STATE BOARD OF OPTOMETRY
2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834
P (916) 575-7170 F (916) 575-7292 www.optometry .ca.gov

Continuing Education Course Approval Checklist

Title: RESUBMITTAL: Emerging Optometry Roles in a Multidisciplinary Setting

Provider Name: Kaiser Permanente c/o Dr. Joan Mah, O.D.

☑Completed Application
Open to all Optometrists? ☑Yes ☐No
Maintain Record Agreement? ☑Yes ☐No

☑Correct Application Fee

☑Detailed Course Summary

☑Detailed Course Outline

☑PowerPoint and/or other Presentation Materials

☐Advertising (optional)

☑CV for EACH Course Instructor

☑License Verification for Each Course Instructor
Disciplinary History? ☐Yes ☑No

Date: February 3, 2017

This talk was a grand rounds presentation of various ocular conditions describing case histories, symptoms, interpretation of diagnostic testing results, clinical management of background information of each condition.

These were discussed in the unique context of large multidisciplinary setting which provides the clinical optometrists with close proximity to and communication with various medical professionals and sub specialists. The presentation used cases as a way of demonstrating how to best take advantage of this setting to maximize professional scope of practice.

In addition, it provided an informative discussion of clinical features so some important ocular conditions encountered in this setting.

The intent of the presentation was to show that conditions can be treated by Optometrists and that they can collaborate with each other or if needed an ophthalmologist or medical professionals to co-manage conditions instead of simply referring these conditions to Ophthalmology.

There are many resources available to optometrists to aid them in their differential diagnoses of conditions.

Lastly, to remind optometrists that treating these conditions and others are within their scope of practice.

I started my talk with showing changes that have affected Optometry which include technological changes which enable patients to easily obtain their glasses or contact lens prescriptions online. I continue with a discussion of how Ophthalmologists are utilizing Physician assistants to help in their work.

I then discuss how Optometrists can maximize their value by generating optical revenue, providing excellent service to patients and engaging in medical leveraging.

I discuss the important events of Primary care and the importance of moving from Classic Optometry toward Primary care while highlighting best practices of Primary care.

I show examples of letters of correspondence between Optometrist, Ophthalmologists and other medical doctors.

I then move into examples of conditions to illustrate my point that Optometrists can manage conditions which are well within their scope.I highlighted tests that Optometrists can order such as FA (fluorescein angiography), blood work up, etc.

I discuss how Primary care providers (PCP) and others can aid Optometrists with ordering tests or suggesting tests that can help with diagnoses of conditions.

I showcase Idiopathic Juxtafoveal Telangectasis II to again show that even after an initial exam with an Ophthalmologist, the follow up care can be handed over to the Optometrists.

I discuss glaucoma and Latanoprost Therapy and its possible complications of Cystoid Macular Edema (CME) and that Optometrists can utilize literature to aid them in providing follow care for these patients so the Optometrists know what to expect.

I then give examples of Optometrists partnering with MDs in my clinical setting in Folsom and how the MD initially examines a patient with CME and is comfortable having the Optometrist follow the patient a week later and then how the Optometrist in turn returns the patient to the Ophthalmologist. This is an example of providing the patient with good care by collaborating with Ophthalmology and Optometry.

EDWARD ARTHUR DENZ OD
Department of Optometry

CALIFORNIA STATE BOARD OF OPTOMETRY

January 11, 2017

Kaiser Permanente
Attn: Dr. Joan Mah, O.D.
7200 Redwood Blvd.
Novato, CA 94945

RE: Continuing Education (CE) Course Approval Request

Dear Dr. Mah:

The California State Board of Optometry (Board) may approve CE courses after receiving the applicable fee, and it has been determined that the course meets criteria specified in CCR § 1536 (g):

> (g) The criteria for judging and approving continuing education courses by the Board for continuing optometric education credit will be determined on the following basis:
> (1) Whether the program is likely to contribute to the advancement of professional skill and knowledge in the practice of optometry.
> (2) Whether the instructors, lecturers, and others participating in the presentation are recognized by the Board as being qualified in their field.
> (3) Whether the proposed course is open to all optometrists licensed in this State.
> (4) Whether the provider of any mandatory continuing optometric education course agrees to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation.

The Practice and Education Committee (Committee), having the delegated authority[1], reviewed your course approval requests (Attached) during a public meeting on January 10, 2017 and believed there was insufficient information to determine if the courses met the requirements listed above. Therefore, the following courses are denied:

Course Title: Emerging Optometry Roles in a Multidisciplinary Setting

If you would like the Committee to reconsider your courses, please provide the following information:

- The information provided tends to jump from one aspect to another without cohesively tying together. The Committee wants you to provide information explaining exactly what it is you hope to impart to the attendees of this course.

If you have any questions, please contact Kristina Eklund at 916-575-57165 or Kristina.Eklund@dca.ca.gov.

Sincerely,

[1] Delegated Authority granted February 19, 2016

Jessica Sieferman
Executive Officer
Jessica.Sieferman@dca.ca.gov

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY GOVERNOR EDMUND G. BROWN JR.

OPTOMETRY

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CONTINUING EDUCATION COURSE APPROVAL APPLICATION

$50 Mandatory Fee

Pursuant to California Code of Regulations (CCR) § 1536, the Board will approve continuing education (CE) courses after receiving the applicable fee, the requested information below and it has been determined that the course meets criteria specified in CCR § 1536(g).

In addition to the information requested below, please attach a copy of the course schedule, a detailed course outline and presentation materials (e.g., PowerPoint presentation). Applications must be submitted 45 days prior to the course presentation date.

Please type or print clearly.

Course Title	**Course Presentation Date**
Alejandro Reyes, OD CE Seminar Emerging Optometry Roles in an Integrated Multidisciplinary Setting	09/10/2016

Course Provider Contact Information

Provider Name

Joan (First) Mah (Last) Tovio (Middle)

Provider Mailing Address

Street 700 Redwood Blvd City Novato State Ca Zip 94945

Provider Email Address Joan.Mah@kp.org

Will the proposed course be open to all California licensed optometrists?	☒ YES ☐ NO
Do you agree to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation?	☑ YES ☐ NO

Course Instructor Information

Please provide the information below and attach the curriculum vitae for each instructor or lecturer involved in the course. If there are more instructors in the course, please provide the requested information on a separate sheet of paper.

Instructor Name

Edward (First) Deuz (Last) A (Middle)

License Number 7693 TPG	**License Type** Optometry
Phone Number (916) 532-6227	**Email Address** Ed.Deuz@kp.org

I declare under penalty of perjury under the laws of the State of California that all the information submitted on this form and on any accompanying attachments submitted is true and correct.

Joan T. Mah — *Signature of Course Provider*

7/7/16 — *Date*

Form CE-01, Rev. 5/16

Hi Kristina,
He is presenting on 9/10 1:30-2:30.
The CE program starts at 8:30am and ends at 3:30pm.
You should also now have everything for Dr. Ed Denz, Emerging Roles in Optometry for Medical Optometry.
Thank you,

Hi Kristina,
Here is the information on Dr. Ed Denz who will replacing Dr. Huck Holz on Sept 10, 2016.

Edward A Denz , OD
7693 TPG California Optometry License

He will present on the emerging Optometry roles in an integrated multidisciplinary setting illustrated with case presentations. He will present cases that include diagnosis specific learnings as well as illustrate novel inter professional relationships in the multidisciplinary management of ocular disease. Cases will include glaucoma, macroaneurysm, macular degeneration, juxtafoveal telangiectasis, epiretinal membrane with hidden sub retinal neovascularization, and others.

Ed Denz, OD CV
Education
OD degree UCBSO 1983
Hospital based residency VA Hospital Albuquerque, NM 1983-84

Professional
Assistant and associate clinical professor UCBSO 1984-1992

staff optometrist Fairfield Medical Group 1984-85
staff optometrist Kaiser Permanente
North Valley Service Area 1985-1995

Chief Optometrist Kaiser Permanente
North Valley Service Area 1995-present.

Email address is Ed.Denz@kp.org
Phone number is 916-817-5171

Dr. Denz's outline for his presentation on Emerging Optometry Roles in an Integrated Multidisciplinary Setting

Cases reviewed will be the following:

1. Glaucoma
2. Macroaneurysm
3. Macular Degeneration
4. Juxtafoveal Telangiectasis
5. Epriretinal Membrane with Hidden Sub Retinal Neovascularization
6. Others

FUTURE OF KAISER OPTOMETRY ??

RISKS AND OPPORTUNITIES

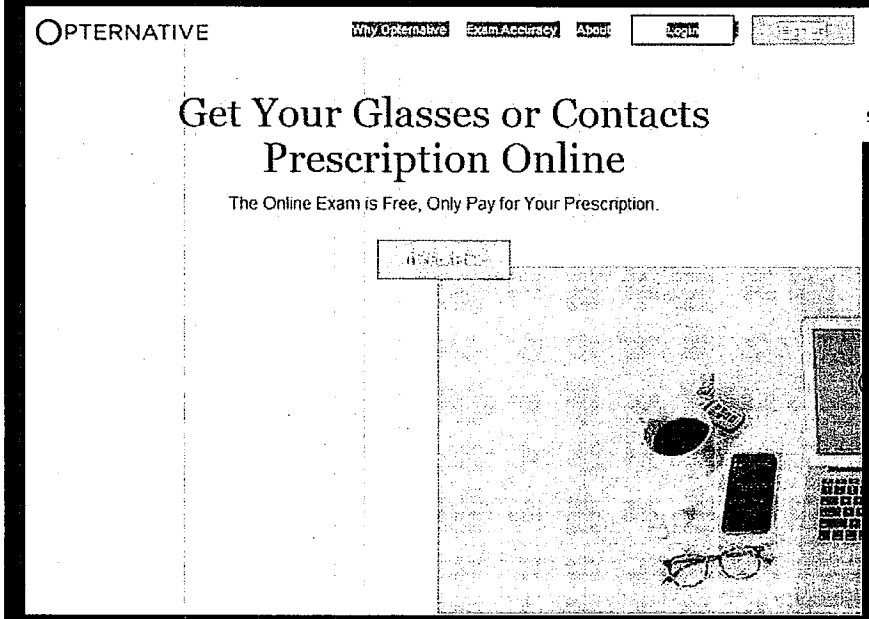
GOAL: MOTIVATE/INSPIRE/ENCOURAGE DEVELOPMENT OF OPTOM MED ROLE

SCOPE

BEHAVIORS

CASES

RISKS??
REFRACTION TECHNOLOGIES (EFFECT ON OPTOMETRY DEMAND??)



Ophthalmology is slowly turning to Physician assistants

Few work in the field, but the need is growing.

Steven Lamm, Fairfax, Virginia

Kim Darden, the PA at Central Plains Eye MDs in Wichita, Kan., examines a patient. COURTESY OF CLARISSA GREENLEAF

The United States faces both a projected shortage of ophthalmologists and a near certain increase in the number of aging patients, who typically have more eye problems than the rest of the population. So we need to ask: Who will take care of the nation's eyes in the future?

One solution may be for ophthalmologists to work with more physician assistants (PAs). PAs have the medical and surgical training to do a

FUTURE OF OPTOMETRY IN CLINICAL SETTING IS BRIGHT PROVIDED WE MAXIMIZE VALUE (COMP/JOB SECURITY)

- Optical revenue
- Member satisfaction
- Medical leveraging
- Ecmp trends: Emerging primary care role/need for optometry to tie things together (in person roles)

PRIMARY EYE CARE

- **"Primary care** is the day-to-day healthcare given by a health care provider. Typically this provider acts as the first contact and principal point of continuing care for patients within a healthcare system, and coordinates other specialist care that the patient may need."
- I would add: "provides continued care; consults with specialists; takes responsibility for over all care, pt communication and coordination of care with multiple specialists"

IS THIS PRIMARY EYE CARE?

- PLAN:
- 1. Final SRx released.
- 2. If applicable, patient should continue follow-up appointments with Ophthalmology for any history of ocular conditions
- 3. Return to Optometry Clinic in 1-2 years or prn if any visual changes/problems

CLASSIC VS PRIMARY CARE

- Provide refraction, vision testing, optical solutions/problem solving
- Limited testing for medical screening
- Detection of abnormal : refer to OMD for additional testing Dx and mngt
- Future optom visits: refraction role and defer medical to ongoing OMD care (OMD provides primary med eye care role)

- Provide refraction, vision testing, optical solutions/problem solving
- medical screening
- Detecting abnormal status: order additional secondary tests as needed (OCT/FA/VF,labs etc). Provide Dx /mngt with OMD support as needed w/I legal scope of practice.
- Ongoing refractive and medical care by OD; OMDs help when needed, provide procedural care and refer back to OD for primary care mngt

PRIMARY CARE "BEHAVIORS"/ BEST PRACTICES

- OD to OD referral
- OD offer to take over MD care as appropriate
- OD share cases (via chart review) as needed with MD (mostly w/o need for oph apps) for advice (rather than refer)
- MD to OD referral for long term medical mngt/ monitoring

ODs and MDs work as true team and help each other

Fewer :lost to fu, misdiagnoses,

Better pt communication

Save cost via reducing redundant visits

Better pt service (fewer apps needed etc)

Value added optometry care/role

PRIMARY OPT MED CARE SCOPE

- Flashes floaters /pvd r/o breaks; RD BIO depression
- Red eyes : infections; iritis periph infiltrate, etc
- Fb removal
- Dry eye
- C abrasions
- Coag
- Retina : DR, arm, vasculpathies (BVO etc) ,
- Ped: any age? (pseudo strabs etc) , patching, etc
- Vision loss wu
- On call?
- MD sub?

