Can I treat this patient?

Previously known as
“Do I have to refer this patient?”

Learning objectives.

1. Cover some of the factors that influence a decision to treat rather than refer a patient.
2. Understand how varied the presentation of Herpetic eye disease can be.
3. Recognise two relatively benign presentations that can require referral
4. Assess and manage appropriately ocular chemical trauma
5. Become aware of some adverse outcomes to glaucoma treatment

Questions I ask myself

- Diagnosis?
- Can I treat it?
  - Provide a prescription for suitable topic agent
  - Will the local pharmacy have it in stock?
  - Can the condition be treated with topical agents alone?
- Is travel to an ophthalmologist convenient?
  - Echuca is at least 3 hours from RVEEH
  - 1 hour from nearest Mon/Fri Ophthalmologist

87 year old male

PC woke yesterday with a blurry left eye, right feels normal

POH left eye HSV keratitis 2008
Currently taking Ganfort© (bimatoprost with timolol) and sees an ophthalmologist.

GH no medication? Does he really see a GP?

87 year old male

- Unaided VA 6/19 6/30
- Aided VA 6/15 6/24-
- PH VA 6/24-

Can I treat this patient?

- Diagnosis of HSV epithelial keratitis
  - DDx of HZO ruled out
- His ophthalmologist visits from Melbourne in 10 days
  - Rang the ophthalmologist
  - who recommends roll with cotton bud for debridement. Aciclovir 5x daily, rev this week.

Getting better.

- Aciclovir left eye for 3 days
- NaFl less staining in left eye
- Plan keep up Aciclovir, cease Ganfort © for a few days. He will not miss it for three days and his epithelial keratitis is better off without it.
- Sees his ophthalmologist locally in 7 days.

Glaucoma drops and inflammation

- Australian Medicines Handbook has a warning about Prostaglandin analogues

"History of herpetic keratitis—use with caution as reactivation may occur. Avoid use if herpetic keratitis is active."

- Conjunctival proinflammatory and proapoptotic effects of latanoprost and preserved and unpreserved timolol: an ex vivo and in vitro study. Invest Ophthalmol Vis Sci. 2004 May;45(5):1360-8.

72 year old “Jim” – day 1

PC Left eye feels like it has the same thing as May 2010.

POH 2009 treated by Dr X with Pred Forte and Timolol for herpetic uveitis.

May 2010 treated by Dr Y with Pred Forte and Timolol for herpetic uveitis.

72 year old “Jim” – day 1

Vis 6/19 right 6/19 left 6/15 OU

SL left circumlimbal hyperaemia, iris detail clear. Left pupil irregular and iris atrophy.

NaFl no staining.

IOP 21/24mmHg

Diagnosis Another episode of herpetic uveitis?

Patient does not want one hour drive, “You can treat me, can’t you……”

The phone consult?

- Rang Dr Y and confirmed treatment plan, Pred Forte q1h, Timol bid and homatropine tid.
- Review tomorrow.

72 year old “Jim” – day 2

SL	NaFl no staining Left pupil dilated, iris defects visible on transillumination. Pigment on lens from previous synechiae. Less hyperemia
VA	Left 6/12
Plan	Reduce Pred to every 2 hours, keep up timolol bid and homatropine tid. Rev 3 days.

72 year old “Jim” – day 5

He feels better.

SL KP on inferior half of left cornea, NaFl NAD

IOP 20/20

Plan Cease homatropine, maintain Pred Forte every waking 2 hours, Timolol bid. Rev 3 days

72 year old “Jim” – day 8

Rang Dr Y who recommends to keep current doses and admits it may not be herpetic.

Request HLA B27 and chest Xray from local GP

Review Monday morning.

Email Slit lamp images to Dr Y

72 year old “Jim” – day 11

SL left cornea has no KP, still old faint scar.
IOP 20/16

Reduce Pred to qid and keep Timolol bid.
Rev 1 week

72 year old “Jim” – day 18

Feeling "much better”

SL Left no cells or flare, nuclear sclerosis OU

IOP 20/16

Begin weaning Pred as advised by Dr Y

Keep on Timolol bid, reduce Pred to 3x daily one week, 2 times daily one week

Rev in two weeks - refer for cataract

80 year old “Jim” day 1

Had bilateral IOL surgery in 2015

Had a heart attack in 2017

Left eye very red, but today no light sensitivity

Today unaided	6/9 R	6/19 L
Last year unaided	6/12 R	6/12 L

SL NaFL dendrite left eye, corneal thinning either side of the dendrite. left ectropian. No AC reaction, iris sectoral atrophy from prev iritis.

80 year old “Jim” day 1

When questioned he did say he had a cold sore on his lip on the left side recently.

Epithelial herpes simplex keratitis
AciVision 5x daily rev 3 days

80 year old “Jim” day 4

Redness has reduced with his wife applying Aciclovir oint 5 x daily

NaFl healing, no signs of ulcer.

SPK mild

IOP 16/16

Unaided VA	6/9 R	6/24 L

80 year old “Jim” day 4

- Keep up oint tid 5 days.
- discuss with Jim and his wife likely loss of corneal sensation due to HSV, use lubricants SUD a lot.
- Rang Jim to follow up, reports white eye with good vision, will come in for a full review.

67 year old male - day 1

Washing face and got Q10 soap in the left eye, very sore and watery and light sensitive. He suspects scratch. Has done two saline washes

SL heavy stain, very red eye.
note dense stain at limbus.
Irrigated again with saline

PH VA 6/19

Roper Hall Classification for Ocular Surface Burns			
Grade	**Prognosis**	**Cornea**	**Conjunctiva/Limbus**
I	Good	Corneal epithelial damage	No limbal ischemia
II	Good	Corneal haze, iris details visible	<1/3 limbal ischemia
III	Guarded	Total epithelial loss, stromal haze, iris details obscured	1/3-1/2 limbal ischemia
IV	Poor	Cornea opaque, iris and pupil obscured	>1/2 limbal ischemia

Dua Classification for Ocular Surface Burns				
Grade	**Prognosis**	**Clinical findings**	**Conjunctiva Involvement**	**Analogue Scale***
I	Very good	0 clock hours of limbal involvement	0%	0/0%
II	Good	< 3 clock hours of limbal involvement	< 30%	0.1-3/1-29.9%
III	Good	Between 3-6 clock hours of limbal involvement	30-50%	3.1-6/31-50%
IV	Good to guarded	Between 6-9 clock hours of limbal involvement	50-75%	6.1-9/51-75
V	Guarded to poor	Between 9 and 12 clock hours of limbal involvement	75-100%	9.1-11.9/75.1-99.9%
VI	Very poor	Total limbus (12 clock hours) involved	Total conjunctiva (100%) involved	12/100%

*The analogue scale records the amount of limbal involvement in clock hours of affected limbus/percentage of conjunctival involvement. The conjunctival involvement should be calculated only for the bulbar conjunctiva, up to including the conjunctival fornices.

Q10 soap?

