

- ❑ Training students receive during 4 years of optometry school
  1. Didactically in the classroom
  2. Practical/hands on training in the lab

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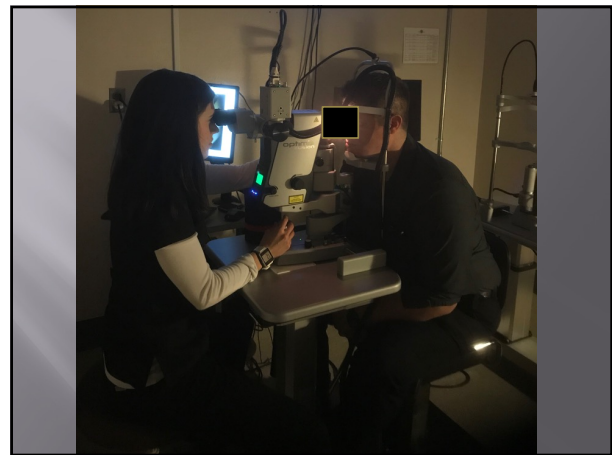


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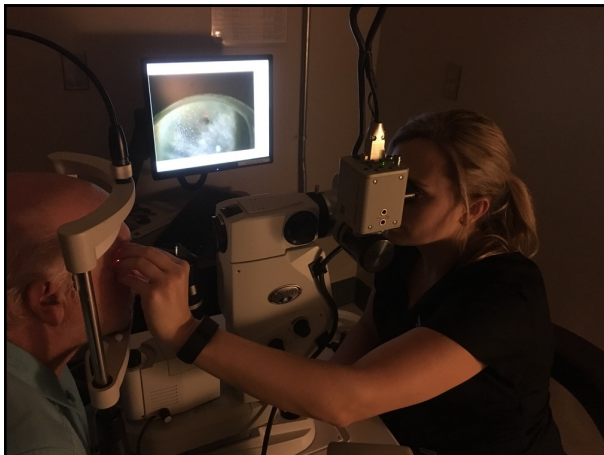
## Laser Procedures

- ▣ Training students receive during 4 years of optometry school
  1. Didactically in the classroom
  2. Practical/hands on training in the lab
  3. Written and proficiency testing
  4. Treating patients in the clinic
    - ▣ Doing procedures on actual patients

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## Injections, Lesion Removals, Laser Procedures

- ▣ Training students receive during 4 years of optometry school
  1. Didactically in the classroom
  2. Practical/hands on training in the lab
  3. Written and proficiency testing
  4. Treating patients in the clinic
    - Doing procedures on actual patients
- ▣ Dentists - 4 years of dental school
  - Give injections in/around the mouth
  - Do all sorts of office-based procedures and injections after their 4 years of schooling

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## What if a doctor graduated from optometry school 25 years ago?

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## What if a doctor graduated from optometry school 25 years ago?

- ▣ Education continues after graduation
  - Training courses all across the country
- ▣ Just like MD's and DO's
  - What if an ophthalmologist graduated from medical school 30+ years ago before Lasik came about?
    - Went to a 1 day or weekend training seminar
- ▣ How to get more privileges for doing procedures in other professions?
  - apply for credentials at the hospital where the doctor practices. How do you get credentialed?
    - Involves showing training was received at a continuing education seminar.

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NSUOCO Advanced Procedures Tableauah, Oklahoma		
Thursday, July 7, 2022	Friday, July 8, 2022	Saturday, July 9, 2022
1:00-2:00 p.m. Intro to Ophthalmic Surgery and Ophthalmic Surgical Instruments Dr. Castillo	12:00-1:00 p.m. Lunch Provided.	4:00-5:00 p.m. Laser Therapy in Narrow Angle/Angle Closure: IPT and ALT Jeff Miller, O.D.
2:00-3:00 p.m. Review of Surgical Anatomy of the Face Dr. Castillo	1:00-2:00 p.m. Intro to Suturing Dr. Castillo	5:00-6:00 p.m. YAG Laser Posterior Capsulotomy Nathan Lighthizer, O.D.
3:00-4:00 p.m. Oculofacial Surgical Asepsis Dr. Castillo	2:00-6:00 p.m. Suture Techniques Lab Dr. Castillo, Lighthizer, Miller & Peniston	6:00-7:00 p.m. Managing Potential Laser Complications Richard Castillo, O.D., D.O.
4:00-5:00 p.m. Review of Eyelid Anatomy & Eyelid Lesions Dr. Lighthizer	Lab Rotations Injection Techniques Dr. Miller & Peniston	7:00-8:00 p.m. Multicore Aspects of Anterior Segment Laser Procedures: Panel Discussion Dr. Castillo, Lighthizer, Miller & Peniston
5:00-6:00 p.m. Dinner Provided.	Radio-surgical Techniques Dr. Lighthizer	<b>Sunday, July 10, 2022</b>
6:00-7:00 p.m. Office-based Local Anesthesia Dr. Castillo	Oculofacial Biopsy Dr. Castillo	7:00 a.m. Breakfast Provided.
7:00-8:00 p.m. Radio Frequency Surgery in Optometric Practice Dr. Lighthizer	<b>Saturday, July 9, 2022</b>	7:30-11:30 a.m. Lab Rotations
8:00-9:00 p.m. Introduction to Oculofacial Biopsy Dr. Castillo	7:00-8:00 a.m. Hot Breakfast Provided Dr. Castillo	YAG Capsulotomy Dr. Castillo
<b>Friday, July 8, 2022</b>	8:00-9:00 a.m. Laser Physics, Hazards & Safety Neal Whittle, O.D.	Laser Peripheral Iridotomy Dr. Miller
7:00-8:00 a.m. Hot Breakfast Provided	9:00-10:00 a.m. Laser Tissue Interactions Neal Whittle, O.D.	Gonioscopy & Laser Lenses Dr. Peniston
8:00-9:00 a.m. Chalazion Management Dr. Lighthizer	10:00-12:00 p.m. Clinical Workshops: Intro to Therapeutic Lasers Dr. Lighthizer & Whittle	Laser Trabeculoplasty: ALT & SLT Dr. Lighthizer
9:00-12:00 p.m. Video Grand Rounds & Surgical Concepts Dr. Lighthizer & Castillo	12:00-1:00 p.m. Gonioscopy: How to Interpret What You Are Seeing Doug Peniston, O.D., Ph.D.	11:30-1:00 p.m. Review & Final Exam Nathan Lighthizer
	1:00-2:00 p.m. Lunch Provided.	
	2:00-4:00 p.m. Laser Therapy for the Open Angle Glauomas: ALT & SLT Nathan Lighthizer, O.D.	Thank you!