- Testing: BIO ; depression, OCT, labs, FA,

- Procedures: Fb, abrasions, plugs, lac irrigation,
- other

BIGGER LIST

- Treatment of corneal abrasion including use soft contact lens bandages
  Treatment of allergic and infectious conjunctivitis
  Treatment of sterile peripheral corneal ulcers (central or infectious ulcer require consultation with an ophthalmologist)
  Lacrimal irrigation for NLD obstruction
  Removal of foreign bodies from conjunctiva cornea
  Binocular indirect ophthalmoscopy with scleral indentation for posterior vitreous detachment
  Clinical monitoring of dry macular degeneration, epiretinal membrane, lamellar macular, mild to moderate diabetic retinopathy, resolved or stable branch vein occlusion, central serrous retinopathy and burnt out (post PRP) proliferative diabetic retinopathy
  management and/or treatment of glaucoma suspects, chronic open angle glaucoma, pigmentary glaucoma, pseudoexfoliation glaucoma
  Monitoring of choroidal, conjunctival and Iris Nevis with photographic images
  Ordering of FA and OCT as appropriate; direct referral to retinal clinic for approved ODs
  Treatment of unilateral non-granulomatous iritis (granulomatous, bilateral, recurrent uveitis requires consultation with an ophthalmologist)
  surface disease dry. plugs restasis
  Pediatric eye care >age 2 (ped champs) or > age 5 general optometry including treatment of amblyopia

TRANSFER OF CARE TO OPTOM EXAMPLES

- Dear Michele and Scott Mr xxx appears lost to followup for glaucoma (last oph 5/12 last VF 9/05) If ok w you both, he appears stable and Ill update his testing and resume follow up for him (per his approval)

- Michele,Mrs xxxx is due for your yearly followup of resolved CSR LE next month. I got a good look at her at her refraction exam and she's normal/stable w good VA and normal foveal contour on her OCT. OK if I take her off your book list and ck her in a year?
- Sean: Mrs Howard is happy w my fu in future; if ok w you Ill put on my BL x 2 y, ok? (ERM 20/40 VA RE)
- Ron Mrs xxxx lattice/retinoplexy and lamellar hole RE look stable and shes happy w my fu; ok if I see her in a year and save you an appointment?
- Sean. Mr xxxx is on your BL for xxx so I checked him (maybe you can extend his BL and save an oph appointment. IOP was 10 and he looks stable IOP wise but last VF 1/09 (advanced VF loss LE)
- Rich: ERM L w good VA; HX BRAO RE with corresponding sup alt defect (hard to distinguish from coag); Txed prophylactically c latan. w low IOPs; iols ou; If you think its ok; pt is happy w my fu of your pt ; ok w you?
- That is fine.
- Rominder: You're scheduled to see Mr C in May. He's on cosopt bid OU; healthy looking nerves/OCT possible early in depression R on VF ; OHT prior to Tx (close to 30 wo meds); 16/16 today on meds ; stable situation . Do you want me to manage him? If not I wont book fu w me; If so ; Ill take off your BL.
- Thanks for following him. You can take him off my booking list.

OD TO OD REFER

- See my notes: I didn't think meds were indicated at this time.xxxxx should get an OCT in 2 years and VF in a year w IOP. Do you want to follow ?

- I would like you to follow her if that is ok w/you Thanks for seeing her

OD TO PCP

- Dear Mr xxxxxx
  I sent an email to Dr xxxxxx asking to order a Doppler test to check your carotids and would like to check you in 3 months (youll get an app in the mail)

  Sincerely,
  Ed Denz, OD

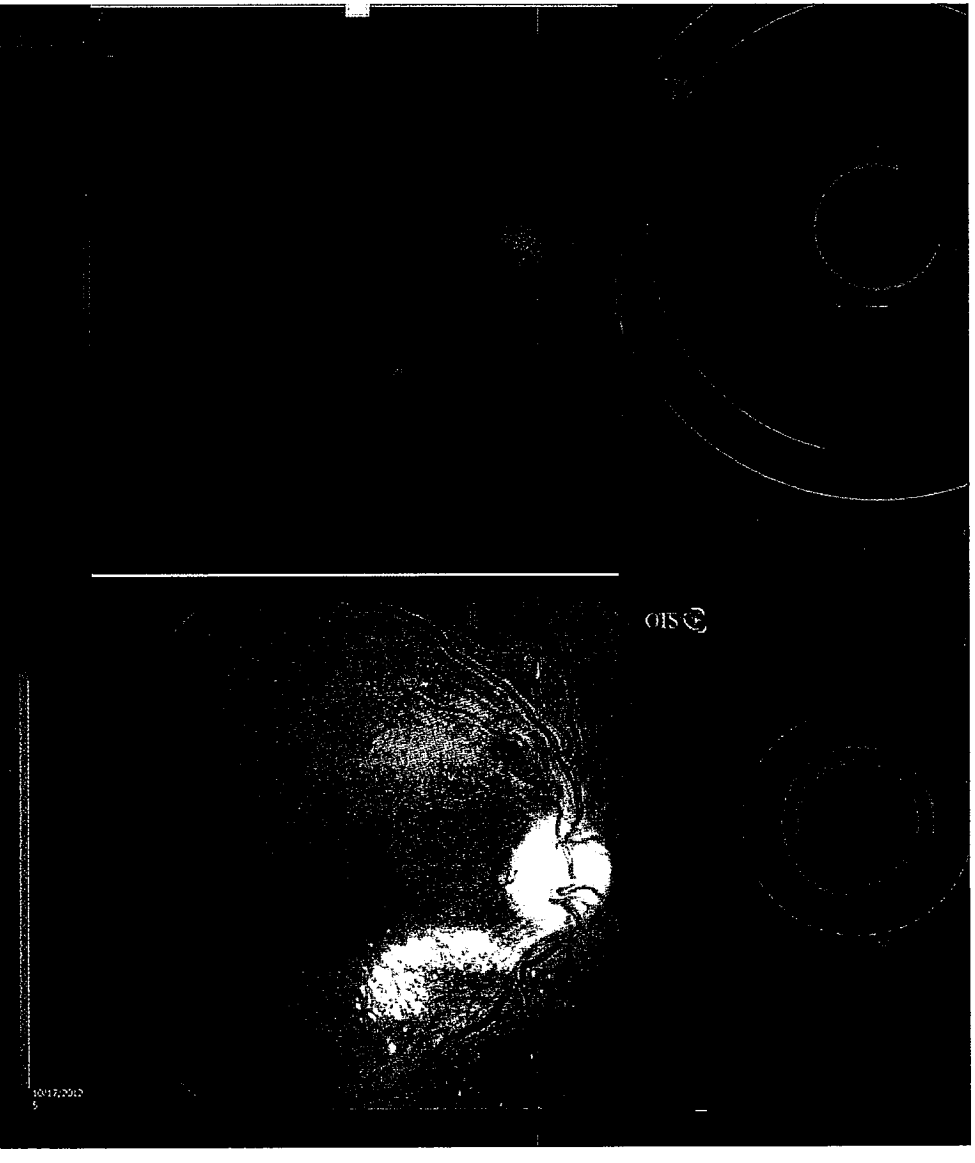
DR OR OTHER?

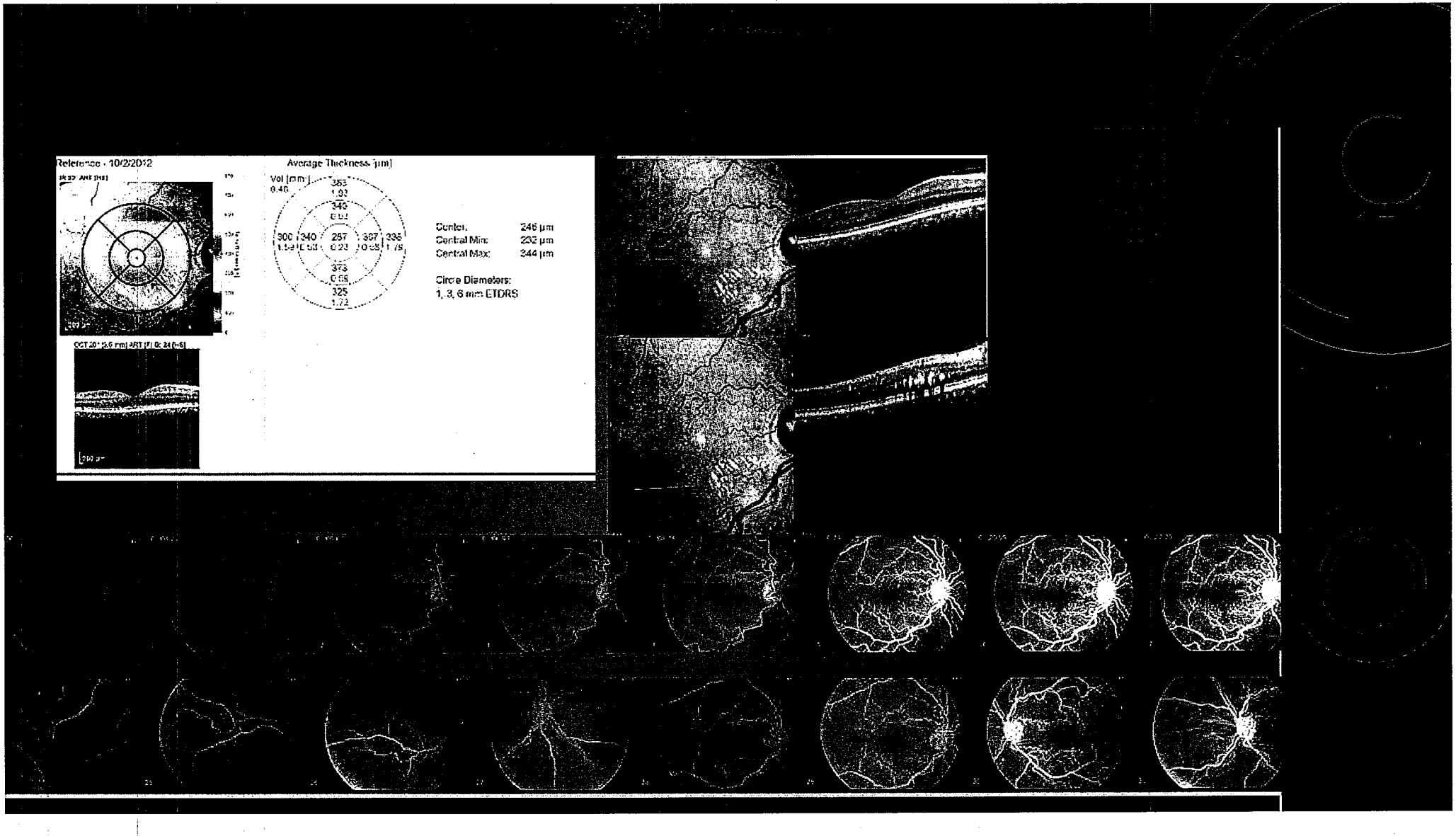
59 yo afro

DM x 15 good control /HTN

Mild DR

20/25 OU




Average Thickness [µm]
Vol [mm³]
0.46
353
1.92
340
0.82
300
1.59
340
0.93
287
0.23
367
0.85
336
1.76
373
0.55
325
1.72
Center: 246 µm
Central Min: 232 µm
Central Max: 244 µm
Circle Diameters:
1, 3, 6 mm ETDRS

MACROANEURYSM

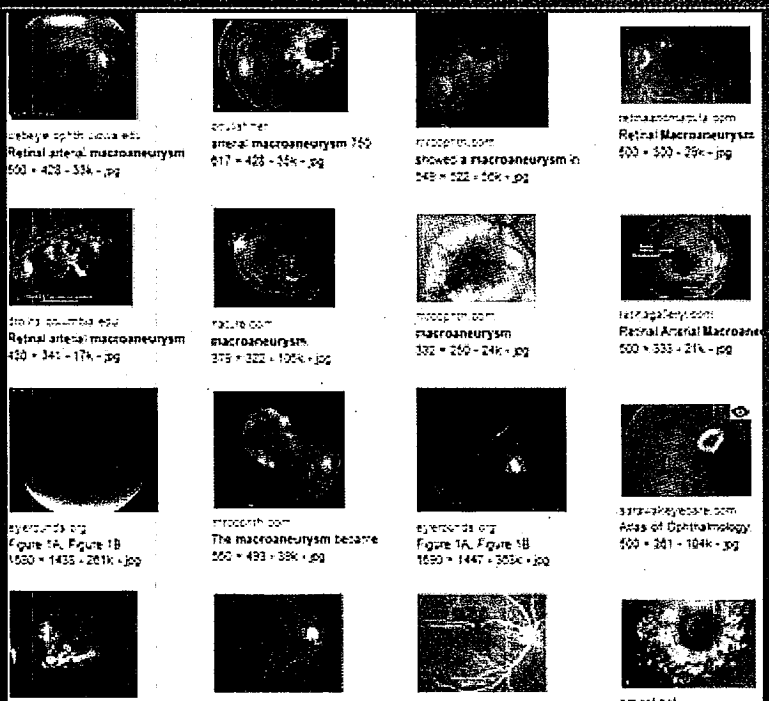
- A/P (retina)
- Self thrombosed macroaneurysm along an arteriolae branching off the IT arcade with resolving edema as evidenced by hard exudates.No leakage on fluorescein angiogram or fluid on OCT
- non-proliferative diabetic retinopathy both eyes
- Mild hypertensive retinopathy

- Plan
- Observe for now
- BP and diabetes mellitus control stressed
- FU 2-3 mths with comp and retina PRN

- Followed by me q 3m for 1y then q 6m
- By 1year MA almost invisible
- Last fu : mild+ DR only little to no trace of MA

macroaneurysm

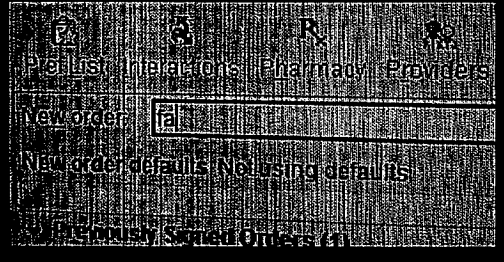
Click to add text

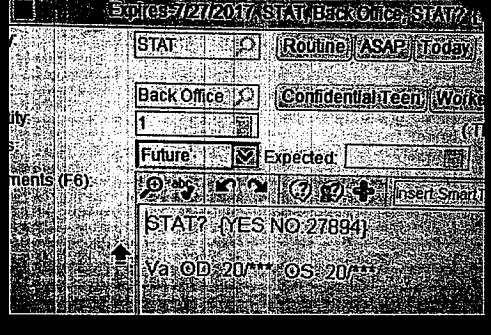


Click to add text

- **Disease[edit | edit source]**
- Retinal arterial macroaneurysms are acquired, focal dilations of retinal arterial branches (mostly second-order retinal arterioles) that can be classified as hemorrhagic or exudative. Macroaneurysms range from 100 to 250μm in diameter and are most often found on the temporal retina. Associated findings include capillary telangiectasias, vascular remodeling, and retinal edema. While visual prognosis is generally good, vision loss can occur from macular edema, end-arteriole [illegible] from thrombosis, or hemorrhage due to rupture [illegible] [1-2]. Diagnosis is made on clinical exam and via imaging modalities such as fluorescein angiography (FA) and spectral-domain optical coherence tomography (SD-OCT), and [illegible]. More recently, the use of anti-vascular endothelial growth factor (VEGF) intravitreal injections has been suggested but not extensively studied as a possible treatment modality.