- Looks like a chemical burn…

- Grade I (Roper Hall classification)
- Topical antibiotic ointment four times a day
- Prednisolone acetate 1% four times a day
- Preservative free artificial tears as needed
- If there is pain, consider a short acting cycloplegic like cyclopentolate three times a day

67 year old male - day 1

- Treat under assumption it is a chemical burn
- Tx PredForte and Chlorsig qid
- Stop for now Combigan
- Rev tomorrow if worse

67 year old male - day 3

- Slept better last night. Hazy vision. Kept up drops yesterday and 7 am today. Now says it was QV hand wash (pH 6!).
- SL VH open left dense NaFL stain of defect.
- Note heavy inferior conjunctival stain. AC ok
- PH 6/24 ?!?
- Conjunctival stain fits with chemical injury
- Chlorsig ointment tid and Pred qid left
- rev late tomorrow

67 year old male - day 4

- Feels better today.
- NaFl only stains small inf conj. diffuse haze left.
- PH no improvement on unaided 6/19
- IOP 18/18
- Keep up Pred qid and chlorsig tid
- restart Combigan bid OU

67 year old male - day 10

- Hazy but feels ok. reading the paper now
- SL both eyes white now, NaFl fine SPK all over the left eye.
- IOP 16/16
- Cease oint rev one week
- Pred forte bid only left
- Cellufresh PRN
- PH 6/12

67 year old male - day 17

- SL left eye white
- NaFl minimal SPK OU

- Cease Pred, keep up single unit dose lubricants

Lessons I learnt from “soap in eye”

- Orange Power tile cleaner has a pH 1.8-2.5
- Even a low grade chemical injury can take 20 days to heal fully
- Potential long term complications include
  - Glaucoma in up to half of severe burns
  - Dry eye in even well healed eyes due to loss of conjunctival goblet cells
  - Damage to palpebral conjunctiva can lead to ciccatricial entropian or ectropian weeks to months later

10 year old boy

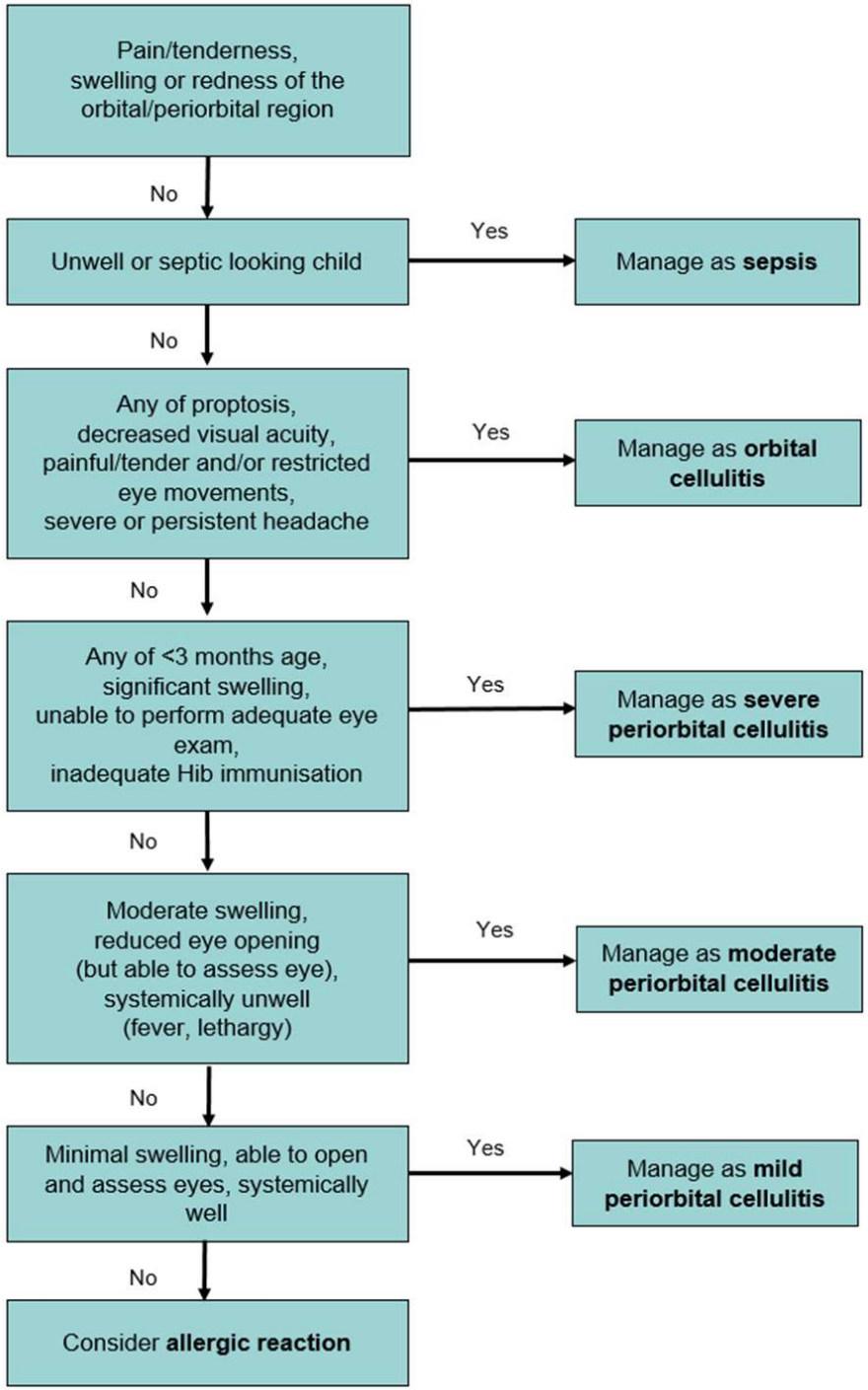
- GP Rx chlorsig eye drops 4 days ago for a stye(?)
- Second GP Rx oral cephalexin today.
- Went to pharmacist to have made up and it was recommended they see an Optometrist today!
- Had a cold the week before and has history of sinus infections

Orbital or Preseptal Cellulitis?

- SL left eye totally obscured by swelling top and bottom lid, held lid apart and noted white bulbar conjunctiva, AC quiet, and pupils responds.
- pain on eye movement!
- VA 6/6 6/12!
- Rang GP clinic urgently
- GP agrees he needs CT scan to rule out orbital involvement and possible intravenous antibiotic

Orbital or Preseptal Cellulitis (RCH)

- Orbital cellulitis
  - infection within the orbit, (i.e. **postseptal**, the structures posterior to the orbital septum)
  - the majority (>80%) of cases relate to local sinus disease
- Periorbital cellulitis
  - infection of the eye lids and surrounding skin not involving the orbit
- The globe is not involved in either infection


Pain/tenderness, swelling or redness of the orbital/periorbital region
No
Unwell or septic looking child
Yes
Manage as **sepsis**
No
Any of proptosis, decreased visual acuity, painful/tender and/or restricted eye movements, severe or persistent headache
Yes
Manage as **orbital cellulitis**
No
Any of <3 months age, significant swelling, unable to perform adequate eye exam, inadequate Hib immunisation
Yes
Manage as **severe periorbital cellulitis**
No
Moderate swelling, reduced eye opening (but able to assess eye), systemically unwell (fever, lethargy)
Yes
Manage as **moderate periorbital cellulitis**
No
Minimal swelling, able to open and assess eyes, systemically well
Yes
Manage as **mild periorbital cellulitis**
No
Consider **allergic reaction**

Orbital or Preseptal Cellulitis (RCH)

- **Orbital Cellulitis**
- Admission
- Keep fasted until need for surgery clarified
- Consider urgent contrast enhanced CT scan of orbits, sinuses +/- brain
- Antibiotics IV
- **Periorbital Cellulitis (Severe)**
- Management as per orbital cellulitis

What treatment did he get?

