

CASE PRESENTATION

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III yr PG

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CASE 1



- NAME – XXX
- AGE – 65yrs
- SEX – Male
- Occupation – Agriculture labourer
- Village - Akkinapally

CHIEF COMPLAINT




- Head ache and Diminution of vision in BE (RE > LE)
since 1 year

HISTORY OF PRESENT ILLNESS



- Patient was apparently alright 1 year back, then he developed diminution of vision in BE (RE > LE) which was insidious in onset, gradually progressive and painless
- Headache was dull aching type, over temporal region, no radiation, no aggravating or relieving factors

- 
- No history of coloured halos , photophobia
 - No history of diplopia, glare
 - No history of ocular trauma

PAST HISTORY



- ❑ No history of similar complaints in the past
- ❑ Known hypertension since 5 years – on T.Amlong 5mg once daily
- ❑ Not a known diabetic /Asthmatic
- ❑ No significant past medical history
- ❑ No history of long term usage of systemic / topical steroids

FAMILY HISTORY



- Other family members - Sibling, son and daughter have similar complaints

PERSONAL HISTORY



- Diet – Mixed
- Appetite – Adequate
- Sleep – Adequate
- Bowel and bladder - Regular

GENERAL EXAMINATION:



- Patient was conscious , coherent , well oriented to time, place, person
- No icterus
- No pallor
- No cyanosis
- No clubbing
- No lymphadenopathy
- No pedal edema
- All peripheral pulses felt

VITALS



- Patient Afebrile
- PULSE RATE – 86/min
- BLOOD PRESSURE – 120/90mm Hg right arm
supine position
- RESPIRATORY RATE – 14/min

SYSTEMIC EXAMINATION



- Cardiovascular system:

S1 S2 – heard

no murmurs

- Respiratory system:

bilateral vesicular breath sounds heard

no added sounds



Central nervous system:

- higher functions – normal
- motor system - normal
- Sensory system – normal
- Cerebellar functions - normal


OCULAR EXAMINATION

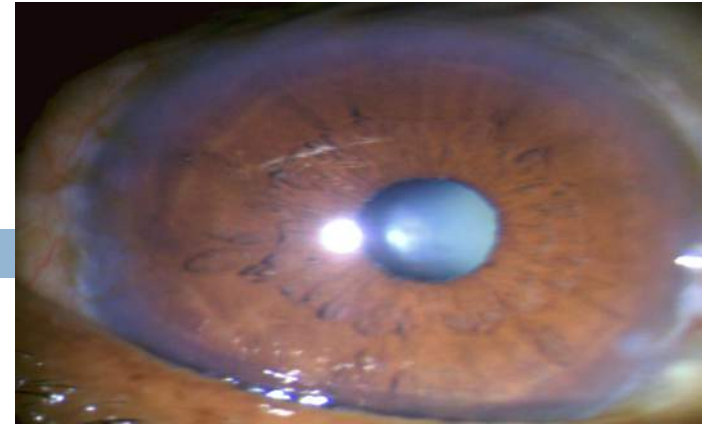
UCVA:

- RE – CF 2mts with pinhole 6/60
- LE – CF 3mts with pinhole 6/36
- Near vision – N18 in BE

BCVA:

- RE -2.50D Sph – 6/60
- LE - 2.00D Sph – 6/36
- Near vision – Add +2.50D Sph – N6

- 
- HEAD POSTURE : Normal
 - FACIAL SYMMETRY : Normal
 - OCULAR SYMMETRY : Normal
 - EXTRAOCULAR MOVEMENTS: Full in all directions



RIGHT EYE

LEFT EYE

LIDS	NORMAL	NORMAL
CONJUNCTIVA	NASAL PTERYGIUM	NORMAL
CORNEA	CLEAR	CLEAR
ANTERIOR CHAMBER	NORMAL DEPTH PACD = $\frac{1}{2}$ CT (GR - III) CACD = 3 CT	NORMAL DEPTH PACD = $\frac{1}{2}$ CT (Gr - III) CACD = 3 CT
IRIS	Normal colour and pattern	Normal colour and pattern
PUPIL	Normal size reacting to light	Normal size reacting to light
LENS	Greyish white- NS Gr I	Greyish white -NS Gr I