ORDERING FA (EASY!)



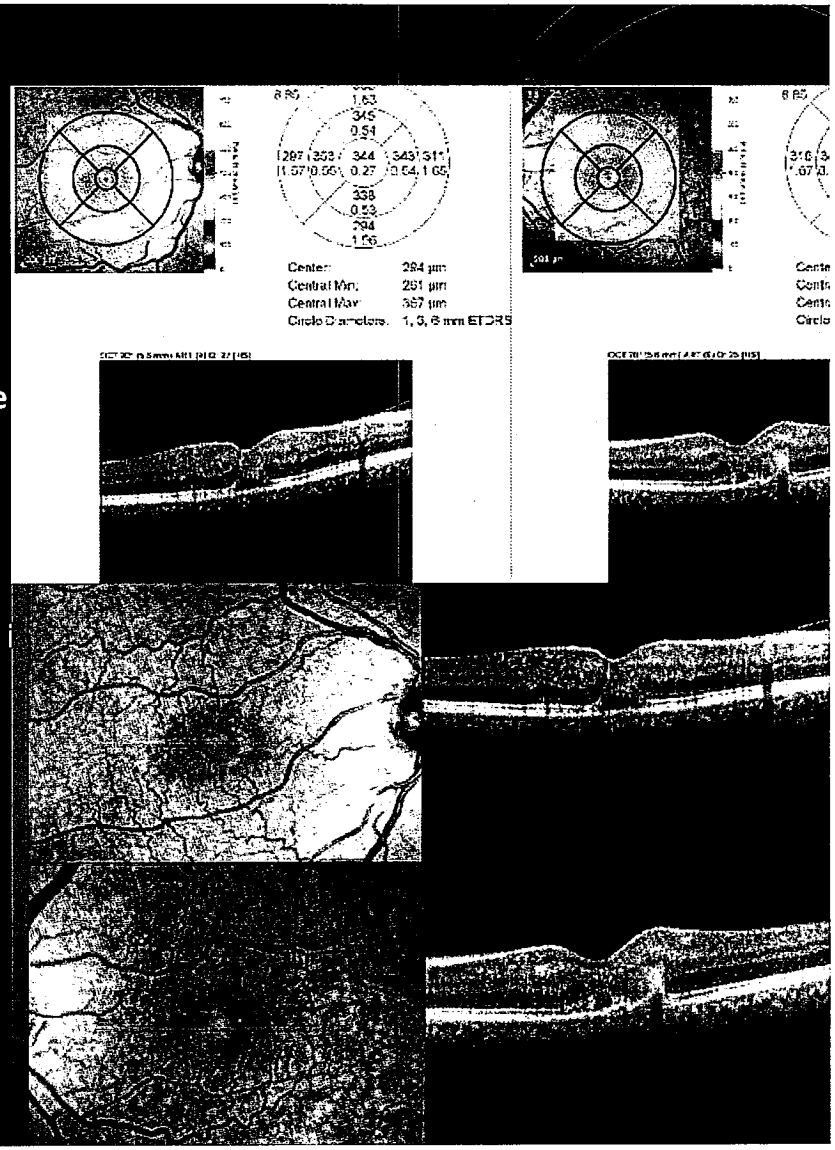


TESTING TIPS : LABS OMD/PCP CAN HELP

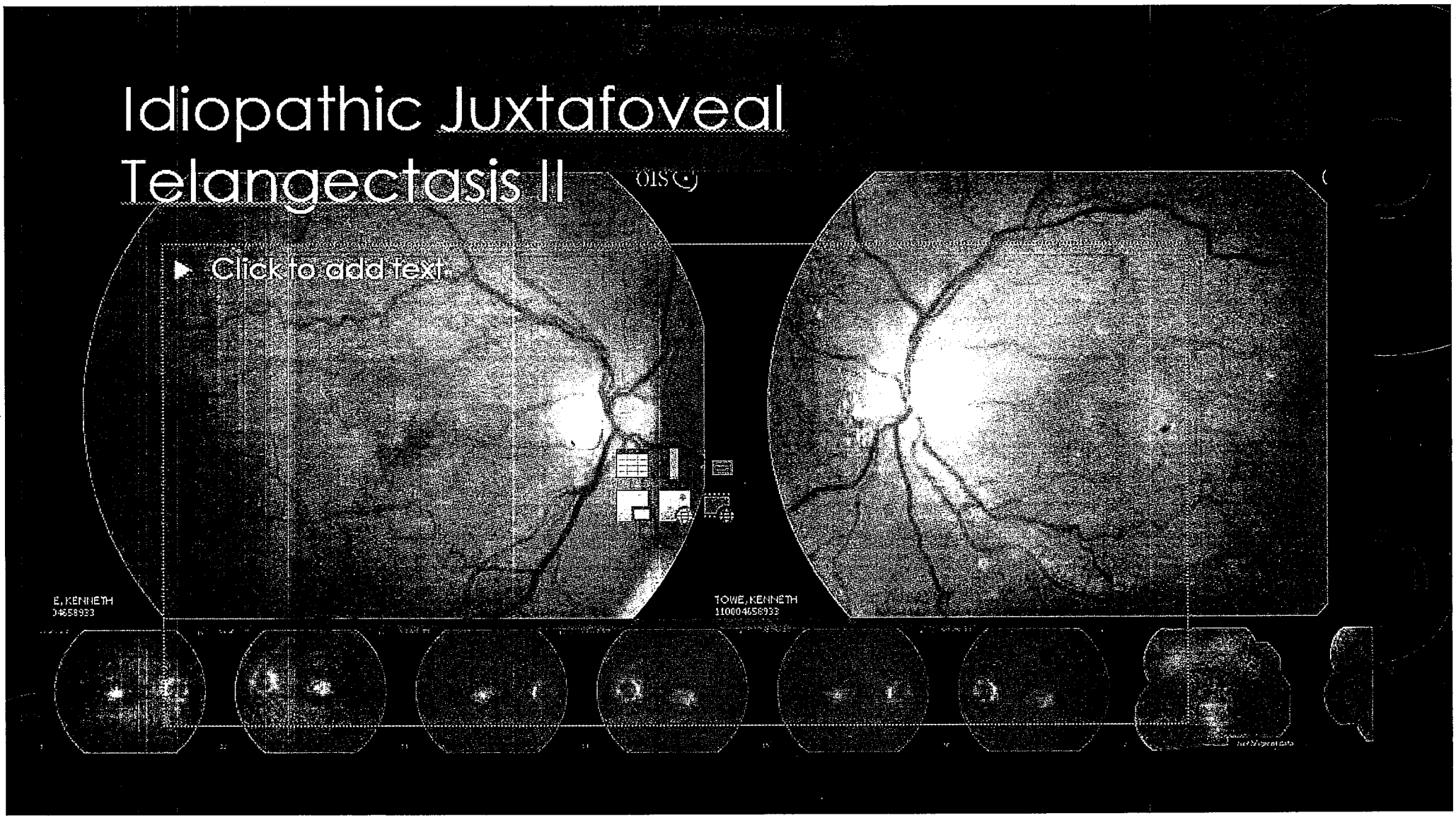
- **Laboratory Studies**
- The workup should be tailored to the patient according to the history or to the signs and symptoms that point to a certain etiology.
- Laboratory workup may not be necessary in certain situations.[2] In cases of mild, unilateral nongranulomatous uveitis in the setting of trauma, known systemic disease, or a history and physical not suggestive of systemic disease, laboratory studies are unlikely to be helpful.
- If the history and the physical examination findings are unremarkable in the presence of bilateral uveitis, granulomatous uveitis, or recurrent uveitis, a nonspecific workup is indicated.
- The following tests do not need to be conducted in the emergency department and may be ordered by the consulting ophthalmologist[2] as outpatient workup.
- CBC count
- Erythrocyte sedimentation rate (ESR)
- Antinuclear antibody (ANA)
- Rapid plasma reagin (RPR)
- Venereal disease research laboratory (VDRL)
- Purified protein derivative (PPD)
- Lyme titer
- HLA-B27
- Urinalysis
- HIV test

- 64yo w m 1st to Kaiser 10 yo specs
- Old +0.75ds ou 250 add 20/100ou
- Re
- OD: +3.00 -1.00 x 90° 20/50- +2.75
  OS: +2.75 -0.75 x 90° 20/50- +2.75
- **Macula:RE 1/2 DD cicumscribed area of RP disruption? Looks flat LE some**
- **(Looks a little like Bests but doubt))**
- **Asteroid L only (no cat)**
- **OCT:**
- **RE small area of sensory detachment and trace intra ret edema; foveal pit**
- **LE mainly some disruption of PIL line and RP normal foveal contour**

- **Plan stat FA for srf RE**
- **Called pt; psr to book**



Idiopathic Juxtafoveal Telangectasis II



IDIOPATHIC JUXTAFOVEAL TELANGECTASIS II

Retina:
FA/OCT reviewed and are c/w Idiopathic Juxtafoveal Telangectasis II. No evidence of SRNVM seen
"Elaine,
Ok for me to recheck him in 6m? Any recommendations?
ED
Just have him monitor grid for sudden changes since superimposed SRNVM can develop and would be treated same as wet ARMD. Otherwise yes, just f/u 6 months.
To psr:
Please call and book MV 1-2 week for follow up (I will discuss findings and instruct carefully on amsler grid test

disease is more specific to the parafoveal region of the retina. Therefore, it becomes easily distinguishable from other generalized retinal telangiectasias such as Coats' disease or a secondary telangiectasis found in retinal vein occlusions, carotid artery disease or diabetes.[3]

Classification of IJRT by Type

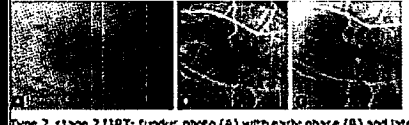
Type	1A	1B	2	3
Frequency	2nd most common	Rare	Most common	Very rare
Gender	Male (90%)	Male	Male = Female	Male = Female
Age	15-64	40-50	35-65	40-60
Congenital/acquired	Congenital	Congenital	Acquired	Acquired
Laterality	Unilateral	Unilateral	Bilateral	Bilateral
Visual acuity at presentation	Around 20/40	≥20/25	20/20 to 20/300	20/25 to 20/50
Classic signs	Exudates and macular edema	Exudates and macular edema	Foveolar atrophy or CNV (stage 5)	Capillary obliteration
Systemic associations	None	None	Possible diabetes	CNS involvement

IJRT was first identified by Gass and Oyakawa in 1982.[3] They classified the disease into four groups based on clinical features and results from fluorescein angiography. Gass and Blodi updated this classification system in 1993.[3] They divided IJRT into three groups with smaller subgroups within the first group. (*See "Classification of IJRT by Type," above.*) This most recent classification system is widely accepted and described as follows:[3]

- ***Type 1.*** The hallmark characteristic of type 1 is variable sized aneurysmal dilations and easily visible telangiectasis of the retinal capillaries.[3]

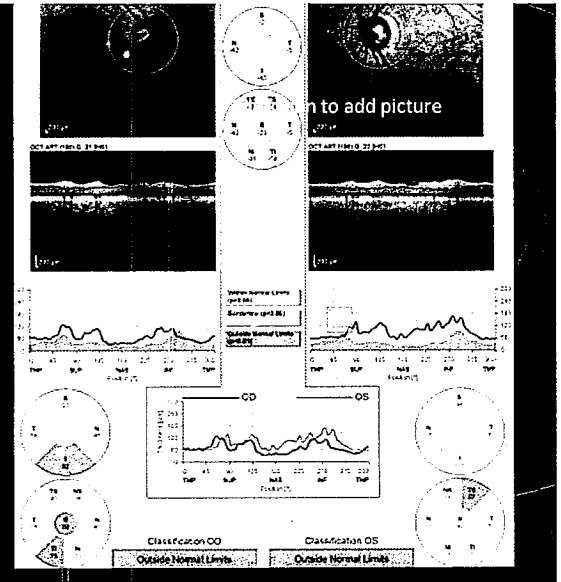
Type 1 is subdivided into types 1A and 1B.[3] Each are unilateral and congenital, typically affecting men in their 30s and 40s.[3] The vision loss in type 1A is more significant than in type 1B.[3]

Type 2, stage 1 IJRT: fundus photo (A) with images of early phase FA that shows punctate staining (B) and late phase shows mild leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J Ophthalmol. 2010 Jul;17(3):224-41.*



Type 2, stage 2 IJRT: fundus photo (A) with early phase (B) and late phase showing leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J Ophthalmol. 2010 Jul;17(3):224-41.*

Type 2, stage 3 IJRT: fundus photo (A) shows grayish ring with crystals surrounding the macula. Early phase of FA shows visible telangiectasis (B) and late phase shows late leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J*



EARLY LTG

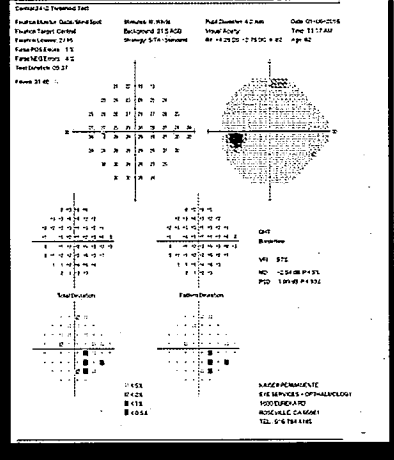
Sum 83 yp hisp m pseudophake

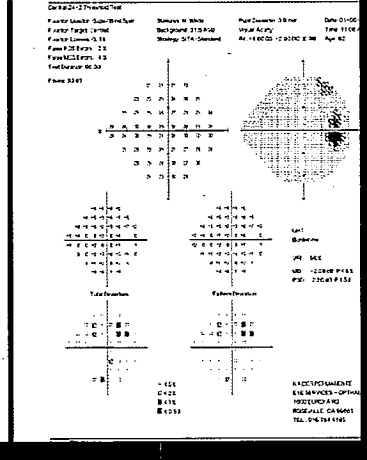
Lower IOPs thinner pak, Cupping R>L with inf thinning RE matching OCT and possibly early VF depression

IOP tmax 17/18 mostly mid teens
CD .70./.60 photo 1/16 thinner inf rim RE
OCT R thin inf L trace thin sup
pak 511/520
gonio deep to scleral spur , no synechia; low pigment OU
VF R borderline sup depression LE borderline inf depression

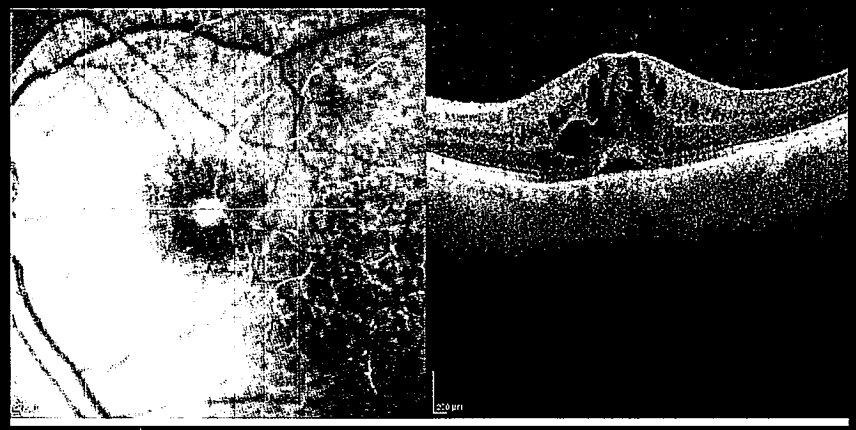
P: discussd in detail pros and cons of Tx. Pt decided to treat.

latan qd : discussed side effects and gtt instilla tion in detail; MV 5w pt to book





LATANOPROST CME



- 83 yo hisp m
- Iols 2002
- Stated on latan 1 month prior

Ophthalmology. 1999 May;106(5):1024-9.