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## About that training course...

- From a laser rep that was at one of our courses for the first time, and works extensively with ophthalmology and optometry
  - "That's the best SLT training I've ever seen."
- From an Ophthalmologist in the UK that was at the UK laser course that we put on in December 2021
  - "I wish we had training this good when I started performing laser procedures"

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## SLT

- Huge public health win for VT citizens if Optometrists had the law to allow SLT

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## SLT

- Huge public health win for VT citizens if Optometrists had the law to allow SLT
- Traditionally, the options for first line glaucoma treatment
  - Eye drops
- Patients:
  - Struggle with eye drop compliance
  - Struggle with instilling their eye drops
  - Also have dry eye - glaucoma drops help to lower their eye pressure, but can worsen their dry eye

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## SLT

- Huge public health win for VT citizens if Optometrists had the law to allow SLT
- 2 options for first line glaucoma treatment
  - Eye drops
  - SLT laser

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**Selective laser trabeculoplasty versus eye drops for first-line treatment of ocular hypertension and glaucoma (LiGHT): a multicentre randomised controlled trial**

**Summary**  
 Background Primary open angle glaucoma and ocular hypertension are habitually treated with eye drops that lower intraocular pressure. Selective laser trabeculoplasty is a safe alternative but is rarely used as first-line treatment. We compared the two.

**Methods** In this observer-masked, randomised controlled trial treatment-naïve patients with open angle glaucoma or ocular hypertension and no ocular comorbidities were recruited between 2012 and 2014 at six UK hospitals. They were randomly allocated (web-based randomisation) to initial selective laser trabeculoplasty or to eye drops. An objective target intraocular pressure was set according to glaucoma severity. The primary outcome was health-related quality of life (HRQL) at 3 years (assessed by EQ-5D). Secondary outcomes were cost and cost-effectiveness, disease-specific HRQL, clinical effectiveness, and safety. Analysis was by intention to treat. This study is registered at controlled-trials.com (ISRCTN2093222).

**Findings** Of 7121 patients enrolled, 356 were randomised to the selective laser trabeculoplasty and 362 to the eye drop group. 351 (97%) returned the primary outcome questionnaire at 36 months. Average EQ-5D score was 0.99 (SD 0.10) in the selective laser trabeculoplasty group versus 0.98 (SD 0.10) in the eye drop group, with no significant difference (difference 0.01, 95% CI -0.01 to 0.03, p=0.23). At 36 months, 74.2% (95% CI 69.7% to 78.6%) of patients in the selective laser trabeculoplasty group required no drops to maintain intraocular pressure at target. Five of patients in the selective laser trabeculoplasty group were within target intraocular pressure at more visits (93.8%) than in the eye drop group (91.3%), with glaucoma surgery to lower intraocular pressure required in none versus 21 patients. Over 36 months, from an optimising cost perspective, there was a 37% probability of selective laser trabeculoplasty as first treatment being more cost-effective than eye drops first at a willingness to pay of £20000 per quality-adjusted life-year gained.

**Interpretation** Selective laser trabeculoplasty should be offered as a first-line treatment for open angle glaucoma and ocular hypertension, supporting a change in clinical practice.

**Funding** National Institute for Health Research, Health and Technology Assessment Programme.

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## LiGHT trial 6 year data

- Released Sept 2022
- At 6 years:
  - SLT had better scores in the GSS (glaucoma symptoms scores) quality of life measurement
  - 69.8% of SLT patients remained at or below target without other intervention
  - More eyes in the drop arm exhibited disease progression (26.8% vs 19.6%)\*
  - Trabeculectomy required in 32 eyes in drop arm, 13 eyes in SLT arm
  - More cataract surgeries in the drop arm (95 compared to 57) – statistically significant
  - No serious laser related adverse events
- Conclusion
  - SLT is a safe treatment for OAG and OHT, providing better long-term disease control than initial drop therapy, with reduced need for incisional glaucoma and cataract surgery over 6 years.

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## SLT

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