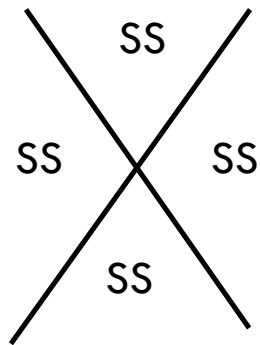
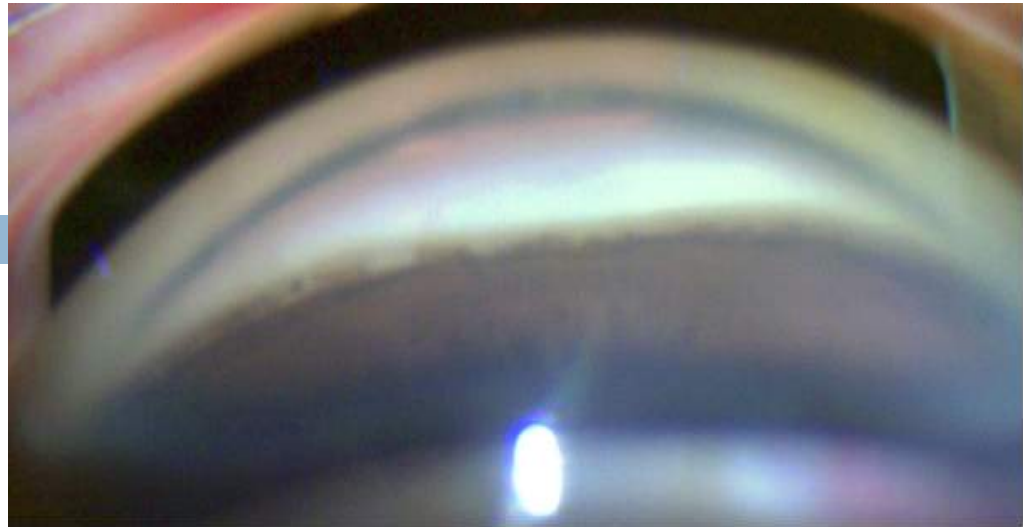
INTRA OCULAR PRESSURE:

- BY APPLANATION TONOMETRY under no anti glaucoma medication

- RE – 16 mm Hg
- LE – 14 mm Hg

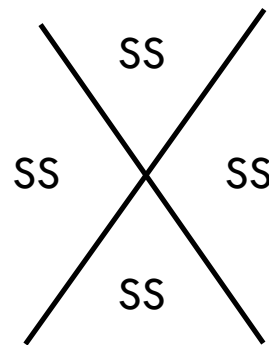
DIURNAL VARIATION TEST – No significant variation