- Four days in Bendigo Hospital on IV antibiotics

- Nine months later presented for general check
- VA 6/6 right and left, 6/5 binocular

Do I refer this patient?

Diagnosis was Christmas eye.
Acute epithelial reaction causing a self limiting but very painful corneal ulceration.

VA 6/30
Given 1% cyclopentolate in rooms for photophobia
Rx Tobrex ointment tid and Acular qid
Rev next day

66 year old male – day 2

VA	6/60 (ointment?)
PH VA	6/24+
SL	still very red eye, epithelium healing and pain reduced somewhat.
Plan	Maintain Acular qid for pain
	Reduce Tobrex ointment am and before bed

66 year old male - day 4

PC "Feeling 100%" Very little discomfort.
PH VA 6/12
Unaided 6/15
SL NaFl fine diffuse SPK, mild injection
Plan Cease antibiotic, keep Acular bid (probably not needed)

Christmas Eye???

- Thomas D. Walker, A Seasonal Corneal Ulcer, *Australian Journal of Ophthalmology, Vol 2 Issue 2*, pages 64–67, June 1974
- *Geoffrey Howsam, Christmas or harvester's eye, Australian and New Zealand Journal of Ophthalmology, 1994, 22, 2*
- Take home point – make the patient comfortable and avoid a secondary infection.

52 year old male

Woke up Sat am bit gritty and got worse, feels like a foreign body.

Does not think anything went in the eye Friday, felt ok Friday night.

Goes to another business for glasses and exams

Med none

Unaided 6/12 6/24 6/12

IOP 13/13

52 year old male

- left corneal haze and fine corneal blood vessels from temp limbus to central cornea. NaFl stain on leading edge
- Cold sores on the lip years ago
- Dx?
- Looks like long standing HSV.
- Refer to Ophthalmologist tomorrow
- Report from Dr H, treated with Valtrex tablets tds (valaciclovir)

When does a subconjunctival haemorrhage need to be treated?

- 80 year old lady presented with
  - A very large dark subconjunctival haemorrhage
  - A headache on the previous day (6 Panadol osteo)
  - No history of coughing or sneezing or vomiting
  - Does take blood thinners and has a history of stroke
- Treatment?
  - Lubricate 4 times daily with preservative free drop
  - Reassure that vision is ok and it will take weeks to clear and wrote to her GP

When is a subconjunctival haemorrhage serious?

- Trauma (young) and blood condition (old)
- SCH 12-24 hours after orbital trauma
- SCH nasal side and 24 hours after head injury is strongly associated with fractures of the base of the skull
- In older patients blood pressure and time it takes blood to clot (INR) should be checked

Odd way to treat uveitis?

- 68 year old female in for 6 month field test
- Simbrinza bid and Xalacom qpm right only after left Xen procedure 2019.
- IOP 15 right and 10 left
- SL VH 1+ IOLs clear OU, some iris transillum defects, right round KP all over bottom half
- Right eye has generalized redness
- When questioned does admit to some light sensitivity

Brimonidine uveitis?

- Email image of right eye to surgeon regarding KP management.
- Ophthal rang back, cease Simbrinza and rev one week.

- “Anterior Uveitis as a Side Effect of Topical Brimonidine”
- Am J Ophthalmol 2000;130:287–291.

Brimonidine uveitis?

- Been off Simbrinza for one week, Xalacom right only at night.
- SL iris mobile some iris transillum defects
- right round KP all over bottom half
- IOP 16 right 9 left
- The right is now white and she has no photophobia
- No steroids were prescribed and sees surgeon later that week

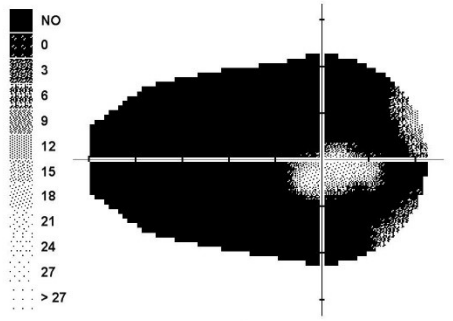
Why be involved in Glaucoma management?

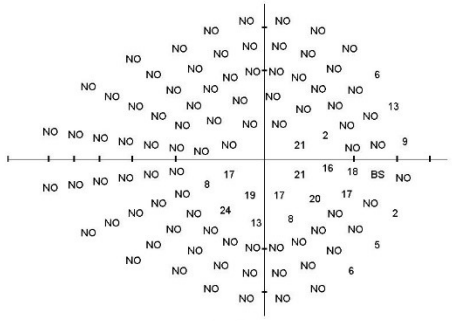
Case 1

- 70 year old man presents for his first formal eye examination
- Referred by GP due to his type II diabetes
- Unaided VA 6/9 6/9
- Sluggish pupil responses but no RAPD
- SL exam VH open typical age cataract
- IOP 20mmHg right and left
- Walked a bit odd down the corridor?

[redacted] [3-Oct-2011 11:24:12 AM - Glaucoma Test] **Eye: Right**

Test:	Glaucoma Test	Date of Birth:	[redacted]	Strategy:	Fast Threshold
Eye:	Right	Trials:	294/103=2.9	Flicker:	OFF
Age:	77 Years 2 Months	Test Duration:	8 Min 27 Sec	Lens:	+1.50/+0.00x0





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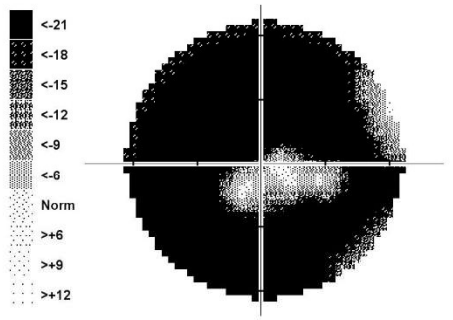