Cystoid macular edema associated with latanoprost therapy in a case series of patients with glaucoma and ocular hypertension.

Moroi SE[1], Gottfredsdottir MS, Schteingart MT, Elner SG, Lee CM, Schertzer RM, Abrams GW, Johnson MW.

Author information

Abstract

OBJECTIVE: To identify coexisting ocular diagnoses in a case series of eyes that developed cystoid macular edema (CME) associated with latanoprost therapy.

DESIGN: Retrospective observational case series.

PARTICIPANTS: Seven eyes of seven patients who developed CME possibly associated with latanoprost treatment were studied.

INTERVENTION: When these patients, all of whom were treated with latanoprost in addition to other glaucoma medications, described blurred vision or eye irritation, ocular examination revealed CME, which was confirmed by fluorescein angiography. Latanoprost was discontinued, and in three cases topical corticosteroids and nonsteroidal anti-inflammatory agents were used to treat the CME.

MAIN OUTCOME MEASURES: Visual acuity and intraocular pressure were determined before latanoprost use began, during therapy, and after latanoprost use ceased. In these cases, resolution of CME was documented clinically after discontinuing latanoprost.

RESULTS: Clinically significant CME developed after 1 to 11 months of latanoprost treatment, with an average decrease of 3 lines in Snellen visual acuity. Intraocular pressure decreased an average of 27.9% during treatment. Cystoid macular edema was confirmed in all cases by fluorescein angiography. In these seven patients, the following coexisting ocular conditions may have placed these eyes at risk for prostaglandin-mediated blood-retinal barrier vascular insufficiency: history of dipivefrin-associated CME, epiretinal membrane, complicated cataract surgery, history of macular edema associated with branch retinal vein occlusion, history of anterior uveitis, and diabetes mellitus. In all cases, the macular edema resolved following discontinuation of latanoprost, in some instances with concomitant use of steroidal and nonsteroidal anti-inflammatory agents.

CONCLUSIONS: In this case series of pseudophakic, aphakic, or phakic eyes, the temporal relationships between the use of latanoprost and developing CME, and the resolution of CME following cessation of the drug, suggest an association between latanoprost and CME. In all cases, coexisting ocular conditions associated with an altered blood-retinal barrier were present.

PMID: 10328408 DOI: 10.1016/S0161-6420(99)00528-X

OD/MD PARTNERING

In folsom

- Ron
- This is one of my coag patients. He started on latanoprost in June of this year and came in today complaining of micropsia and blur LE. He has CME and rare cell in AC LE only. Clint suggested I start him on PF and Voltaren qid LE and switch latanoprost to T1/2 which I did. He thought he might need a sub tenons injection. Ok with you if I just check him in a week? (no other cause of CME likely ; not diabetic; cat sx was 15 y ago, no erm)
- ed
- Sure, but but it will take longer then a week to resolve

1 w later (pt wanted roseville)

- Rominder
- Here's the latanoprost CME LE case I mentioned. He's been on T1/2 and PF/voltaren qid since 7/29 (1 week)
- Still a barely detectable AC response; no change in OCT or VA (20/40) ; T 13/12. Elaine mentioned CME should take maybe a month to resolve
- I booked a return on 8/29 (the next Monday Ill be in Roseville). Ill keep you posted, ok?
- Ed
- Sounds good. Thanks for letting me know.

DON'T WORK TOO HARD!

- Predilate
- Same schedule ok
- Things tend to balance out overall timewise
- Save time by not needing hallway consults
- Multitasking

THANKS AGAIN!!!!!

Curriculum Vitae

Edward A. Denz, O.D.
2315 Carlisle Court
El Dorado Hills, CA 95630
(916) 933-3726

EDUCATION

Foothill College, Los Altos Hills, California, September 1974 - June 1977.

San Jose State University, San Jose, California, September 1977 - June 1979.

BS, OD University of California Berkeley School of Optometry, September 1979 - June 1983.

Certificate of Residency in Optometry, Department of Medicine and Surgery, Veteran's Administration Medical Center, Albuquerque, New Mexico, June 1984.

PROFESSIONAL LICENSE

Optometry License, California, September 21, 1983.

PROFESSIONAL EXPERIENCE

Assistant Clinical Professor, University of California Berkeley School of Optometry, July 1984 - August 1990.

Staff Optometrist, Fairfield Medical Arts Center, Fairfield, California, September 1984 - May 1985.

Staff Optometrist, Permanente Medical Group, Sacramento, California, May 1985 - June 1991.

Senior Optometrist, Permanente Group, Rancho Cordova, California, July 1991 - Present.

MANAGEMENT EXPERIENCE

Courses taken in Business Management and Accounting, San Jose State University.

Certificate of completion, Partners in Development Basic Leadership Skills, May 1992.

University of California Berkeley School of Optometry. Supervised interns in the examination of patients referred from General Clinic for special diagnostic work-ups. Monitored all phases of contact with patients including case histories, testing diagnosis, plan and follow-up. Coordinated patient flow with on-sight consulting ophthalmologists, organized and presented lectures, moderated Grand Rounds case presentations, participated in peer review and intern evaluations. In charge of Ocular Diagnosis Clinic, summers of 1986, 1987.

Senior Optometrist at Kaiser, Rancho Cordova, California. Attended management meetings and acted as management liaison to optometry staff. Reviewed patient concern reports from member services department. Responsible for satisfying patient complaints, discussing cases with optometrists involved, and reporting outcomes to member services department. Received and organized financial data reports for optometry department; sent copies to Chief of Optometry. Organized clinical cases for discussion at monthly optometry / ophthalmology meetings. Organized and implemented an in-house monthly state-approved continuing education program for optometry staff. Collected time cards and checked for accuracy. Member of planning committee for a pilot project to reengineer eye services to be

conducted in Rancho Cordova. Assisted Chief of Optometry with staff optometrists' annual evaluations. Solicited help of optometry staff in redesigning examination form and designing rubber stamps for more efficient clinical records keeping. Assisted Chief of Optometry and medical group administrator in preparing optometry budget. Under Chief of Optometry, responsible for maintaining clinical equipment. Identified quality concern cases and provided feedback and discussion for involved optometrists. Worked with pediatric staff to help determine best practice for screening pre-verbal patients for amblyopia risk.

SPECIAL ACTIVITIES

Principal investigator, Infant Eye Screening Study, Kaiser Research Foundation Institute Project #135-9754. Initiated pilot project program to evaluate the effectiveness of photorefraction as a method for screening infants for high risk ocular disorders in the Pediatrics Department at Kaiser, Rancho Cordova. Participated in the early development of the test at Smith-Kettlewell Institute of Visual Science. Applied for and received grant from Kaiser Foundation Research Institute. Worked with pediatric staff to integrate the test into the 10-month well-baby exam. Motivated and coordinated staff in pediatrics optometry and ophthalmology departments in screening 1200 infants, and work-up and treatment of high risk infants. Presented findings at Kaiser-sponsored "New Visions and Ventures" program, San Francisco, October 1994 and Academy of Optometry Convention, San Diego, December 1994. Completed paper to be submitted to *Pediatrics* and *Journal of Optometry and Visual Science.*

Chairman of the Quality Assurance Subcommittee for Optometry in Northern Sacramento area, 1990 - Present. Conducted quality studies including: 1. Appropriate management of patients with reduced visual acuity. 2. Adequacy of consult request form and appropriateness of referrals to ophthalmologists; analysis of optometry referral patterns. 3. Retrospective analysis of patients of acute complications of contact lens wear. 4. Frequency of examination for high and low risk diabetic patients in optometry and ophthalmology; frequency of dilated fundus examination of diabetics in optometry. Worked with Chief of Optometry in organizing semi-annual quality improvement meetings with Sacramento area clinics to review quality study findings and quality concern cases. Collected quality concern cases as well as examples of innovative care from staff optometrists. Prepared and presented cases at semi-annual quality improvement meetings. Developed questionnaire regarding optometric practice patterns, distributed, collected, and analyzed questionnaire. Reported findings at semi-annual quality meetings.

Chairman of the local Professional Practice Committee. Established committee to promote communication between Optometry, Ophthomology and Administration regarding patient care topics. Obtained input from staff and department chief in preparing LPPC agendas. Chaired monthly meetings. Prepared minutes and distributed to staff optometrists in area.

REGIONAL EYE CARE COMMITTEE MEMBERSHIPS

Member of Diabetic Retinal Screening Guideline Group, October 1994 - Present. One of two optometrists in eight member group to determine and implement best practice guidelines for the screening of patients with diabetes for diabetic retinopathy.

Member of Regional Professional Practice Committee, 1992 - Present. Member of committee consisting of seven optometrists, ophthalmologists and regional administrative staff which discusses current eye care issues at Kaiser including, but not limited to, the scope and quality of optometry practice and interaction between optometry and ophthalmology departments. Wrote and published minutes of meetings in optometry newsletter. The committee also established the Regional Quality Improvement Committee and the Regional Optometry Education Committee and placed under the guidance of the Regional Optometry Chiefs Committee.

Regional Optometry Education Committee, 1993-Present. Consists of two staff and two Chiefs of Optometry. Prepared, distributed and analyzed a survey of 180 optometrists in the region regarding interest in Kaiser-sponsored continuing education topics and preferred mode of presentation. The survey

was used by the Education Committee for planning future educational activities for optometrists in the region. Designed a system for acquiring one-hour slide and video presentations from the International Library, Archives and Museum of Optometry. Obtained approval from the State Board of Optometry for continuing education credit. The program is administered once a month and is currently being used in five Kaiser locations in the region. Worked with committee members to help plan and organize Kaiser optometry seminar held in October 1994. Distributed information via the newsletter regarding unique educational opportunities at various local facilities, such as Grand Rounds case presentations.

Regional Quality Improvement Committee, 1993 - Present. Consists of three staff and three Chiefs of Optometry. Performed survey of current quality assurance plans of 16 Kaiser optometry departments. Compared with plans from benchmark services and JCAHO guidelines. Completed report and used to make recommendations for developing quality measures at Kaiser optometry departments. Assisted committee in designing and conducting pilot quality studies at various Kaiser locations. Reported findings and made recommendations to regional optometry chiefs (April 1994). Currently working on developing best practice determination and outcome strategies.

Area Representative/ Executive Board Member/ Contract Negotiation Committee Member, Optometry Unit, ESC-MEBA, 1990 - Present. Responsible for representing staff optometrists from Sacramento, Roseville, Davis, and South Sacramento facilities. Conducted area dinner meetings to determine needs of staff optometrists and to discuss union activities. Attended executive board meetings. Served on the negotiating committee for the 1990 contract talks.

Member of the Research Committee at Kaiser, Sacramento, 1990 - Present. Assist Chairman of Research Committee in evaluating research proposals from optometry staff throughout the region.

Editor of the Kaiser Optometry Newsletter, 1991 - Present. Founded professional newsletter to encourage communication between facilities concerning professional issues, case reports, events, and opinions. Encouraged staff and management to participate in the publication of articles. Served as editor. Supervised ESC staff in preparing publication.

INVITED LECTURES

Kaiser Optometry Continuing Education Program case presentations: Malignant Melanoma Presents with Minimal Signs and Symptoms; Management of Intractable Diplopia, October 1994.

Photorefraction Screening of Infants with Amblyopia Risk Factors in a large Pediatric Setting, Poster Presentation, Kaiser "New Visions and Ventures", American Academy of Optometry meeting, December 1994.

Kaiser Optometry Continuing Education Program case presentations: Idiopathic, Parafoveal Telangectasis; Optic Nerve Drusen, October 1993.

Anomalies of the Optic Nerve, Sacramento Optometric Society, Ocular Symposium, September 1993.

Kaiser Optometry Continuing Education Program case presentations, May 1992, November 1992. Anomalies of the Optic Nerve, Kaiser Permanente "Innovations in Sight" Educational Program, November 1991.

Use of Photorefraction in the Vision Screening of Infants, Sacramento Valley Optometric Society, September 1991.

Amblyopia Risk Factors and Screening Strategies and Prevention, Pediatrics Department Meeting, Kaiser Hospital, Sacramento, 1990.

Effects of Carotoid and Basilar Artery Disease on the Eye and Vision, Education Program of the UCBSO Alumni Association, 1989

Member of Panel, Grand Rounds Case Discussions; lecture and lab instructor for advanced course in binocular indirect ophthalmoscopy and slit lamp, Education Program, UCBSO Alumni Association, 1985 - 1989.

Anomalies of the Peripheral Retina, Kaiser Continuing Education Program, 1988.

Anomalies of the Vitreous, Education Program of the UCBSO Alumni Association, 1988.

Eyelid Disorders, Fall Clinical Colloquium Program, UCBSO, 1988.

Special Testing Procedures for Optometrists, Kaiser Continuing Education Program, October 1986.

Common disorders of the Macula, Congress of the California Optometric Association, Long Beach, 1986.

Disorders of the Peripheral Retina/ Binocular Indirect Ophthalmoscopy Workshop, Sacramento Valley Optometric Society, 1986.

Differential Diagnosis of Retinal Lesions, Solano County Optometric Association, Napa, California, 1985.

Complications of Cataract Extraction, Faculty of Northeastern State University, Tahlequah, Oklahoma, 1984.

Differential Diagnosis of Common Lid Lesions, Bernalillo County Optometric Society, Albuquerque, New Mexico, 1984.