GONIOSCOPY



RE

OPEN ANGLES



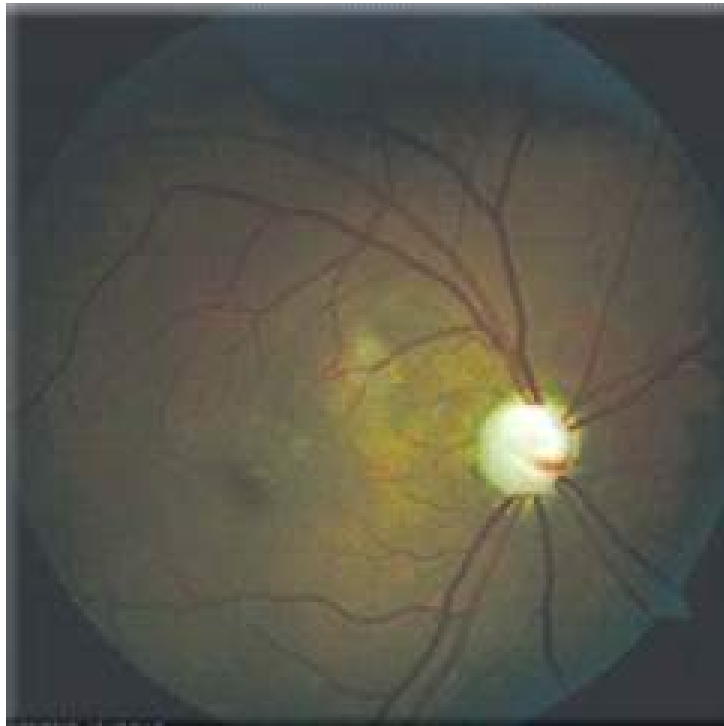
LE

OPEN ANGLES

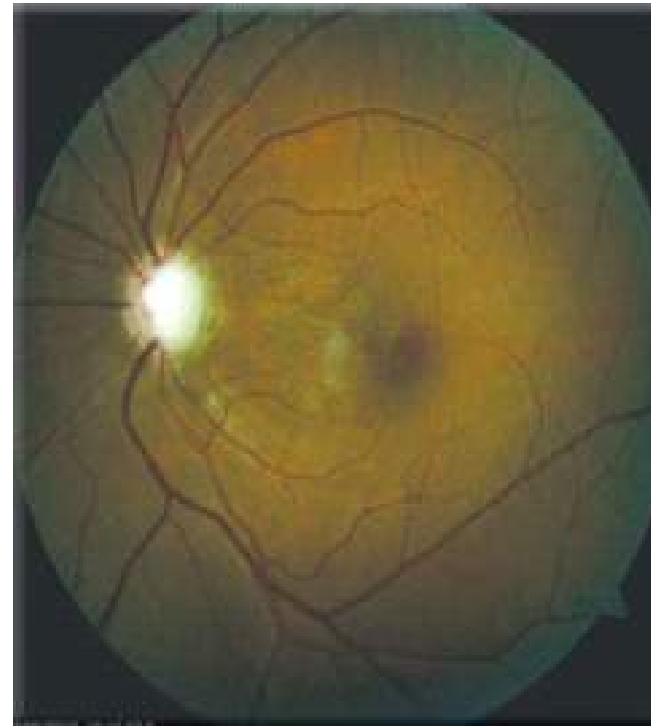
FUNDUS

18

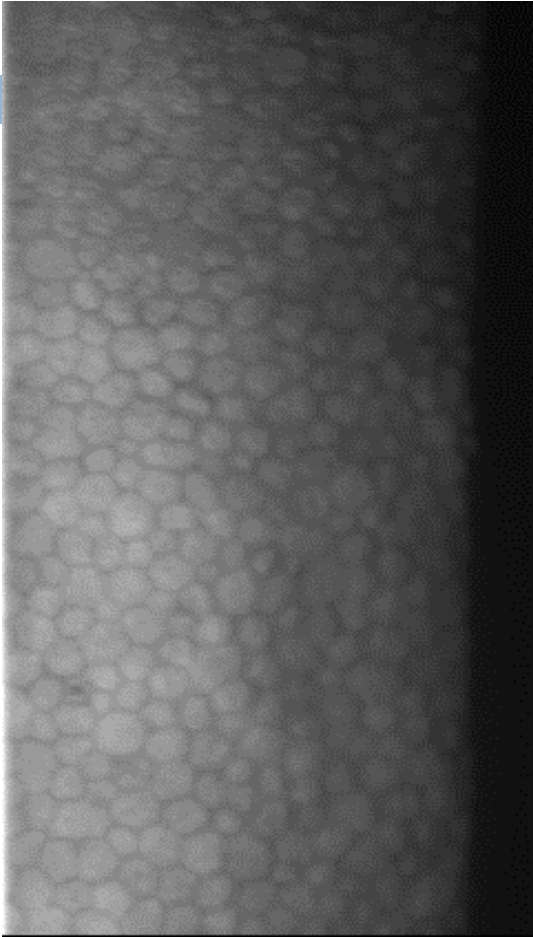
	RIGHT EYE	LEFT EYE
MEDIA	Hazy due to lenticular opacity	Hazy due to lenticular opacity
DISC - SIZE	Normal	Normal
SHAPE	Circular	Circular
COLOUR	Pink	Pink
MARGINS	Well defined	Well defined
C:D RATIO	0.9:1 CDR	0.9:1 CDR
VESSELS – A-V RATIO	2:3	2:3
MACULA	Foveal reflex present	Foveal reflex present



RIGHT EYE

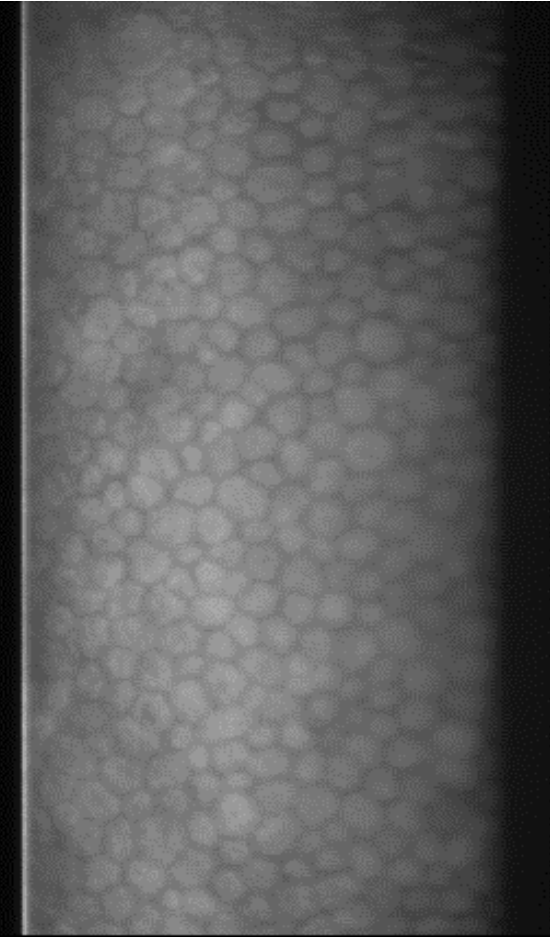


LEFT EYE

A grayscale microscopic image showing a dense field of polygonal cells, likely corneal endothelial cells, with a honeycomb-like appearance. The cells are mostly hexagonal in shape and vary slightly in size.