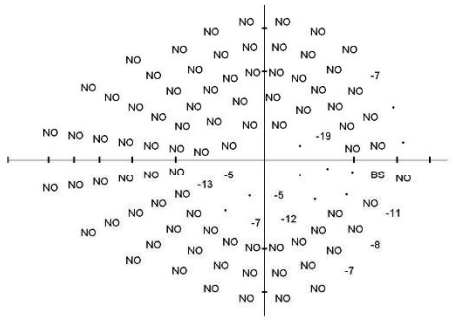

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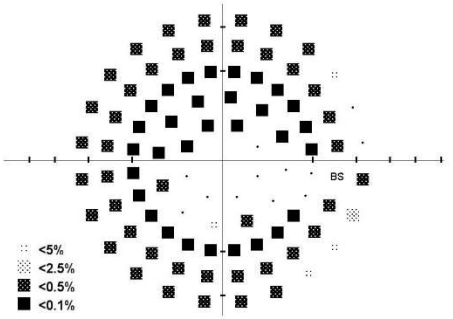
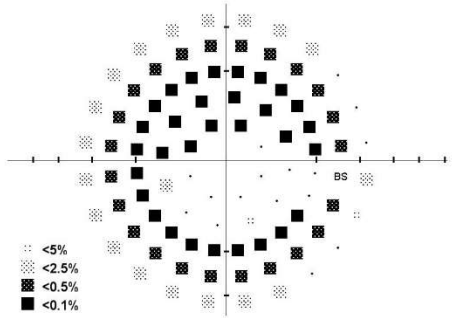
Age Normal Deviation

Patient HoV Deviation





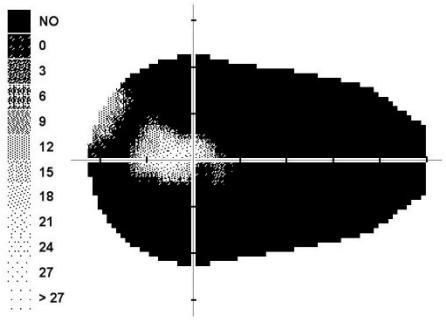
Age Normal Probability

Patient HoV Probability

Fixation Loss:	8/35=23% Fair	Fluctuation:	Disabled	HoV Slope:	4.4 dB/10°
False Positives:	0/29=0% Excellent	Pattern Defect:	17.24 ***	HoV 3° Level:	21.7 dB
False Negatives:	3/14=21% Good	Overall Defect:	-3.30 *	Cluster Analysis:	Superior Defect

[redacted] [3-Oct-2011 11:36:03 AM - Glaucoma Test] **Eye: Left**

Test:	Glaucoma Test	Date of Birth:	[redacted]	Strategy:	Fast Threshold
Eye:	Left	Trials:	297/103=2.9	Flicker:	OFF
Age:	77 Years 2 Months	Test Duration:	7 Min 50 Sec	Lens:	+1.50/+0.00x0



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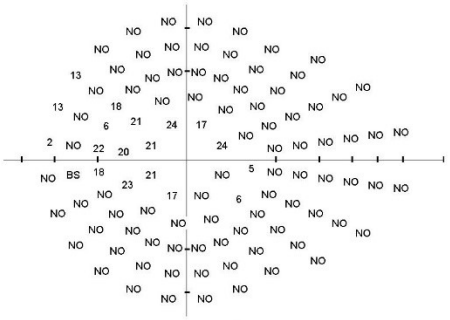

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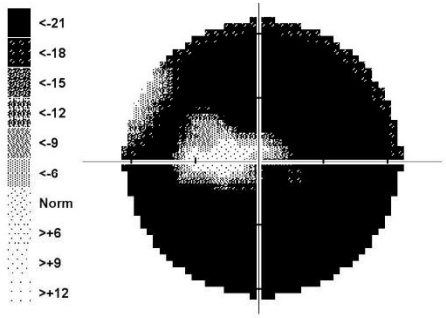
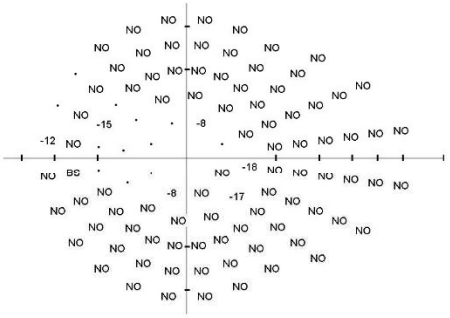
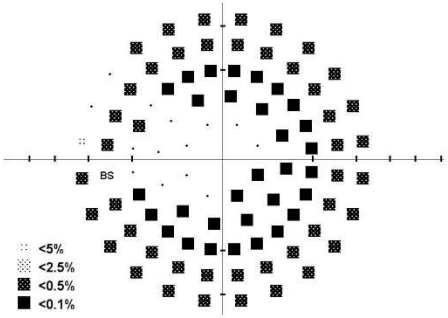


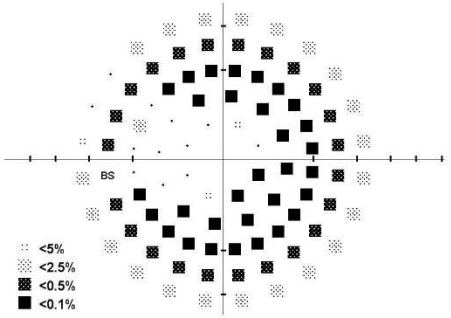
Age Normal Deviation



Patient HoV Deviation



Age Normal Probability



Patient HoV Probability

Fixation Loss:	0/32=0% Excellent	Fluctuation:	Disabled	HoV Slope:	5.9 dB/10°
False Positives:	0/29=0% Excellent	Pattern Defect:	18.58 ***	HoV 3° Level:	24.9 dB
False Negatives:	7/14=50% Poor	Overall Defect:	-1.32	Cluster Analysis:	Inferior Defect

RMM Glaucoma?

- Glaucoma diagnosis at end stage
- Diagnosis delayed by avoiding eye care
- It could be argued that despite advances in diagnostic testings for early glaucoma, the ready made magnifier has created an environment where glaucoma detection is worse than it was 20 years ago.

Case 2 – Ocular Hypertension?

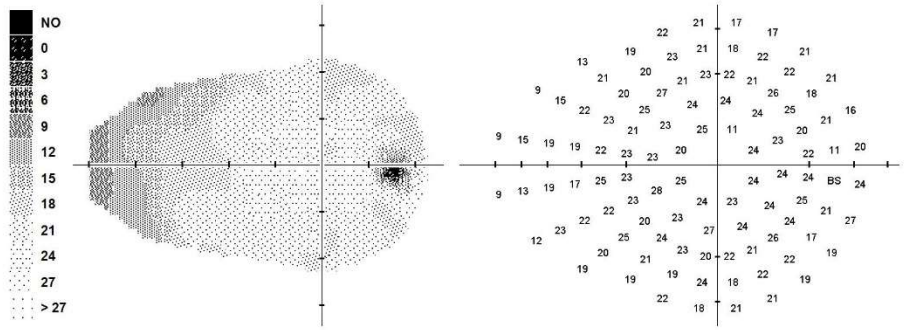
- Jan in 2007 had 23 IOP and no field loss
- CCT: Right 575µ Left 577µ
- CDR 0.7 right and left
- HRT (ophthalmologist) was borderline
- Diagnosis Ocular hypertension monitor closely
- Seven years later Jan developed a repeatable field defect in the left eye