RESEARCH EXPERIENCE

Smith Kettlewell Institute of Visual Science, January 1983 - June 1993.
Assisted visual scientist in the preliminary design and testing of a photoretinoscope for use in infant testing.
NASA Ames Research Center, Life Science Branch, December 1978 - September 1979. Assisted several staff scientists in visual perception and eye tracking research to determine optimum methods of presenting data on visual display terminals used in aircraft.

PUBLICATIONS

Review Editor for *Optometry Edition*, 1986 - 1987.

Denz, E.A., Palmer, E.A., "Effects of Field of View and Monocular Viewing on Angular Size Judgments" NASA; *Technical Memorandum* #81176; 1978.

Denz, E.A., "Basal Cell Carcinoma" *Review of Optometry* October, 1984.

Denz, E.A., Chan, L.K., Shu-Winges. Charlene, Hamer, R.D., Norcia, A.M., "Photorefractive Screening for Amblyopia Risk Factors in a Pediatric Setting" to be submitted to *Pediatrics* December 1994.

PROFESSIONAL MEMBERSHIPS

Sacramento Valley Optometric Assosication.

California Optometric Assosication.

American Optometric Assosication.

CALIFORNIA STATE BOARD OF OPTOMETRY

January 11, 2017

Kaiser Permanente
Attn: Dr. Joan Mah, O.D.
7200 Redwood Blvd.
Novato, CA 94945

RE: Continuing Education (CE) Course Approval Request

Dear Dr. Mah:

The California State Board of Optometry (Board) may approve CE courses after receiving the applicable fee, and it has been determined that the course meets criteria specified in CCR § 1536 (g):

> (g) The criteria for judging and approving continuing education courses by the Board for continuing optometric education credit will be determined on the following basis:
> (1) Whether the program is likely to contribute to the advancement of professional skill and knowledge in the practice of optometry.
> (2) Whether the instructors, lecturers, and others participating in the presentation are recognized by the Board as being qualified in their field.
> (3) Whether the proposed course is open to all optometrists licensed in this State.
> (4) Whether the provider of any mandatory continuing optometric education course agrees to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation.

The Practice and Education Committee (Committee), having the delegated authority[1], reviewed your course approval requests (Attached) during a public meeting on January 10, 2017 and believed there was insufficient information to determine if the courses met the requirements listed above. Therefore, the following courses are denied:

Course Title: Emerging Optometry Roles in a Multidisciplinary Setting

If you would like the Committee to reconsider your courses, please provide the following information:

- The information provided tends to jump from one aspect to another without cohesively tying together. The Committee wants you to provide information explaining exactly what it is you hope to impart to the attendees of this course.

If you have any questions, please contact Kristina Eklund at 916-575-57165 or Kristina.Eklund@dca.ca.gov.

Sincerely,

[1] Delegated Authority granted February 19, 2016

Jessica Sieferman
Executive Officer
Jessica.Sieferman@dca.ca.gov

STATE BOARD OF OPTOMETRY
2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834
P (916) 575-7170 F (916) 575-7292 www.optometry .ca.gov

Continuing Education Course
Approval Checklist

Title: Alejandra Reyes, OD CE Seminar – **Emerging Optometry Roles in an Integrated Multidisciplinary Setting**

Provider Name: Kaiser Permanente c/o Dr. Joan Mah, OD

☒Completed Application
Open to all optometrists? ☒Yes ☐No
Maintain record agreement? ☒Yes ☐No
☒Detailed Course Description
☒PowerPoint and/or other presentation materials
☐Advertising (optional)
☒CV for EACH course instructor
☒License Verification for each course instructor
Disciplinary History? ☐Yes ☒No

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY — GOVERNOR EDMUND G. BROWN JR.

OPTOMETRY
STATE BOARD OF OPTOMETRY
2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834
P (916) 575-7170 F (916) 575-7292 www.optometry.ca.gov

CONTINUING EDUCATION COURSE APPROVAL APPLICATION

$50 Mandatory Fee

Pursuant to California Code of Regulations (CCR) § 1536, the Board will approve continuing education (CE) courses after receiving the applicable fee, the requested information below and it has been determined that the course meets criteria specified in CCR § 1536(g).

In addition to the information requested below, please attach a copy of the course schedule, a detailed course outline and presentation materials (e.g., PowerPoint presentation). Applications must be submitted 45 days prior to the course presentation date.

Please type or print clearly.

Course Title	**Course Presentation Date**
Alejandra Reyes, an CE Seminar Emerging Optometry Roles in an Integrated Multidisciplinary Setting	09/10/2016

Course Provider Contact Information

Provider Name

Joan (First) Mah (Last) Torio (Middle)

Provider Mailing Address

Street 700 Redwood Blvd City Novato State Ca Zip 94945

Provider Email Address Joan.Mah@kp.org

Will the proposed course be open to all California licensed optometrists?	☒ YES ☐ NO
Do you agree to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation?	☑ YES ☐ NO

Course Instructor Information

Please provide the information below and attach the curriculum vitae for each instructor or lecturer involved in the course. If there are more instructors in the course, please provide the requested information on a separate sheet of paper.

Instructor Name

Edward (First) Deuz (Last) A (Middle)

License Number 7693 TPG	**License Type** Optometry
Phone Number (916) 532-6227	**Email Address** Ed.Deuz@kp.org

I declare under penalty of perjury under the laws of the State of California that all the information submitted on this form and on any accompanying attachments submitted is true and correct.

Joan T. Mah — *Signature of Course Provider*

7/5/16 — *Date*

Form CE-01, Rev. 5/16

Hi Kristina,
He is presenting on 9/10 1:30-2:30.
The CE program starts at 8:30am and ends at 3:30pm.
You should also now have everything for Dr. Ed Denz, Emerging Roles in Optometry for Medical Optometry.
Thank you,

Hi Kristina,
Here is the information on Dr. Ed Denz who will replacing Dr. Huck Holz on Sept 10, 2016.

Edward A Denz , OD
7693 TPG California Optometry License

He will present on the emerging Optometry roles in an integrated multidisciplinary setting illustrated with case presentations. He will present cases that include diagnosis specific learnings as well as illustrate novel inter professional relationships in the multidisciplinary management of ocular disease. Cases will include glaucoma, macroaneurysm, macular degeneration, juxtafoveal telangiectasis, epiretinal membrane with hidden sub retinal neovascularization, and others.

Ed Denz, OD CV
Education
OD degree UCBSO 1983
Hospital based residency VA Hospital Albuquerque, NM 1983-84

Professional
Assistant and associate clinical professor UCBSO 1984-1992

staff optometrist Fairfield Medical Group 1984-85
staff optometrist Kaiser Permanente
North Valley Service Area 1985-1995

Chief Optometrist Kaiser Permanente
North Valley Service Area 1995-present.

Email address is Ed.Denz@kp.org
Phone number is 916-817-5171

Dr. Denz's outline for his presentation on Emerging Optometry Roles in an Integrated Multidisciplinary Setting

Cases reviewed will be the following:

1. Glaucoma
2. Macroaneurysm
3. Macular Degeneration
4. Juxtafoveal Telangiectasis
5. Epriretinal Membrane with Hidden Sub Retinal Neovascularization
6. Others

FUTURE OF KAISER OPTOMETRY ??

RISKS AND OPPORTUNITIES

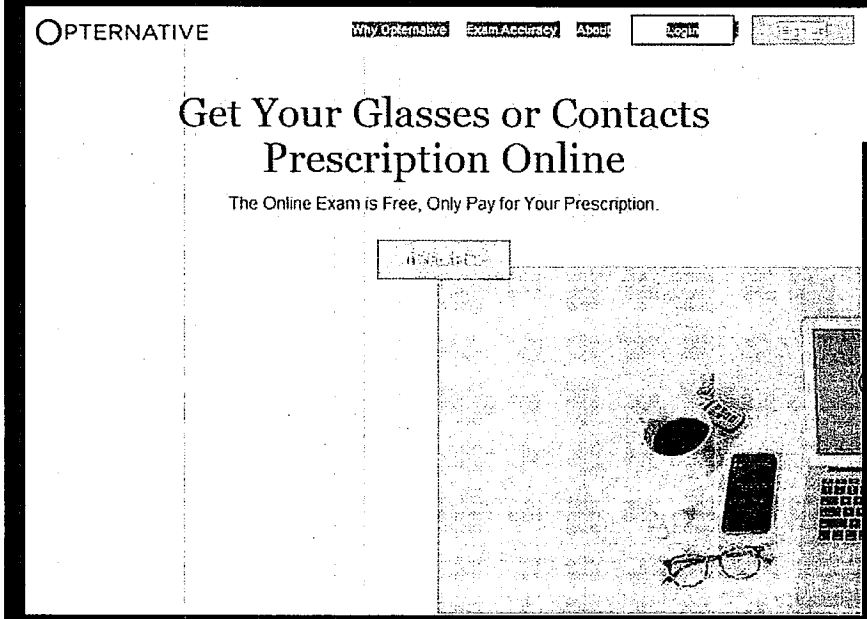
GOAL: MOTIVATE/INSPIRE/ENCOURAGE DEVELOPMENT OF OPTOM MED ROLE

SCOPE

BEHAVIORS

CASES

RISKS??
REFRACTION TECHNOLOGIES (EFFECT ON OPTOMETRY DEMAND??)



Ophthalmology is slowly turning to Physician assistants

Few work in the field, but the need is growing.

Steven Lamm, Fairfax, Virginia

Kim Darden, the PA at Central Plains Eye MDs in Wichita, Kan., examines a patient. COURTESY OF CLARISSA GREENLEAF

The United States faces both a projected shortage of ophthalmologists and a near certain increase in the number of aging patients, who typically have more eye problems than the rest of the population. So we need to ask: Who will take care of the nation's eyes in the future?

One solution may be for ophthalmologists to work with more physician assistants (PAs). PAs have the medical and surgical training to do a

FUTURE OF OPTOMETRY IN CLINICAL SETTING IS BRIGHT PROVIDED WE MAXIMIZE VALUE (COMP/JOB SECURITY)

- Optical revenue
- Member satisfaction
- Medical leveraging
- Ecmp trends: Emerging primary care role/need for optometry to tie things together (in person roles)

PRIMARY EYE CARE

- **"Primary care** is the day-to-day healthcare given by a health care provider. Typically this provider acts as the first contact and principal point of continuing care for patients within a healthcare system, and coordinates other specialist care that the patient may need."
- I would add: "provides continued care; consults with specialists; takes responsibility for over all care, pt communication and coordination of care with multiple specialists"

IS THIS PRIMARY EYE CARE?

- PLAN:
- 1. Final SRx released.
- 2. If applicable, patient should continue follow-up appointments with Ophthalmology for any history of ocular conditions
- 3. Return to Optometry Clinic in 1-2 years or prn if any visual changes/problems

CLASSIC VS PRIMARY CARE

- Provide refraction, vision testing, optical solutions/problem solving
- Limited testing for medical screening
- Detection of abnormal : refer to OMD for additional testing Dx and mngt
- Future optom visits: refraction role and defer medical to ongoing OMD care (OMD provides primary med eye care role)

- Provide refraction, vision testing, optical solutions/problem solving
- medical screening
- Detecting abnormal status: order additional secondary tests as needed (OCT/FA/VF,labs etc). Provide Dx /mngt with OMD support as needed w/I legal scope of practice.
- Ongoing refractive and medical care by OD; OMDs help when needed, provide procedural care and refer back to OD for primary care mngt

PRIMARY CARE "BEHAVIORS"/ BEST PRACTICES

- OD to OD referral
- OD offer to take over MD care as appropriate
- OD share cases (via chart review) as needed with MD (mostly w/o need for oph apps) for advice (rather than refer)
- MD to OD referral for long term medical mngt/ monitoring

ODs and MDs work as true team and help each other

Fewer :lost to fu, misdiagnoses,

Better pt communication

Save cost via reducing redundant visits

Better pt service (fewer apps needed etc)

Value added optometry care/role

PRIMARY OPT MED CARE SCOPE

- Flashes floaters /pvd r/o breaks; RD BIO depression
- Red eyes : infections; iritis periph infiltrate, etc
- Fb removal
- Dry eye
- C abrasions
- Coag
- Retina : DR, arm, vasculpathies (BVO etc) ,
- Ped: any age? (pseudo strabs etc) , patching, etc
- Vision loss wu
- On call?
- MD sub?

- Testing: BIO ; depression, OCT, labs, FA,

- Procedures: Fb, abrasions, plugs, lac irrigation,
- other

BIGGER LIST

- Treatment of corneal abrasion including use soft contact lens bandages
  Treatment of allergic and infectious conjunctivitis
  Treatment of sterile peripheral corneal ulcers (central or infectious ulcer require consultation with an ophthalmologist)
  Lacrimal irrigation for NLD obstruction
  Removal of foreign bodies from conjunctiva cornea
  Binocular indirect ophthalmoscopy with scleral indentation for posterior vitreous detachment
  Clinical monitoring of dry macular degeneration, epiretinal membrane, lamellar macular, mild to moderate diabetic retinopathy, resolved or stable branch vein occlusion, central serrous retinopathy and burnt out (post PRP) proliferative diabetic retinopathy
  management and/or treatment of glaucoma suspects, chronic open angle glaucoma, pigmentary glaucoma, pseudoexfoliation glaucoma
  Monitoring of choroidal, conjunctival and Iris Nevis with photographic images
  Ordering of FA and OCT as appropriate; direct referral to retinal clinic for approved ODs
  Treatment of unilateral non-granulomatous iritis (granulomatous, bilateral, recurrent uveitis requires consultation with an ophthalmologist)
  surface disease dry. plugs restasis
  Pediatric eye care >age 2 (ped champs) or > age 5 general optometry including treatment of amblyopia

TRANSFER OF CARE TO OPTOM EXAMPLES

- Dear Michele and Scott Mr xxx appears lost to followup for glaucoma (last oph 5/12 last VF 9/05) If ok w you both, he appears stable and Ill update his testing and resume follow up for him (per his approval)

- Michele,Mrs xxxx is due for your yearly followup of resolved CSR LE next month. I got a good look at her at her refraction exam and she's normal/stable w good VA and normal foveal contour on her OCT. OK if I take her off your book list and ck her in a year?
- Sean: Mrs Howard is happy w my fu in future; if ok w you Ill put on my BL x 2 y, ok? (ERM 20/40 VA RE)
- Ron Mrs xxxx lattice/retinoplexy and lamellar hole RE look stable and shes happy w my fu; ok if I see her in a year and save you an appointment?
- Sean. Mr xxxx is on your BL for xxx so I checked him (maybe you can extend his BL and save an oph appointment. IOP was 10 and he looks stable IOP wise but last VF 1/09 (advanced VF loss LE)
- Rich: ERM L w good VA; HX BRAO RE with corresponding sup alt defect (hard to distinguish from coag); Txed prophylactically c latan. w low IOPs; iols ou; If you think its ok; pt is happy w my fu of your pt ; ok w you?
- That is fine.
- Rominder: You're scheduled to see Mr C in May. He's on cosopt bid OU; healthy looking nerves/OCT possible early in depression R on VF ; OHT prior to Tx (close to 30 wo meds); 16/16 today on meds ; stable situation . Do you want me to manage him? If not I wont book fu w me; If so ; Ill take off your BL.
- Thanks for following him. You can take him off my booking list.