Cornea thick	:	0.496 (mm)
No. of cells	:	86
Minimum size	:	62.6 (μm^2)
Maximum size	:	674.7 (μm^2)
Average size	:	345.1 (μm^2)
S.D . Of size	:	111.5
C.V. of size	:	32.3%
Cell density	:	2897.5 / m^2
Hexagonality	:	53%

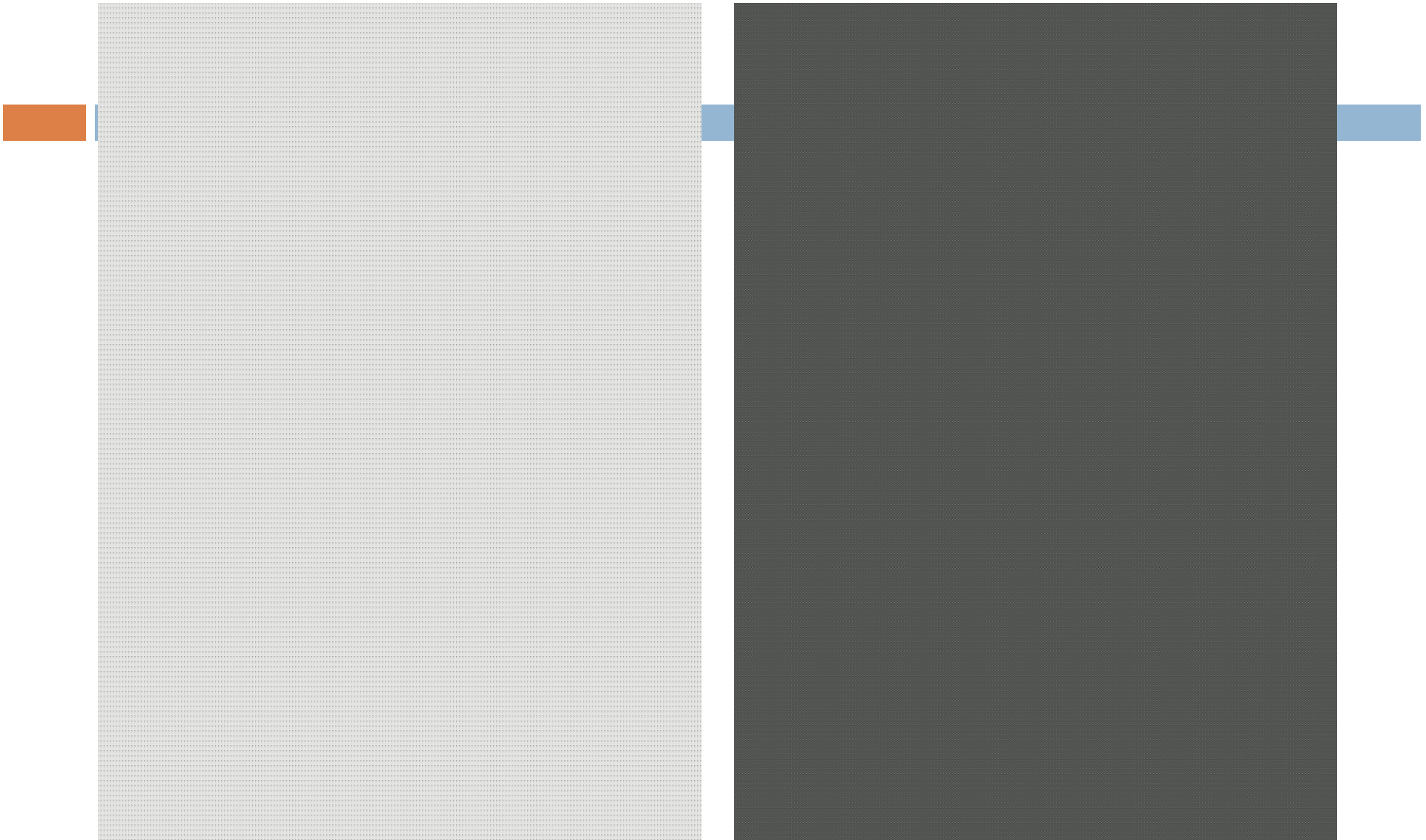
RE CCT – 496 μ



Cornea thick	:	0.498 (mm)
No. of cells	:	99
Minimum size	:	125.8 (μm^2)
Maximum size	:	845.0 (μm^2)
Average size	:	361.0 (μm^2)
S.D . Of size	:	139.3
C.V. of size	:	38.6 %
Cell density	:	2770.3 / m^2
Hexagonality	:	55 %

LE – CCT - 498 μ

VISUAL FIELDS



RE BIARCUATE SCOTOMA

LE BIARCUATE SCOTOMA



INVESTIGATIONS:

- RBS – 75 mg/dl
- URINE – Albumin – Nil
Sugar – Nil
- CBP - normal
- ECG – within normal limits
- Lipidprofile – normal
- ESR – 15mm / 1 hr

DIAGNOSIS



- BE – Normotensive glaucoma with
Nuclear sclerosis Grade - I

MANAGEMENT



MEDICAL MANAGEMENT:

- Eyedrops. Timolol 0.5% twice daily
- RE – Deep sclerectomy with cataract extraction and PCIOL implantation was done under Local anesthesia



RE - Post operatively:

- Visual acuity – 6/60
- IOP by applanation tonometry – 10mm Hg

LE – IOP by applanation tonometry – 12mm Hg

- Eyedrops Timolol 0.5% twice daily
- Advised cataract surgery with deep sclerectomy after 1 month

CASE 2



- NAME : XY
- AGE : 60yrs
- SEX : Female
- OCCUPATION: House wife
- RESIDENT OF: Akkinapally

CHIEF COMPLAINTS




- Diminution of vision in RE since 1 year

HISTORY OF PRESENT ILLNESS



- Patient was apparently alright 1 year back, then she developed diminution of vision in RE which was insidious in onset, gradually progressive and painless

- 
- No history of coloured halos , photophobia
 - No history of diplopia, glare
 - No history of ocular trauma

PAST HISTORY



- ❑ No history of similar complaints in the past
- ❑ Known hypertension since 4 years – on T. Amlong 5mg once daily medication
- ❑ Not known diabetic/asthmatic
- ❑ No significant past medical history
- ❑ No history of usage of long term systemic / topical steroids

FAMILY HISTORY



- Her brother and his off springs have similar complaints

PERSONAL HISTORY



- Diet – Mixed
- Appetite – Adequate
- Sleep – Adequate
- Bowel and bladder - Regular

GENERAL EXAMINATION:



- Patient was conscious , coherent , well oriented to time, place, person
- No icterus
- No pallor
- No cyanosis
- No clubbing
- No lymphadenopathy
- No pedal edema
- All peripheral pulses felt

VITALS



- Patient afebrile
- PULSE RATE – 76/min
- BLOOD PRESSURE – 130/90mm Hg right arm
supine position
- RESPIRATORY RATE – 14/min

SYSTEMIC EXAMINATION



- Cardiovascular system:


S1 S2 – heard

no murmurs

- Respiratory system:

bilateral vesicular breath sounds heard

no added sounds

- 
- Central nervous system:

 - Higher functions – normal
 - Motor system - normal
 - Sensory system – normal
 - Cerebellar functions - normal


OCULAR EXAMINATION

UCVA:

- RE – CF 5mts with pinhole 6/36
- LE – CF 4mts with pinhole 6/24
- Near vision – N18 in BE

BCVA:

- RE -1.50D Sph – 6/36
- LE - 2.00D Sph – 6/24
- Near vision: Add +2.50 D Sph – N6

- 
- HEAD POSTURE : Normal
 - FACIAL SYMMETRY : Normal
 - OCULAR SYMMETRY : Normal
 - EXTRAOCULAR MOVEMENTS: Full in all directions

	RIGHT EYE	LEFT EYE
LIDS	NORMAL	NORMAL
CONJUNCTIVA	NORMAL	NORMAL
CORNEA	CLEAR	CLEAR
ANTERIOR CHAMBER	NORMAL DEPTH PACD = 1/2 CT (GR - III) CACD = 3 CT	NORMAL DEPTH PACD = 1/2 CT (Gr - III) CACD = 3 CT
IRIS	Normal colour and pattern	Normal colour and pattern
PUPIL	Normal size reacting to light	Normal size reacting to light
LENS	Greyish white – NS Gr 1	Greyish white- NS Gr 1



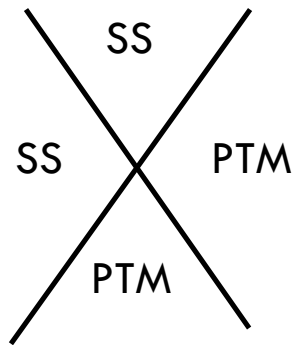
INTRA OCULAR PRESSURE:

- BY APPLANATION TONOMETRY under no anti glaucoma medication
- RE – 18 mm Hg
- LE – 18 mm Hg