2014 Treatment for POAG

- NHMRC guidelines support minimum 20% IOP reduction in early POAG. Making target IOP 19mmHg
- SLT and Duotrav(travoprost/timolol)
- Combigan(brimonidine/timolol) and Lumigan
- IOP is 25 right and left
- Mild irritation -> Cosopt(dorzolamide/timolol) and Lumigan PF
- December 2015 IOP is 20mmg right and left

[redacted] [10-Dec-2015 2:42:50 PM - Glaucoma Test] Right Eye

Test: Glaucoma Test
Eye: Right
Age: 70 Years 2 Months
Date of Birth: [redacted]
Trials: 227/103=2.2
Test Duration: 6 Min 10 Sec
Strategy: Fast Threshold
Flicker: OFF
Lens: +2.50/+0.00x0



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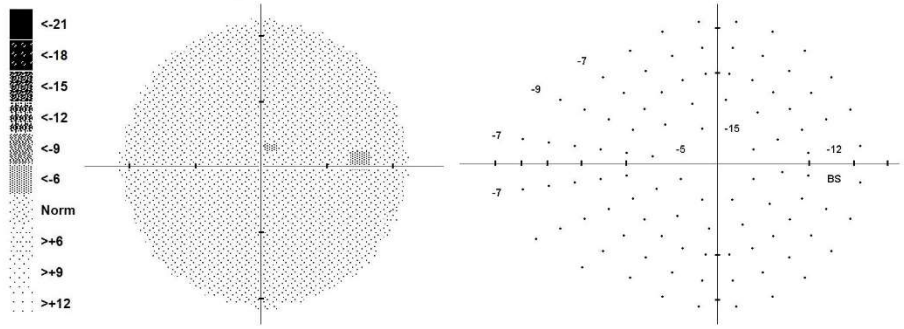
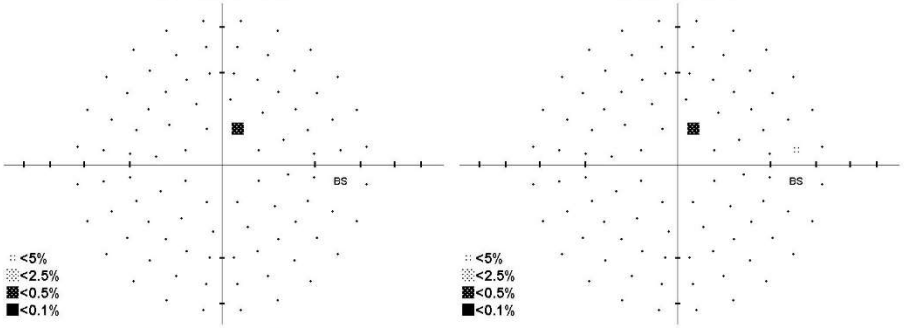


Age Normal Deviation

Patient HoV Deviation



Age Normal Probability

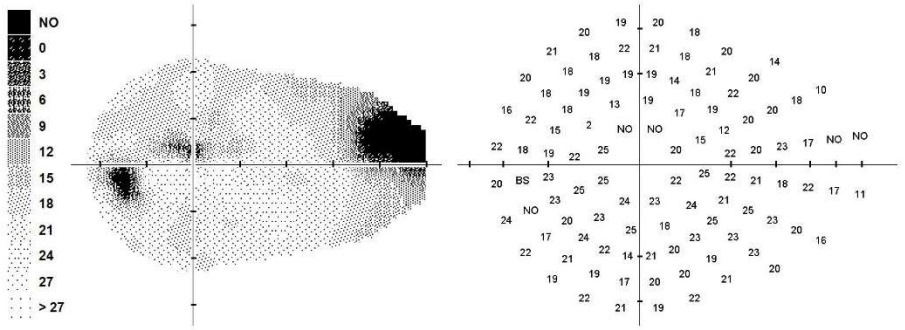
Patient HoV Probability

Fixation Loss:	1/24=4% Excellent	Pattern Defect:	2.37
False Positives:	1/22=5% Excellent	Overall Defect:	2.83
False Negatives:	0/11=0% Excellent	HFA MD:	-0.02
Fluctuation:	Disabled	HFA PSD:	1.45

HoV Slope:	2.1 dB/10°
HoV 3° Level:	25.8 dB
Cluster Analysis:	No local defects

[redacted] [10-Dec-2015 2:53:25 PM - Glaucoma Test] Left Eye

Test: Glaucoma Test
Eye: Left
Age: 70 Years 2 Months
Date of Birth: [redacted]
Trials: 278/103=2.7
Test Duration: 7 Min 51 Sec
Strategy: Fast Threshold
Flicker: OFF
Lens: +2.50/+0.00x0



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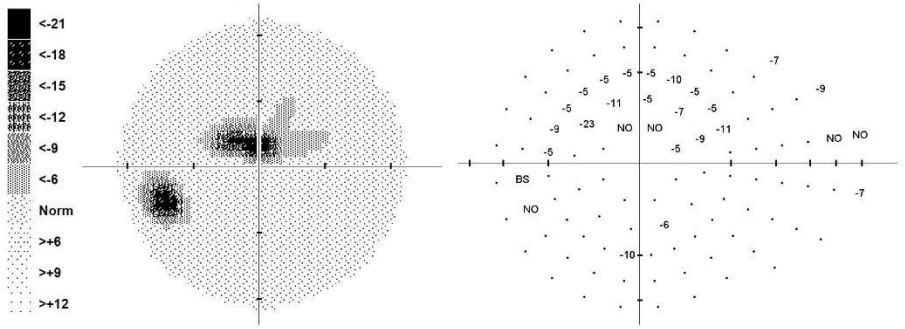
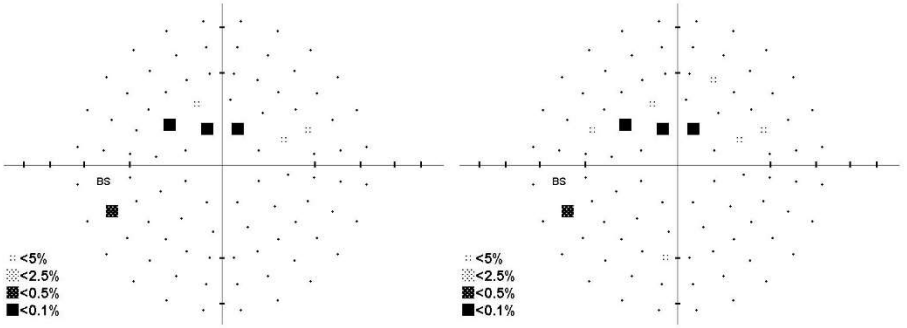


