Visual Outcomes and Compliance Rates in a Free Rural Diabetic Eye Clinic in West Alabama

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FINANCIAL DISCLOSURES

• Dr. John O. Mason III, Castle Biosciences

SUMMARY

- The Diabetic Eye Clinic of Alabama (DECA) is a non-profit, bi-monthly, free clinic serving the uninsured.
- Timely treatment with durable PRP and focal laser in addition to IVA stabilized and improved visual acuity in the majority of clinic patients, and is appropriate given DECA patients are at high risk for loss to follow up.
- This nonprofit may serve as a template for other diabetic nonprofits across the country to address the growing epidemic of uninsured, underserved diabetic patients.

INTRODUCTION

- DR accounts for ~1/3 of working-age blind
 - 12-24K new cases of blindness each year in USA
- Nationwide, 1/3 patients referred from primary diabetic screenings make their scheduled appt.
- No reported volunteer, not-for-profit clinics in west Alabama or east Mississippi providing DR screening and same-day treatment existed prior to DECA.

INTRODUCTION

- Diabetic Eye Clinic of Alabama (DECA)
 - Est. 2017 as a 501C3
 - Lauren Mason, Founder and CEO
 - http://diabeticeyeclinical.com
- Bi-monthly, free-for-service clinic
- Screening and same-day treatment for DR



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The Diabetic Eye Clinic of Alabama is a SO1(c)(3) nonprofit organization that aims to treat, prevent blindness, and educate uninsured, underserved patients suffering from diabetic eye disease in West Alabama and surrounding areas. The clinic provides free eye care to patients, as well as information on how to manage their diabetes. The care and administrative efforts are provided solely by volunteers, as the clinic is a 100% not for profit organization

The Diabetic Eye Clinic of Alabama does not discriminate based on race, gender, religious affiliation, or other criteria. Although the clinic operates in West Alabama, it serves the economically disadvantaged populations across the entire state of Alabama and East Mississippi. It is the only source of free diabetic eye care in West Alabama.

The Diabetic Eye Clinic of Alabama depends on the community to provide services and keep our doors open. Care is provided by a wide range at volunteers that include medical professionals. The Diabetic Eye Clinic of Alabama applied for 501(c)(3) federal income tax exemption status in

PURPOSE

To assess visual outcomes and compliance rates in a free, rural diabetic eye clinic where patients are screened and treated PRN.

METHODS:

 Retrospective Chart Review of 96 patients to see who required treatment for DR

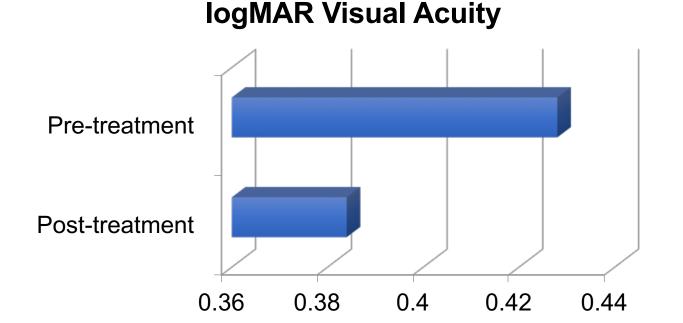
- Assessed:
 - Mean Pre/post treatment visual acuity
 - Mean # of IVA, Focal laser, and PRP applications
 - Mean # of clinic visits
 - LTFU (complete absence from clinic \geq 7 months)

- 21% of Clinic population received tx
 - *Many pts received multiple treatments

• **DME:** 36 eyes (17 OD, 19 OS), 20 patients

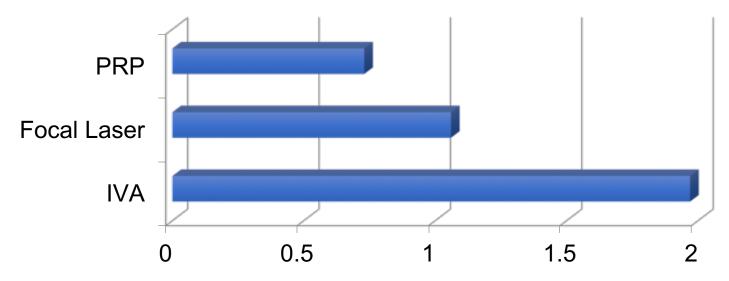
• PDR: 15 eyes (7 OD, 8 OS), 8 patients

- Mean Pre-treatment Visual Acuity
 .428 logMAR (20/54 snellen)
- Mean Post-treatment Visual Acuity
 .384 logMAR (20/48 snellen)



- Mean Focal Laser Applications: 1.06 per eye
- Mean Injections (IVA): 1.97 per eye
- Mean PRP Applications: .73 per eye





• Mean clinic visits per patient: 3.15

% Lost To Follow Up (LTFU): 21%

DECA PATIENT SURVEY

- "Satisfaction with screening and same-day treatment in a free clinic for diabetic retinopathy"
 - High overall satisfaction (4.95/5; SD-0.21)
 - Clinic location (4.68/5)
 - Scheduling (4.09/5)
 - Communication (4.77/5)

DISCUSSION

- VA was not only preserved, but slightly improved on average
 - .428 logMAR pre vs .384 logMAR post
- Significant number of clinic patients (21%) needed and received treatment
- Focal and IVA ratio
 - This clinic aims to maintain more of a 1:1 ratio
- The clinic was designed to do laser and adjunctive IVA on every patient who needed treatment because of the high risk of LTFU.

DISCUSSION

- Previously Published Study by Retina Consultants of Alabama (Ophthalmology and Eye Diseases Volume 9:1-6, 2017)
- 102 eyes, 53 pts
- Treatment: IVA + Focal over ~5 years
- Mean pre- tx VA 20/100 vs. 20/80 post
- After an avg. of 5 focal lasers and 5.5 IVI:
 - 64% maintained >20/40 VA over 5 years
 - 90% of eyes had stable or better BCVA
- Laser with adjunctive IVA has a much more durable effect and therefore is used in DECA

CONCLUSIONS

- DECA stabilized and improved visual acuity in most of the clinic patients
- Timely treatment with durable PRP and Focal laser in addition to IVA may explain these desirable outcomes, and is appropriate given DECA patients are at high risk for LTFU

FINAL STATEMENT

 This diabetic nonprofit may serve as a template for other diabetic nonprofits across the country to lessen the growing burden of uninsured diabetics which is reaching an epidemic

Diabetic Eye Clinic of Alabama

•<u>Website</u>:

http://diabeticeyeclinical.com