DIURNAL VARIATION TEST

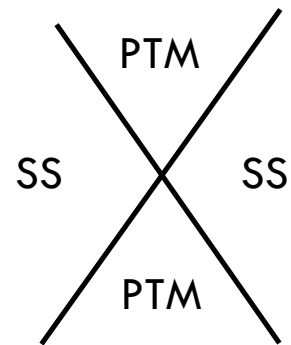
- no significant variation

GONIOSCOPY



RE

OPEN ANGLES



LE

OPEN ANGLES

RIGHT EYE

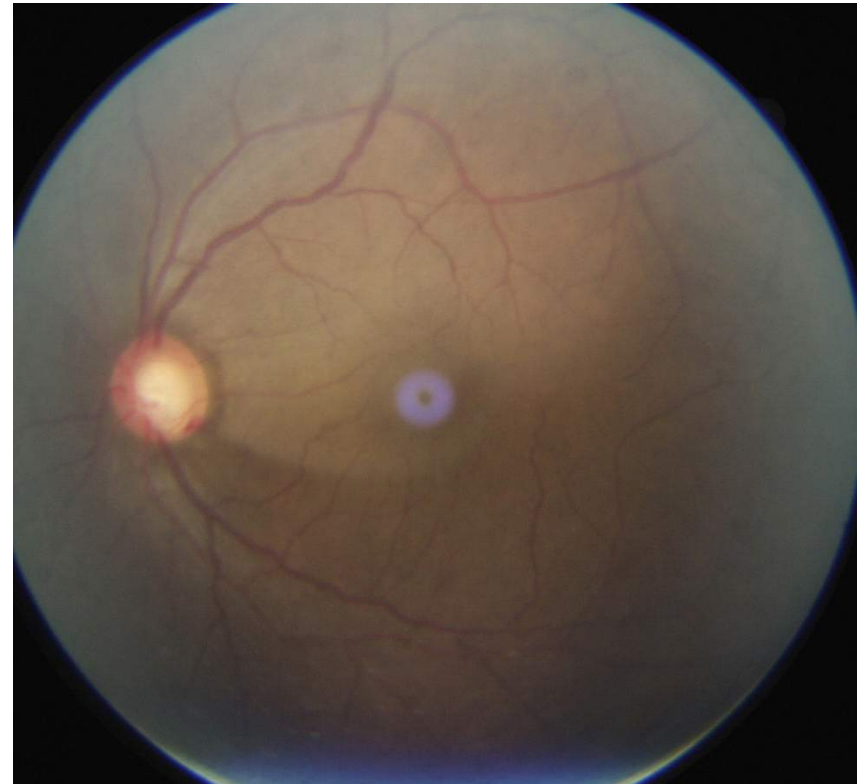
LEFT EYE

MEDIA	Hazy due to lenticular opacity	Hazy due to lenticular opacity
DISC - SIZE	Normal	Normal
SHAPE	Circular	Circular
COLOUR	Pink	Pink
MARGINS	Well defined	Well defined
C:D RATIO	0.8:1 , inferior notch , superior rim thinning	0.7:1, inferior notch present Disc hemorrhage inferiorly
VESSELS – A-V RATIO	2:3	2:3
MACULA	Foveal reflex present	Foveal reflex present