Age Normal Deviation

Patient HoV Deviation

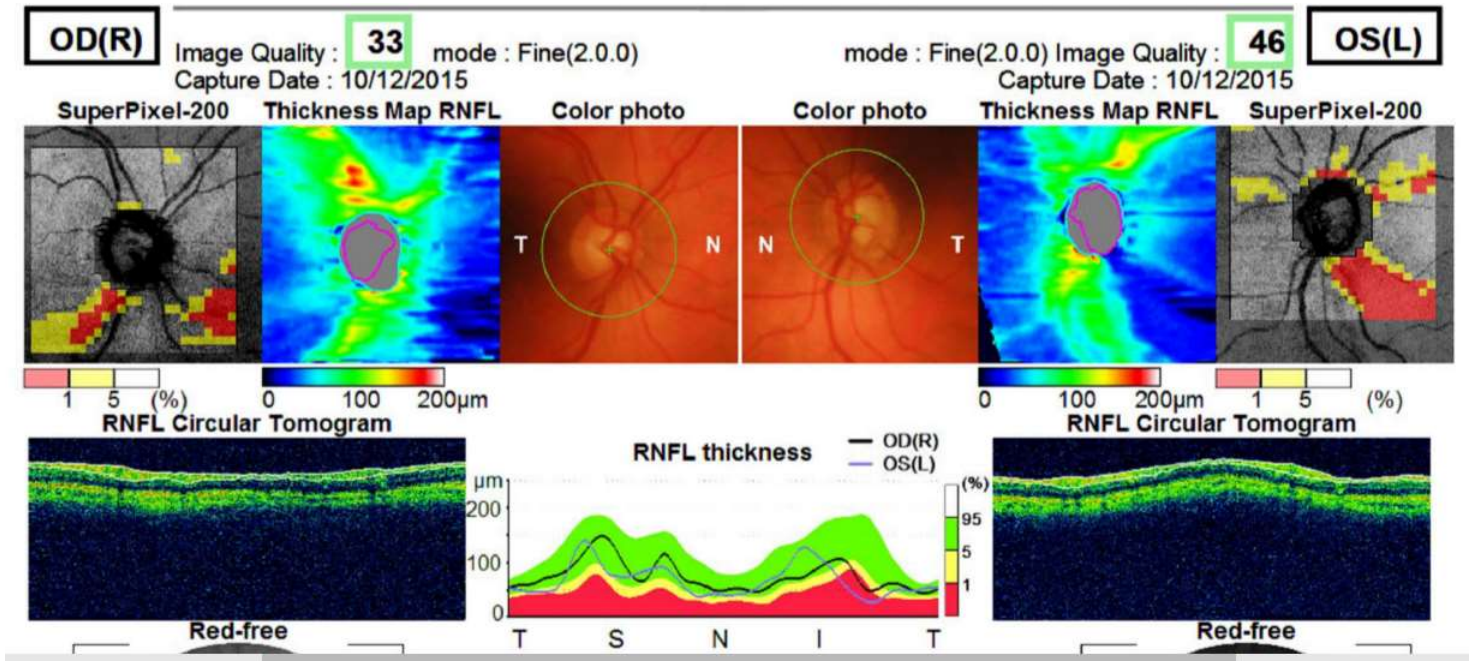


Age Normal Probability

Patient HoV Probability

Fixation Loss:	2/32=6% Good	Pattern Defect:	4.90 *
False Positives:	3/27=11% Good	Overall Defect:	2.54
False Negatives:	0/13=0% Excellent	HFA MD:	-0.78
Fluctuation:	Disabled	HFA PSD:	4.43

HoV Slope:	1.4 dB/10°
HoV 3° Level:	24.6 dB
Cluster Analysis:	Superior Defect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Capture Date : 10/12/2015
OS(L)
SuperPixel-200
Thickness Map RNFL
Color photo
Color photo
Thickness Map RNFL
SuperPixel-200
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1 5 (%)
0 100 200µm
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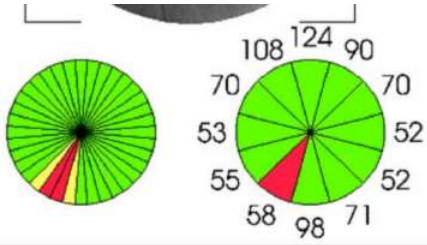
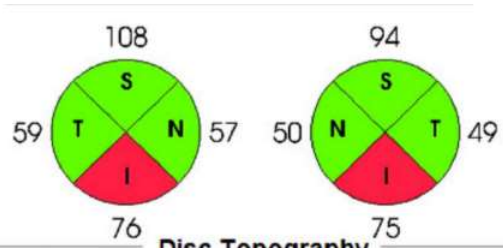
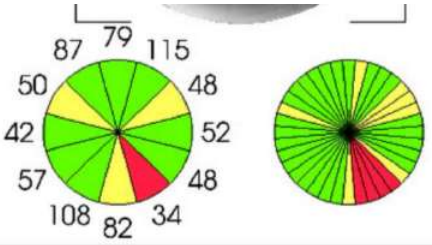
1 5 (%)
RNFL Circular Tomogram
RNFL thickness
OD(R)
OS(L)
µm
200
100
0
(%)
95
5
1
RNFL Circular Tomogram
Red-free
T S N I T
Red-free



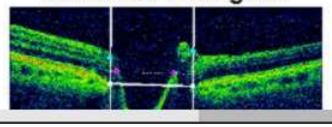




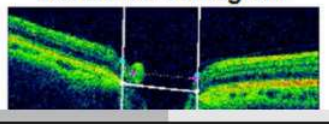
Disc Topography

2.50	Disc Area	(mm^2)	2.17
1.26	Cup Area	(mm^2)	1.54
1.24	Rim Area	(mm^2)	0.63
0.50	C/D Area Ratio		0.71
0.71	Linear CDR		0.84
0.75	Vertical CDR		0.95
0.37	Cup Volume	(mm^3)	0.45
0.32	Rim Volume	(mm^3)	0.10
1.62	Horizontal D.D	(mm)	1.45
2.02	Vertical D.D	(mm)	1.89

Horizontal Tomogram



Horizontal Tomogram



R/D Ratio

OD(R)
OS(L)

1.0

7th June 2016

- Both eyes itchy around eye lashes, skin around the eyes red and puffy.
- Eyes themselves are not inflamed
- IOP 20 right 26 left
- Rang ophthalmologist to discuss options given IOP and signs. He suggested Xalatan for Lumigan and stay on Cosopt
- If that fails he suggest Simbrinza for Cosopt

14th June 2016

- Jan rang me in tears “Really miserable”
- Red raw looking lower lids
- NaFl no staining of the cornea
- IOP 22 right and 26 left
- Cease Cosopt and resume Lumigan PF
- Suspicious of dorzolamide in Cosopt and not willing to try Simbrinza (brinzolamide and brimonidine)

21st June 2016

- Dramatic improvement off the Cosopt
- IOP 26 right and left
- Tolerating Lumigan PF well
- Try restarting Combigan as it caused only mild irritation in 2015.