OD TO OD REFER

- See my notes: I didn't think meds were indicated at this time.xxxxx should get an OCT in 2 years and VF in a year w IOP. Do you want to follow ?

- I would like you to follow her if that is ok w/you Thanks for seeing her

OD TO PCP

- Dear Mr xxxxxx
  I sent an email to Dr xxxxxx asking to order a Doppler test to check your carotids and would like to check you in 3 months (youll get an app in the mail)

  Sincerely,
  Ed Denz, OD

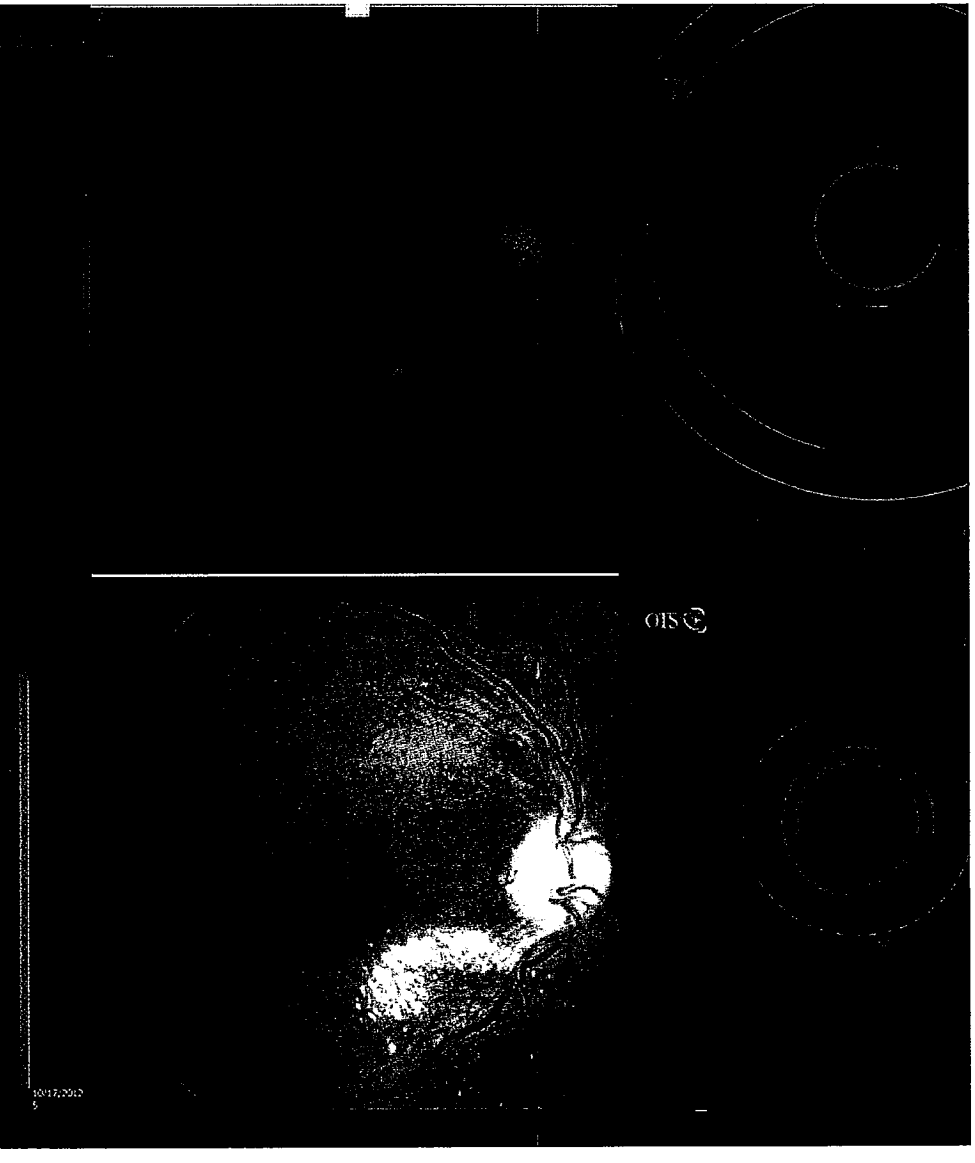
DR OR OTHER?

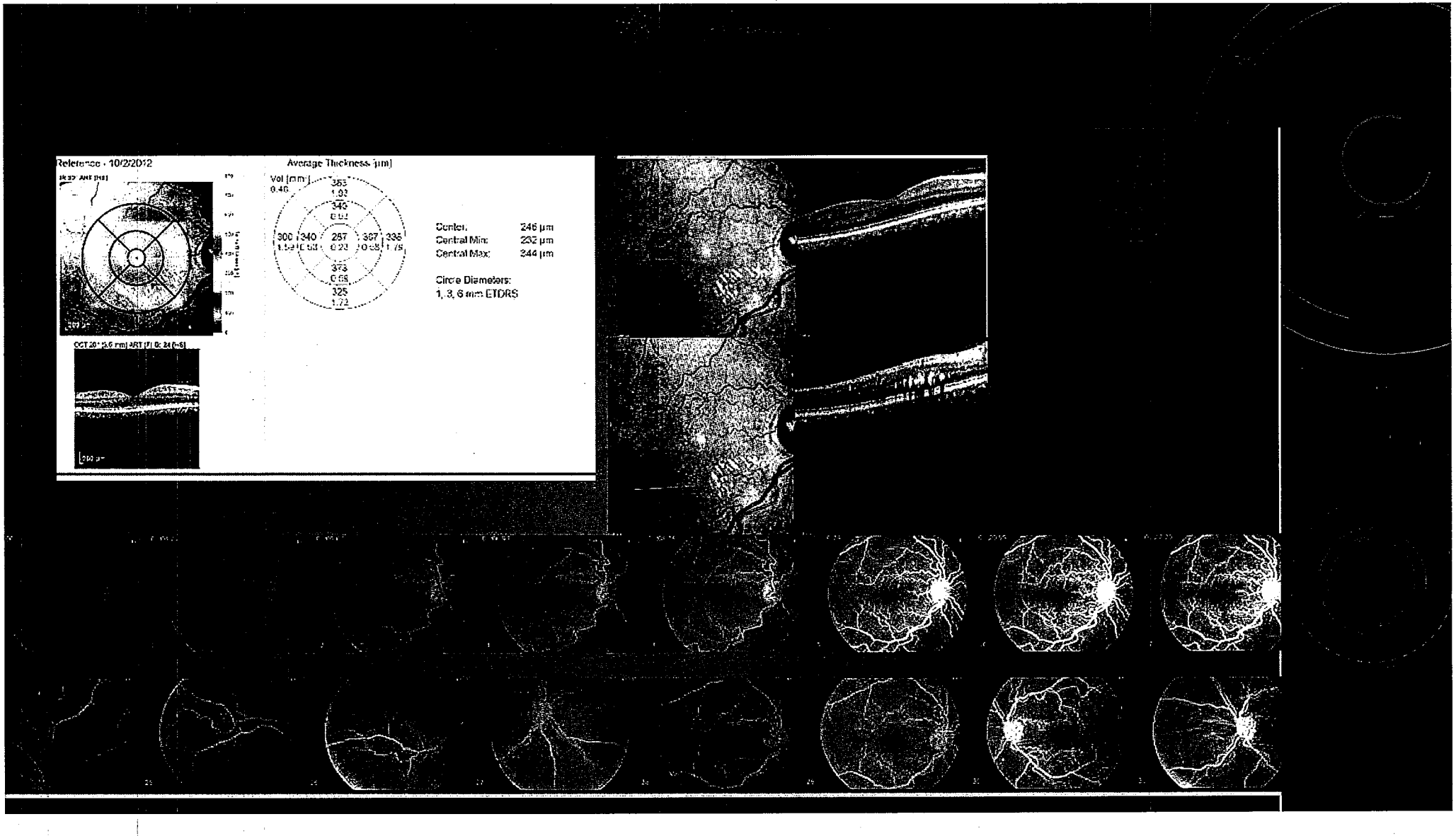
59 yo afro

DM x 15 good control /HTN

Mild DR

20/25 OU




Average Thickness [µm]
Vol [mm³]
0.46
353
1.92
340
0.82
300
1.59
340
0.93
287
0.23
367
0.85
336
1.76
373
0.55
325
1.72
Center: 246 µm
Central Min: 232 µm
Central Max: 244 µm
Circle Diameters:
1, 3, 6 mm ETDRS

MACROANEURYSM

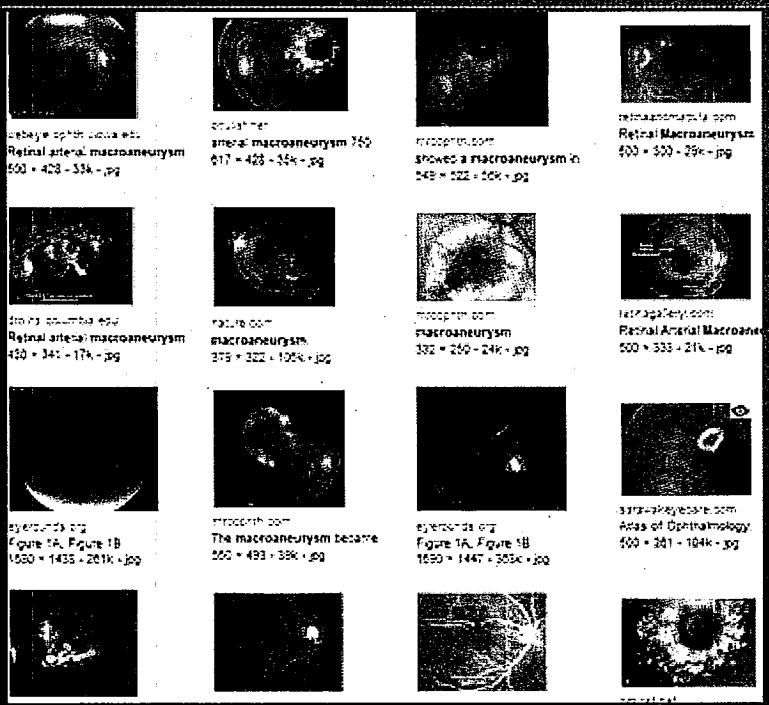
- A/P (retina)
- Self thrombosed macroaneurysm along an arteriolae branching off the IT arcade with resolving edema as evidenced by hard exudates.No leakage on fluorescein angiogram or fluid on OCT
- non-proliferative diabetic retinopathy both eyes
- Mild hypertensive retinopathy

- Plan
- Observe for now
- BP and diabetes mellitus control stressed
- FU 2-3 mths with comp and retina PRN

- Followed by me q 3m for 1y then q 6m
- By 1year MA almost invisible
- Last fu : mild+ DR only little to no trace of MA

macroaneurysm

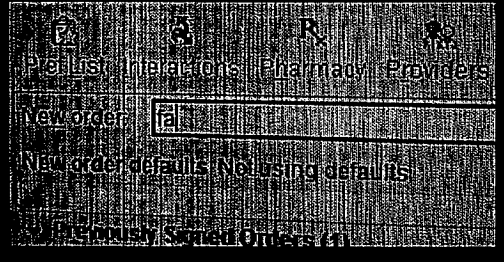
Click to add text

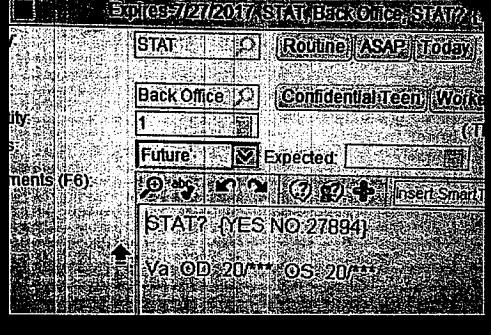


Click to add text

- **Disease[edit | edit source]**
- Retinal arterial macroaneurysms are acquired, focal dilations of retinal arterial branches (mostly second-order retinal arterioles) that can be classified as hemorrhagic or exudative. Macroaneurysms range from 100 to 250µm in diameter and are most often found on the temporal retina. Associated findings include capillary telangiectasias, vascular remodeling, and retinal edema. While visual prognosis is generally good, vision loss can occur from macular edema, end-arteriole [illegible] from thrombosis, or hemorrhage due to rupture [illegible]. [1-2]. Diagnosis is made on clinical exam and via imaging modalities such as fluorescein angiography (FA) and spectral-domain optical coherence tomography (SD-OCT), and [illegible]. More recently, the use of anti-vascular endothelial growth factor (VEGF) intravitreal injections has been suggested but not extensively studied as a possible treatment modality.

ORDERING FA (EASY!)