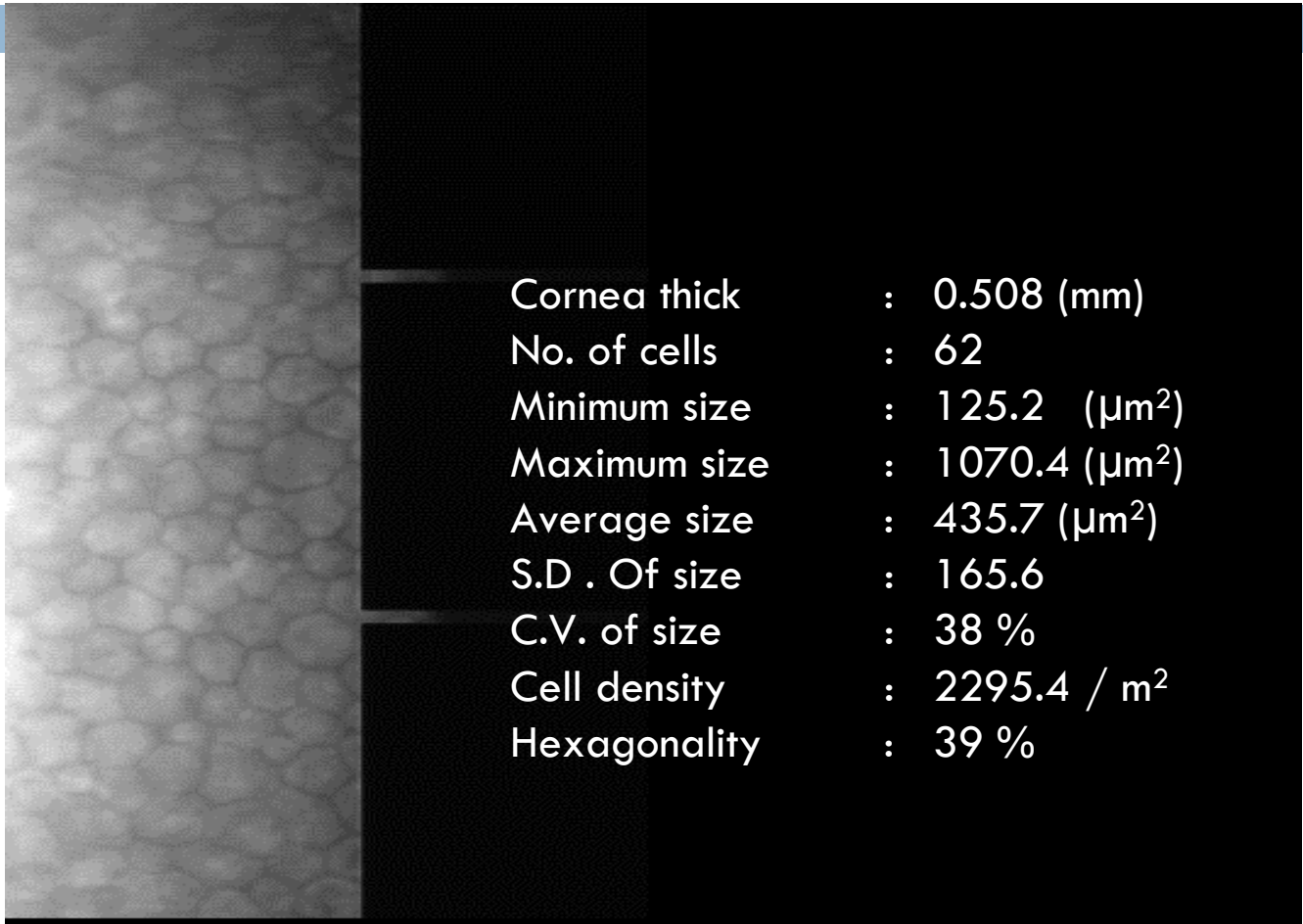
FUNDUS



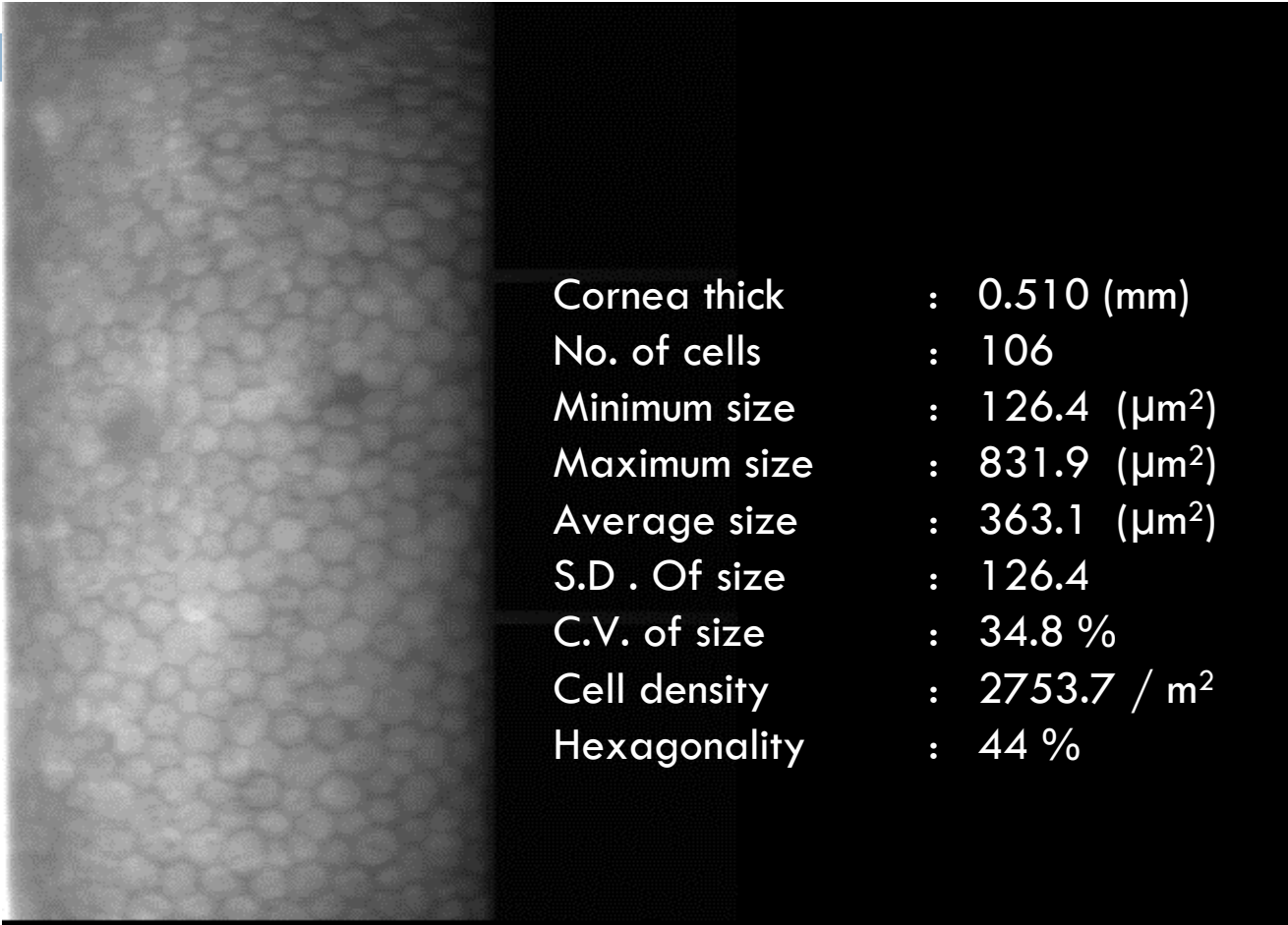