July 2016

- Restarting Combigan (brimonidine and timolol) was unsuccessful, red skin again in 24 hours. Self managed by ceasing it.
- Lumigan PF at night
- IOP 26 right and 28 left
- Right IOL and iStent booked for August
- Report to ophthalmologist IOP and medication

November 2016

- Right IOL and iStent procedure
- IOP 18 right and 19 left
- Lumigan PF only at night
- Opthalmologist replaces Lumigan PF with Ganforte PF (bimatoprost and timolol) and does not want to see her for a year.

December 2016

- After one night of Ganforte eyes puffed up red itchy and Jan ceased it. Gone back to her supply of Lumigan PF
- IOP 20 right and 21 left
- Gave Jan 5 repeats for Lumigan PF

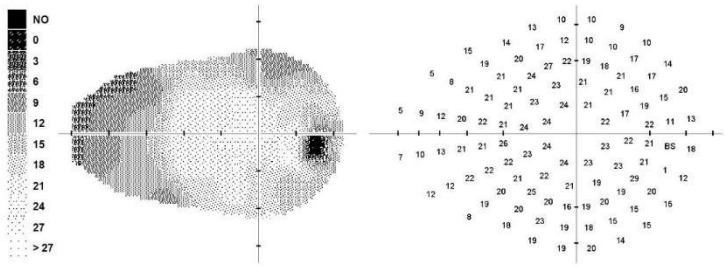
Periorbital dermatitis as a side effect of topical dorzolamide

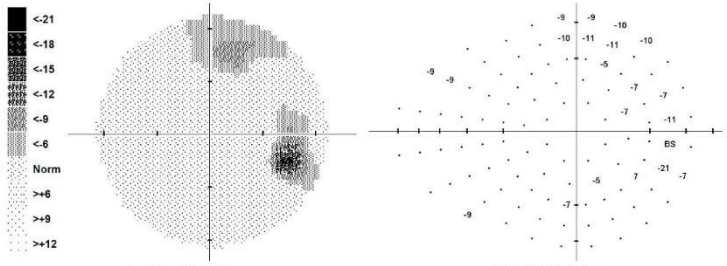
- Delaney et al (ophthals and dermatologists)
- Br J Ophthalmol 2002;86:378–380
- A retrospective study of 14 patients who developed periorbital dermatitis while using topical dorzolamide hydrochloride
- “Although the dermatitis may resolve when dorzolamide is discontinued, this does not always occur and in some patients all topical medication containing benzalkonium chloride needs to be stopped.”

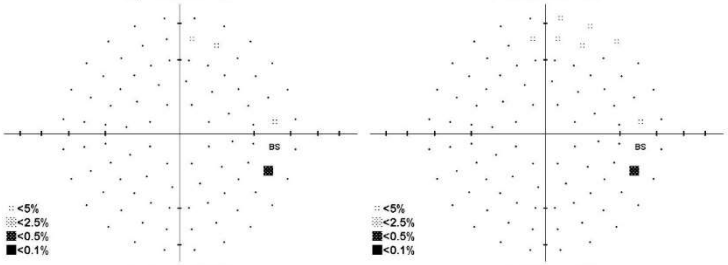
Case 3

- 83 year old woman “TV blurry” 2014
- Hx right IOL and trabeculectomy in 2001
- Has not seen an ophthalmologist for 3 years and gets her Rx – Xalacom (Latanoprost and Timolol) left only from GP
- VA 6/9= right and 6/19 left
- IOP 19 right and 26 left

Test: Glaucoma Test | Date of Birth: 26/08/1930 | Strategy: Fast Threshold
Eye: Right | Trials: 255/103=2.5 | Flicker: OFF
Age: 83 Years 10 Months | Test Duration: 7 Min 36 Sec | Lens: +3.00/+0.00x0



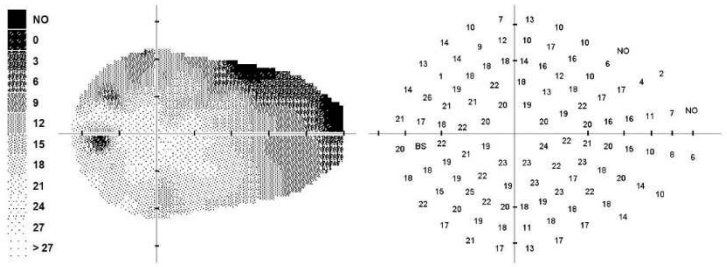


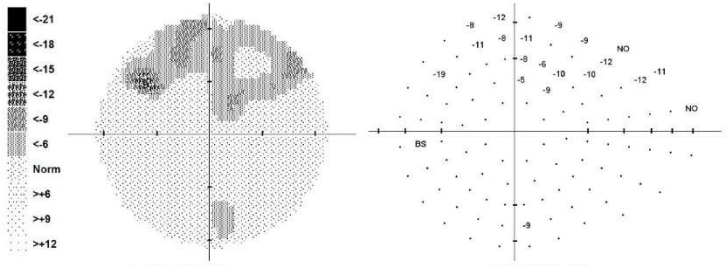


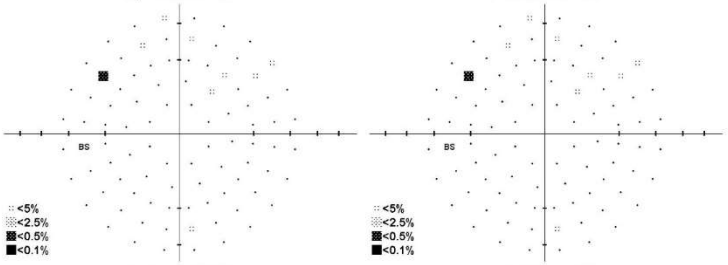
Fixation Loss:	4/31=13% Good	Pattern Defect:	3.44 *
False Positives:	0/25=0% Excellent	Overall Defect:	0.67
False Negatives:	0/12=0% Excellent	HFA MD:	-2.56
Fluctuation:	Disabled	HFA PSD:	0.90

HoV Slope:	2.9 dB/10°
HoV 3° Level:	24.7 dB
Cluster Analysis:	Superior Defect

Test: Glaucoma Test | Date of Birth: 26/08/1930 | Strategy: Fast Threshold
Eye: Left | Trials: 286/103=2.8 | Flicker: OFF
Age: 83 Years 10 Months | Test Duration: 8 Min 30 Sec | Lens: +3.00/-0.50x92