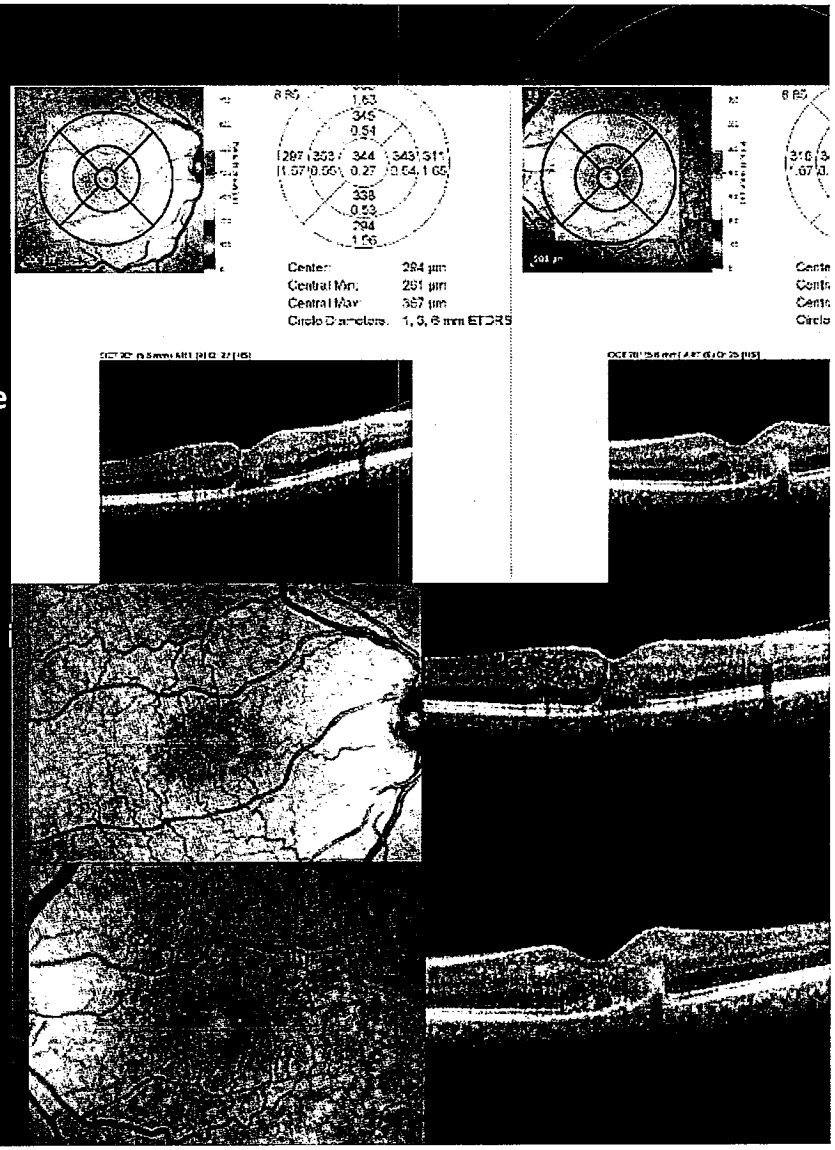


TESTING TIPS : LABS OMD/PCP CAN HELP

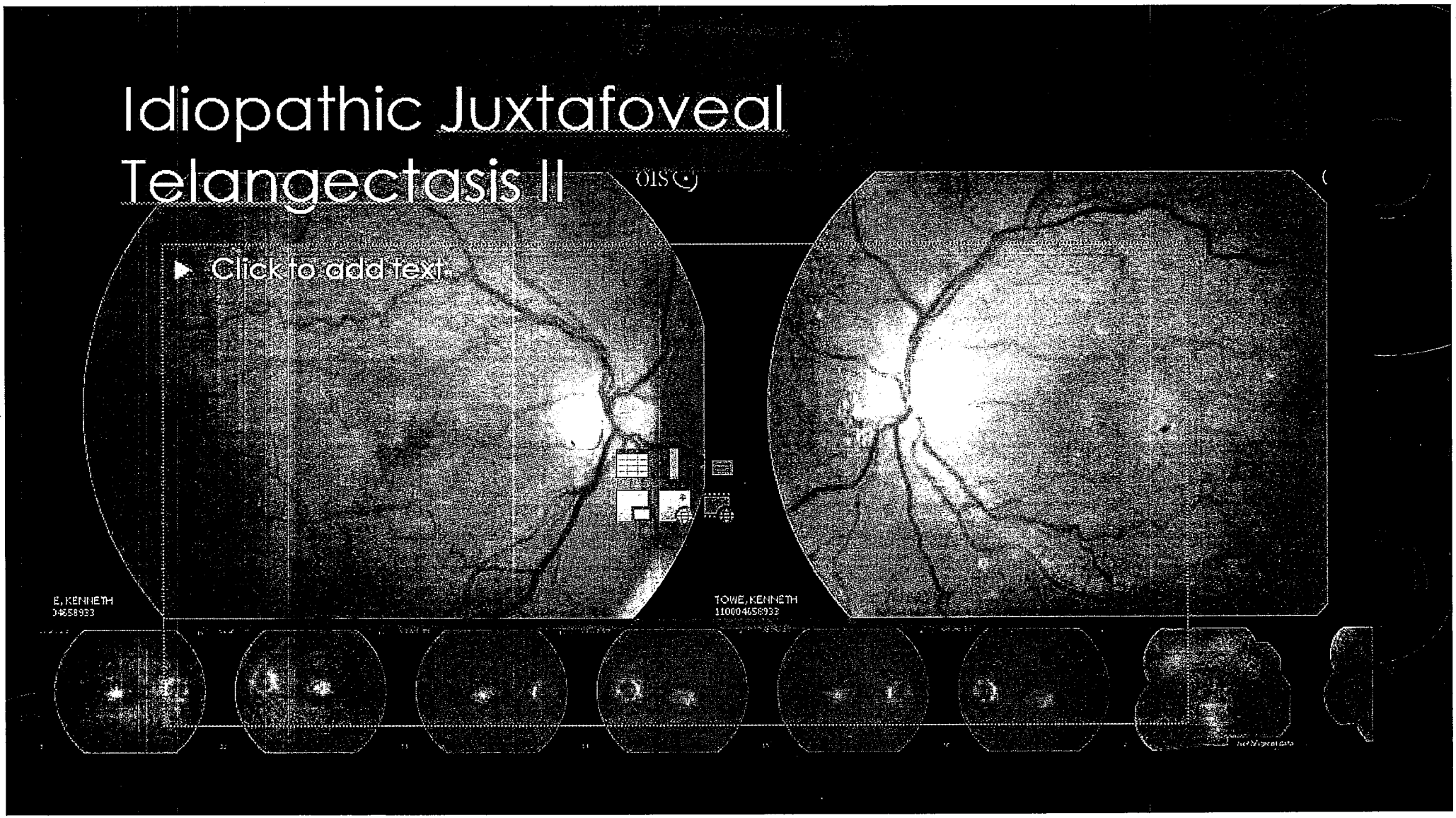
- **Laboratory Studies**
- The workup should be tailored to the patient according to the history or to the signs and symptoms that point to a certain etiology.
- Laboratory workup may not be necessary in certain situations.[2] In cases of mild, unilateral nongranulomatous uveitis in the setting of trauma, known systemic disease, or a history and physical not suggestive of systemic disease, laboratory studies are unlikely to be helpful.
- If the history and the physical examination findings are unremarkable in the presence of bilateral uveitis, granulomatous uveitis, or recurrent uveitis, a nonspecific workup is indicated.
- The following tests do not need to be conducted in the emergency department and may be ordered by the consulting ophthalmologist[2] as outpatient workup.
- CBC count
- Erythrocyte sedimentation rate (ESR)
- Antinuclear antibody (ANA)
- Rapid plasma reagin (RPR)
- Venereal disease research laboratory (VDRL)
- Purified protein derivative (PPD)
- Lyme titer
- HLA-B27
- Urinalysis
- HIV test

- 64yo w m 1st to Kaiser 10 yo specs
- Old +0.75ds ou 250 add 20/100ou
- Re
- OD: +3.00 -1.00 x 90° 20/50- +2.75
  OS: +2.75 -0.75 x 90° 20/50- +2.75
- **Macula:RE 1/2 DD cicumscribed area of RP disruption? Looks flat LE some**
- **(Looks a little like Bests but doubt))**
- **Asteroid L only (no cat)**
- **OCT:**
- **RE small area of sensory detachment and trace intra ret edema; foveal pit**
- **LE mainly some disruption of PIL line and RP normal foveal contour**

- **Plan stat FA for srf RE**
- **Called pt; psr to book**



Idiopathic Juxtafoveal Telangectasis II



IDIOPATHIC JUXTAFOVEAL TELANGECTASIS II

Retina:
FA/OCT reviewed and are c/w Idiopathic Juxtafoveal Telangectasis II. No evidence of SRNVM seen
"Elaine,
Ok for me to recheck him in 6m? Any recommendations?
ED
Just have him monitor grid for sudden changes since superimposed SRNVM can develop and would be treated same as wet ARMD. Otherwise yes, just f/u 6 months.
To psr:
Please call and book MV 1-2 week for follow up (I will discuss findings and instruct carefully on amsler grid test

disease is more specific to the parafoveal region of the retina. Therefore, it becomes easily distinguishable from other generalized retinal telangiectasias such as Coats' disease or a secondary telangiectasis found in retinal vein occlusions, carotid artery disease or diabetes.[3]

Classification of IJRT by Type

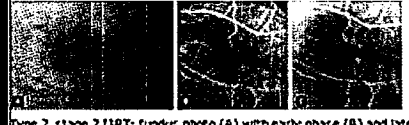
Type	1A	1B	2	3
Frequency	2nd most common	Rare	Most common	Very rare
Gender	Male (90%)	Male	Male = Female	Male = Female
Age	15-64	40-50	35-65	40-60
Congenital/acquired	Congenital	Congenital	Acquired	Acquired
Laterality	Unilateral	Unilateral	Bilateral	Bilateral
Visual acuity at presentation	Around 20/40	≥20/25	20/20 to 20/300	20/25 to 20/50
Classic signs	Exudates and macular edema	Exudates and macular edema	Foveolar atrophy or CNV (stage 5)	Capillary obliteration
Systemic associations	None	None	Possible diabetes	CNS involvement

IJRT was first identified by Gass and Oyakawa in 1982.[3] They classified the disease into four groups based on clinical features and results from fluorescein angiography. Gass and Blodi updated this classification system in 1993.[3] They divided IJRT into three groups with smaller subgroups within the first group. (*See "Classification of IJRT by Type," above.*) This most recent classification system is widely accepted and described as follows:[3]

- ***Type 1.*** The hallmark characteristic of type 1 is variable sized aneurysmal dilations and easily visible telangiectasis of the retinal capillaries.[3]

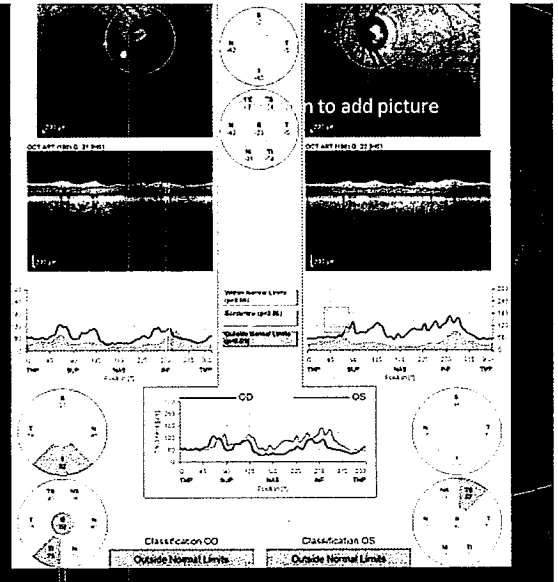
Type 1 is subdivided into types 1A and 1B.[3] Each are unilateral and congenital, typically affecting men in their 30s and 40s.[3] The vision loss in type 1A is more significant than in type 1B.[3]

Type 2, stage 1 IJRT: fundus photo (A) with images of early phase FA that shows punctate staining (B) and late phase shows mild leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J Ophthalmol. 2010 Jul;17(3):224-41.*



Type 2, stage 2 IJRT: fundus photo (A) with early phase (B) and late phase showing leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J Ophthalmol. 2010 Jul;17(3):224-41.*

Type 2, stage 3 IJRT: fundus photo (A) shows grayish ring with crystals surrounding the macula. Early phase of FA shows visible telangiectasis (B) and late phase shows late leakage (C). *Images: Nowilaty S, Al-Shamsi H, Al-Khars W. Idiopathic juxtafoveal retinal telangiectasis: a current review. Middle East Afr J*



EARLY LTG

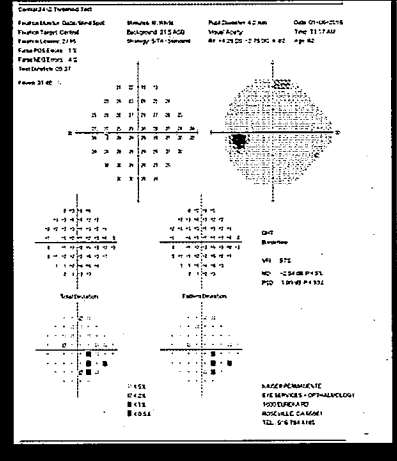
Sum 83 yp hisp m pseudophake

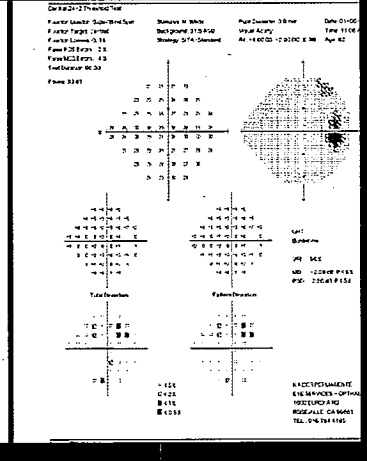
Lower IOPs thinner pak, Cupping R>L with inf thinning RE matching OCT and possibly early VF depression

IOP tmax 17/18 mostly mid teens
CD .70./.60 photo 1/16 thinner inf rim RE
OCT R thin inf L trace thin sup
pak 511/520
gonio deep to scleral spur , no synechia; low pigment OU
VF R borderline sup depression LE borderline inf depression

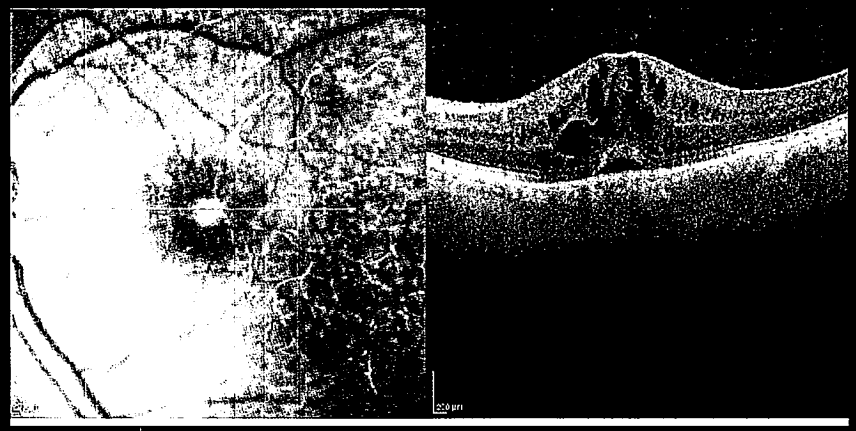
P: discussd in detail pros and cons of Tx. Pt decided to treat.

latan qd : discussed side effects and gtt instilla tion in detail; MV 5w pt to book





LATANOPROST CME



- 83 yo hisp m
- Iols 2002
- Stated on latan 1 month prior

Ophthalmology. 1999 May;106(5):1024-9.

Cystoid macular edema associated with latanoprost therapy in a case series of patients with glaucoma and ocular hypertension.

Moroi SE[1], Gottfredsdottir MS, Schteingart MT, Elner SG, Lee CM, Schertzer RM, Abrams GW, Johnson MW.

Author information

Abstract

OBJECTIVE: To identify coexisting ocular diagnoses in a case series of eyes that developed cystoid macular edema (CME) associated with latanoprost therapy.

DESIGN: Retrospective observational case series.

PARTICIPANTS: Seven eyes of seven patients who developed CME possibly associated with latanoprost treatment were studied.

INTERVENTION: When these patients, all of whom were treated with latanoprost in addition to other glaucoma medications, described blurred vision or eye irritation, ocular examination revealed CME, which was confirmed by fluorescein angiography. Latanoprost was discontinued, and in three cases topical corticosteroids and nonsteroidal anti-inflammatory agents were used to treat the CME.

MAIN OUTCOME MEASURES: Visual acuity and intraocular pressure were determined before latanoprost use began, during therapy, and after latanoprost use ceased. In these cases, resolution of CME was documented clinically after discontinuing latanoprost.

RESULTS: Clinically significant CME developed after 1 to 11 months of latanoprost treatment, with an average decrease of 3 lines in Snellen visual acuity. Intraocular pressure decreased an average of 27.9% during treatment. Cystoid macular edema was confirmed in all cases by fluorescein angiography. In these seven patients, the following coexisting ocular conditions may have placed these eyes at risk for prostaglandin-mediated blood-retinal barrier vascular insufficiency: history of dipivefrin-associated CME, epiretinal membrane, complicated cataract surgery, history of macular edema associated with branch retinal vein occlusion, history of anterior uveitis, and diabetes mellitus. In all cases, the macular edema resolved following discontinuation of latanoprost, in some instances with concomitant use of steroidal and nonsteroidal anti-inflammatory agents.

CONCLUSIONS: In this case series of pseudophakic, aphakic, or phakic eyes, the temporal relationships between the use of latanoprost and developing CME, and the resolution of CME following cessation of the drug, suggest an association between latanoprost and CME. In all cases, coexisting ocular conditions associated with an altered blood-retinal barrier were present.

PMID: 10328408 DOI: 10.1016/S0161-6420(99)00528-X

OD/MD PARTNERING

In folsom

- Ron
- This is one of my coag patients. He started on latanoprost in June of this year and came in today complaining of micropsia and blur LE. He has CME and rare cell in AC LE only. Clint suggested I start him on PF and Voltaren qid LE and switch latanoprost to T1/2 which I did. He thought he might need a sub tenons injection. Ok with you if I just check him in a week? (no other cause of CME likely ; not diabetic; cat sx was 15 y ago, no erm)
- ed
- Sure, but but it will take longer then a week to resolve

1 w later (pt wanted roseville)

- Rominder
- Here's the latanoprost CME LE case I mentioned. He's been on T1/2 and PF/voltaren qid since 7/29 (1 week)
- Still a barely detectable AC response; no change in OCT or VA (20/40) ; T 13/12. Elaine mentioned CME should take maybe a month to resolve
- I booked a return on 8/29 (the next Monday Ill be in Roseville). Ill keep you posted, ok?
- Ed
- Sounds good. Thanks for letting me know.

DON'T WORK TOO HARD!

- Predilate
- Same schedule ok
- Things tend to balance out overall timewise
- Save time by not needing hallway consults
- Multitasking

THANKS AGAIN!!!!!

Curriculum Vitae

Edward A. Denz, O.D.
2315 Carlisle Court
El Dorado Hills, CA 95630
(916) 933-3726

EDUCATION

Foothill College, Los Altos Hills, California, September 1974 - June 1977.

San Jose State University, San Jose, California, September 1977 - June 1979.

BS, OD University of California Berkeley School of Optometry, September 1979 - June 1983.

Certificate of Residency in Optometry, Department of Medicine and Surgery, Veteran's Administration Medical Center, Albuquerque, New Mexico, June 1984.

PROFESSIONAL LICENSE

Optometry License, California, September 21, 1983.

PROFESSIONAL EXPERIENCE

Assistant Clinical Professor, University of California Berkeley School of Optometry, July 1984 - August 1990.

Staff Optometrist, Fairfield Medical Arts Center, Fairfield, California, September 1984 - May 1985.

Staff Optometrist, Permanente Medical Group, Sacramento, California, May 1985 - June 1991.

Senior Optometrist, Permanente Group, Rancho Cordova, California, July 1991 - Present.

MANAGEMENT EXPERIENCE

Courses taken in Business Management and Accounting, San Jose State University.

Certificate of completion, Partners in Development Basic Leadership Skills, May 1992.

University of California Berkeley School of Optometry. Supervised interns in the examination of patients referred from General Clinic for special diagnostic work-ups. Monitored all phases of contact with patients including case histories, testing diagnosis, plan and follow-up. Coordinated patient flow with on-sight consulting ophthalmologists, organized and presented lectures, moderated Grand Rounds case presentations, participated in peer review and intern evaluations. In charge of Ocular Diagnosis Clinic, summers of 1986, 1987.

Senior Optometrist at Kaiser, Rancho Cordova, California. Attended management meetings and acted as management liaison to optometry staff. Reviewed patient concern reports from member services department. Responsible for satisfying patient complaints, discussing cases with optometrists involved, and reporting outcomes to member services department. Received and organized financial data reports for optometry department; sent copies to Chief of Optometry. Organized clinical cases for discussion at monthly optometry / ophthalmology meetings. Organized and implemented an in-house monthly state-approved continuing education program for optometry staff. Collected time cards and checked for accuracy. Member of planning committee for a pilot project to reengineer eye services to be

conducted in Rancho Cordova. Assisted Chief of Optometry with staff optometrists' annual evaluations. Solicited help of optometry staff in redesigning examination form and designing rubber stamps for more efficient clinical records keeping. Assisted Chief of Optometry and medical group administrator in preparing optometry budget. Under Chief of Optometry, responsible for maintaining clinical equipment. Identified quality concern cases and provided feedback and discussion for involved optometrists. Worked with pediatric staff to help determine best practice for screening pre-verbal patients for amblyopia risk.

SPECIAL ACTIVITIES

Principal investigator, Infant Eye Screening Study, Kaiser Research Foundation Institute Project #135-9754. Initiated pilot project program to evaluate the effectiveness of photorefraction as a method for screening infants for high risk ocular disorders in the Pediatrics Department at Kaiser, Rancho Cordova. Participated in the early development of the test at Smith-Kettlewell Institute of Visual Science. Applied for and received grant from Kaiser Foundation Research Institute. Worked with pediatric staff to integrate the test into the 10-month well-baby exam. Motivated and coordinated staff in pediatrics optometry and ophthalmology departments in screening 1200 infants, and work-up and treatment of high risk infants. Presented findings at Kaiser-sponsored "New Visions and Ventures" program, San Francisco, October 1994 and Academy of Optometry Convention, San Diego, December 1994. Completed paper to be submitted to *Pediatrics* and *Journal of Optometry and Visual Science.*

Chairman of the Quality Assurance Subcommittee for Optometry in Northern Sacramento area, 1990 - Present. Conducted quality studies including: 1. Appropriate management of patients with reduced visual acuity. 2. Adequacy of consult request form and appropriateness of referrals to ophthalmologists; analysis of optometry referral patterns. 3. Retrospective analysis of patients of acute complications of contact lens wear. 4. Frequency of examination for high and low risk diabetic patients in optometry and ophthalmology; frequency of dilated fundus examination of diabetics in optometry. Worked with Chief of Optometry in organizing semi-annual quality improvement meetings with Sacramento area clinics to review quality study findings and quality concern cases. Collected quality concern cases as well as examples of innovative care from staff optometrists. Prepared and presented cases at semi-annual quality improvement meetings. Developed questionnaire regarding optometric practice patterns, distributed, collected, and analyzed questionnaire. Reported findings at semi-annual quality meetings.

Chairman of the local Professional Practice Committee. Established committee to promote communication between Optometry, Ophthomology and Administration regarding patient care topics. Obtained input from staff and department chief in preparing LPPC agendas. Chaired monthly meetings. Prepared minutes and distributed to staff optometrists in area.

REGIONAL EYE CARE COMMITTEE MEMBERSHIPS

Member of Diabetic Retinal Screening Guideline Group, October 1994 - Present. One of two optometrists in eight member group to determine and implement best practice guidelines for the screening of patients with diabetes for diabetic retinopathy.

Member of Regional Professional Practice Committee, 1992 - Present. Member of committee consisting of seven optometrists, ophthalmologists and regional administrative staff which discusses current eye care issues at Kaiser including, but not limited to, the scope and quality of optometry practice and interaction between optometry and ophthalmology departments. Wrote and published minutes of meetings in optometry newsletter. The committee also established the Regional Quality Improvement Committee and the Regional Optometry Education Committee and placed under the guidance of the Regional Optometry Chiefs Committee.

Regional Optometry Education Committee, 1993-Present. Consists of two staff and two Chiefs of Optometry. Prepared, distributed and analyzed a survey of 180 optometrists in the region regarding interest in Kaiser-sponsored continuing education topics and preferred mode of presentation. The survey

was used by the Education Committee for planning future educational activities for optometrists in the region. Designed a system for acquiring one-hour slide and video presentations from the International Library, Archives and Museum of Optometry. Obtained approval from the State Board of Optometry for continuing education credit. The program is administered once a month and is currently being used in five Kaiser locations in the region. Worked with committee members to help plan and organize Kaiser optometry seminar held in October 1994. Distributed information via the newsletter regarding unique educational opportunities at various local facilities, such as Grand Rounds case presentations.

Regional Quality Improvement Committee, 1993 - Present. Consists of three staff and three Chiefs of Optometry. Performed survey of current quality assurance plans of 16 Kaiser optometry departments. Compared with plans from benchmark services and JCAHO guidelines. Completed report and used to make recommendations for developing quality measures at Kaiser optometry departments. Assisted committee in designing and conducting pilot quality studies at various Kaiser locations. Reported findings and made recommendations to regional optometry chiefs (April 1994). Currently working on developing best practice determination and outcome strategies.

Area Representative/ Executive Board Member/ Contract Negotiation Committee Member, Optometry Unit, ESC-MEBA, 1990 - Present. Responsible for representing staff optometrists from Sacramento, Roseville, Davis, and South Sacramento facilities. Conducted area dinner meetings to determine needs of staff optometrists and to discuss union activities. Attended executive board meetings. Served on the negotiating committee for the 1990 contract talks.

Member of the Research Committee at Kaiser, Sacramento, 1990 - Present. Assist Chairman of Research Committee in evaluating research proposals from optometry staff throughout the region.

Editor of the Kaiser Optometry Newsletter, 1991 - Present. Founded professional newsletter to encourage communication between facilities concerning professional issues, case reports, events, and opinions. Encouraged staff and management to participate in the publication of articles. Served as editor. Supervised ESC staff in preparing publication.

INVITED LECTURES

Kaiser Optometry Continuing Education Program case presentations: Malignant Melanoma Presents with Minimal Signs and Symptoms; Management of Intractable Diplopia, October 1994.

Photorefraction Screening of Infants with Amblyopia Risk Factors in a large Pediatric Setting, Poster Presentation, Kaiser "New Visions and Ventures", American Academy of Optometry meeting, December 1994.

Kaiser Optometry Continuing Education Program case presentations: Idiopathic, Parafoveal Telangectasis; Optic Nerve Drusen, October 1993.

Anomalies of the Optic Nerve, Sacramento Optometric Society, Ocular Symposium, September 1993.

Kaiser Optometry Continuing Education Program case presentations, May 1992, November 1992.
Anomalies of the Optic Nerve, Kaiser Permanente "Innovations in Sight" Educational Program, November 1991.

Use of Photorefraction in the Vision Screening of Infants, Sacramento Valley Optometric Society, September 1991.

Amblyopia Risk Factors and Screening Strategies and Prevention, Pediatrics Department Meeting, Kaiser Hospital, Sacramento, 1990.

Effects of Carotoid and Basilar Artery Disease on the Eye and Vision, Education Program of the UCBSO Alumni Association, 1989

Member of Panel, Grand Rounds Case Discussions; lecture and lab instructor for advanced course in binocular indirect ophthalmoscopy and slit lamp, Education Program, UCBSO Alumni Association, 1985 - 1989.

Anomalies of the Peripheral Retina, Kaiser Continuing Education Program, 1988.

Anomalies of the Vitreous, Education Program of the UCBSO Alumni Association, 1988.

Eyelid Disorders, Fall Clinical Colloquium Program, UCBSO, 1988.

Special Testing Procedures for Optometrists, Kaiser Continuing Education Program, October 1986.

Common disorders of the Macula, Congress of the California Optometric Association, Long Beach, 1986.

Disorders of the Peripheral Retina/ Binocular Indirect Ophthalmoscopy Workshop, Sacramento Valley Optometric Society, 1986.

Differential Diagnosis of Retinal Lesions, Solano County Optometric Association, Napa, California, 1985.

Complications of Cataract Extraction, Faculty of Northeastern State University, Tahlequah, Oklahoma, 1984.

Differential Diagnosis of Common Lid Lesions, Bernalillo County Optometric Society, Albuquerque, New Mexico, 1984.

RESEARCH EXPERIENCE

Smith Kettlewell Institute of Visual Science, January 1983 - June 1993.
Assisted visual scientist in the preliminary design and testing of a photoretinoscope for use in infant testing.
NASA Ames Research Center, Life Science Branch, December 1978 - September 1979. Assisted several staff scientists in visual perception and eye tracking research to determine optimum methods of presenting data on visual display terminals used in aircraft.

PUBLICATIONS

Review Editor for *Optometry Edition*, 1986 - 1987.

Denz, E.A., Palmer, E.A., "Effects of Field of View and Monocular Viewing on Angular Size Judgments" NASA; *Technical Memorandum* #81176; 1978.

Denz, E.A., "Basal Cell Carcinoma" *Review of Optometry* October, 1984.

Denz, E.A., Chan, L.K., Shu-Winges. Charlene, Hamer, R.D., Norcia, A.M., "Photorefractive Screening for Amblyopia Risk Factors in a Pediatric Setting" to be submitted to *Pediatrics* December 1994.

PROFESSIONAL MEMBERSHIPS

Sacramento Valley Optometric Assosication.

California Optometric Assosication.

American Optometric Assosication.