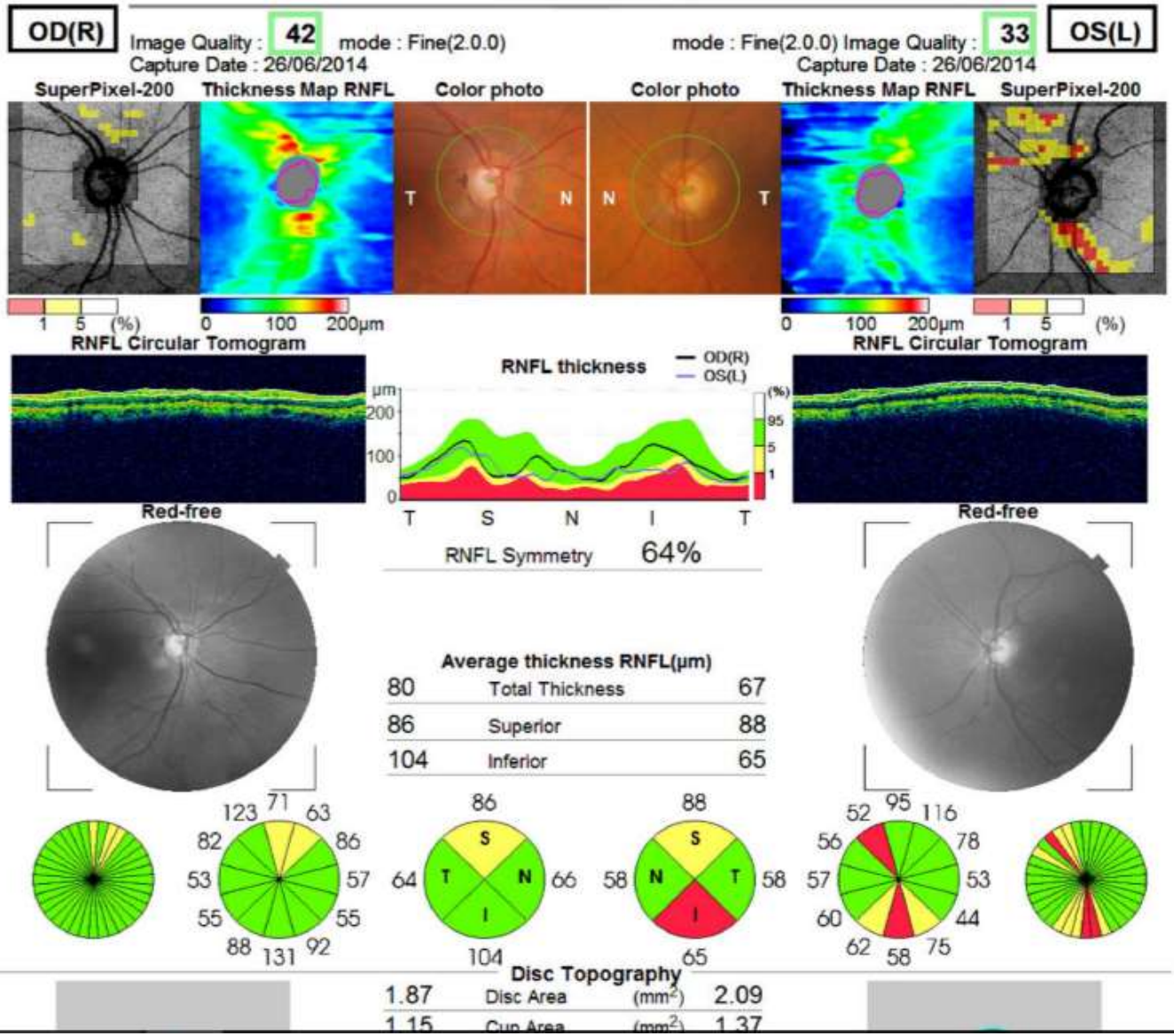






Fixation Loss:	3/32=9% Good	Pattern Defect:	4.33 *
False Positives:	0/28=0% Excellent	Overall Defect:	-0.65
False Negatives:	3/14=21% Good	HFA MD:	-3.06
Fluctuation:	Disabled	HFA PSD:	1.85

HoV Slope:	2.8 dB/10°
HoV 3° Level:	23.5 dB
Cluster Analysis:	Superior Defect


OD(R)
Image Quality : 42
mode : Fine(2.0.0)
Capture Date : 26/06/2014
mode : Fine(2.0.0) Image Quality : 33
Capture Date : 26/06/2014
OS(L)
SuperPixel-200
Thickness Map RNFL
Color photo
Color photo
Thickness Map RNFL
SuperPixel-200
T
N
N
T
1 5 (%)
0 100 200µm
0 100 200µm 1 5 (%)
RNFL Circular Tomogram
RNFL thickness
OD(R)
OS(L)
µm
200
100
0
(%)
95
5
1
RNFL Circular Tomogram
T S N I T
Red-free
Red-free
RNFL Symmetry 64%
Average thickness RNFL(µm)
80 Total Thickness 67
86 Superior 88
104 Inferior 65
123 71 63
82 86
53 57
55 55
88 131 92
86
S
64 T N 66
I
104
88
S
58 N T 58
I
65
52 95 116
56 78
57 53
60 44
62 58 75
Disc Topography
1.87 Disc Area (mm²) 2.09
1.15 Cup Area (mm²) 1.37

Refer for left cataract and IOP

- Ophthalmologist feels disc and field signs suggest the left needs lower IOP.
- Has used Xalacom for years
- Changes left to Ganforte and Alphagan
- He states his target for the left is 14mmHg
- NHMRC guidelines state that IOP in established glaucoma needs to be lower than 16-19mmHg

June 2015

- IOP 20 right and 20 left
- Now on Azarga (Brinzolamide and timolol) and Lumigan PF
- Alphagan was not tolerated
- Booked for left IOL and trabeculectomy

September 2015

- Ophthalmologist review 6 weeks post op
- He reports VA 6/7.5 left
- IOP still 20, which he feels is due to problem at the trab door
- He performed a 5FU needling to remove scar tissue and removed some sutures
- Planed to review her in a month, left on Maxidex 2 hourly

12 days later

- Patient reports poor left vision
- Unaided VA 6/19 right and CF left
- IOP left is 8mmHg
- SL left IOL clear
- Went straight to OCT, suspecting macula pathology – no image!
- OPTOS

Rang the ophthalmologist

- After viewing the image on his phone the ophthalmologist was confident she was suffering a choroidal effusion
- Cease Maxidex
- Rx Atropine bid and bed rest
- No improvement likely for two weeks

Two weeks later

The ophthalmologist found

- IOP left 6mmHg
- VA CF as temporal lobe is still occluding the visual axis.
- Booked for surgical drainage of the effusion and reinforcement of the trab door

To Trab or not to Trab?

Perioperative Complications of Trabeculectomy in the Collaborative Initial Glaucoma Treatment Study (CIGTS) Am J Ophthalmol 2005; 140(1):16-22.

- 11% of 465 Trabeculectomies procedures resulted in a serous choroidal detachment within one month post op
- Older patients were more likely to experience serous choroidal detachment

Medication in order of appearance

Trade name	Active ingredients
Duotrav	travoprost and timolol
Combigan	brimonidine and timolol
Cosopt	dorzolamide and timolol
Lumigan	bimatoprost
Simbrinza	brinzolamide and brimonidine
Ganforte	bimatoprost and timolol
Xalacom	latanoprost and timolol
Alphagan	brimonidine
Azarga	brinzolamide and timolol

Thank You