RIGHT EYE



LEFT EYE

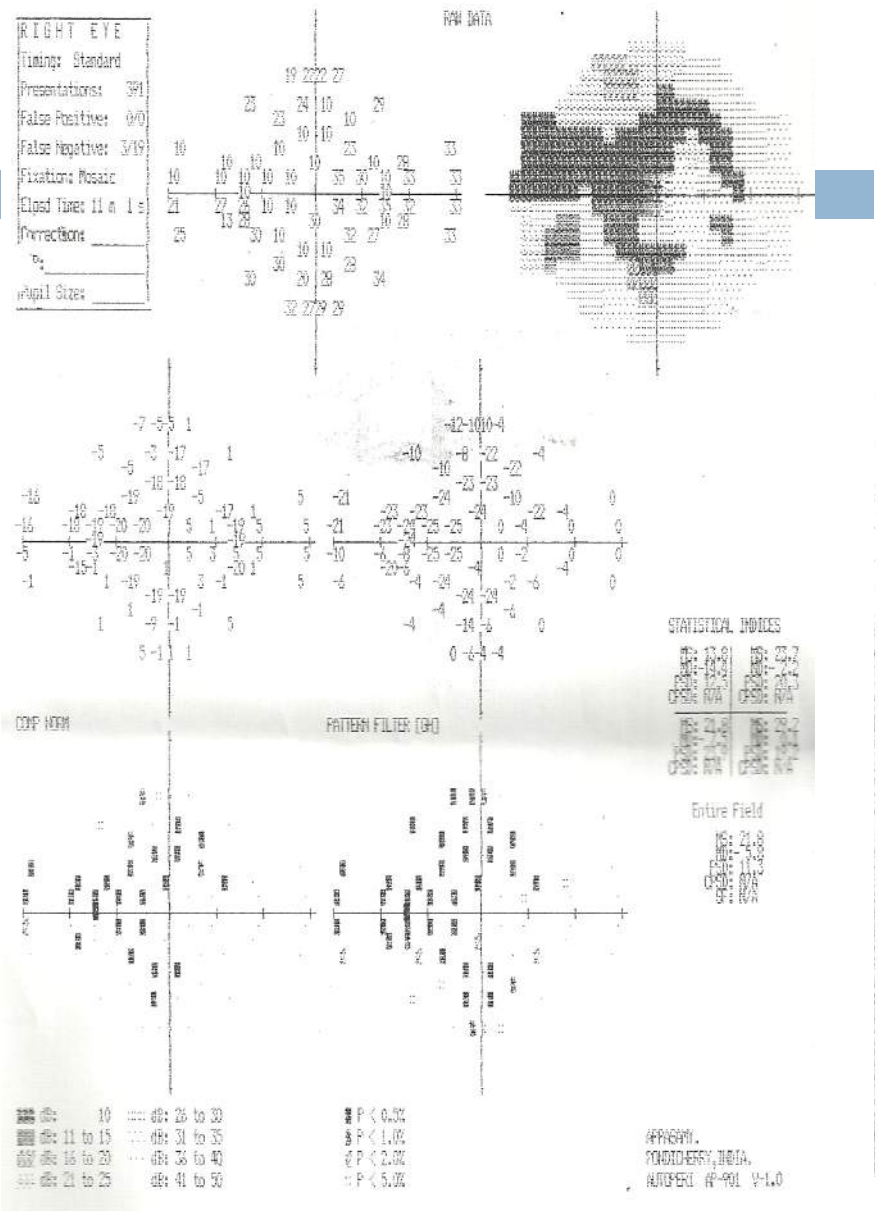


RE CCT 508 μ

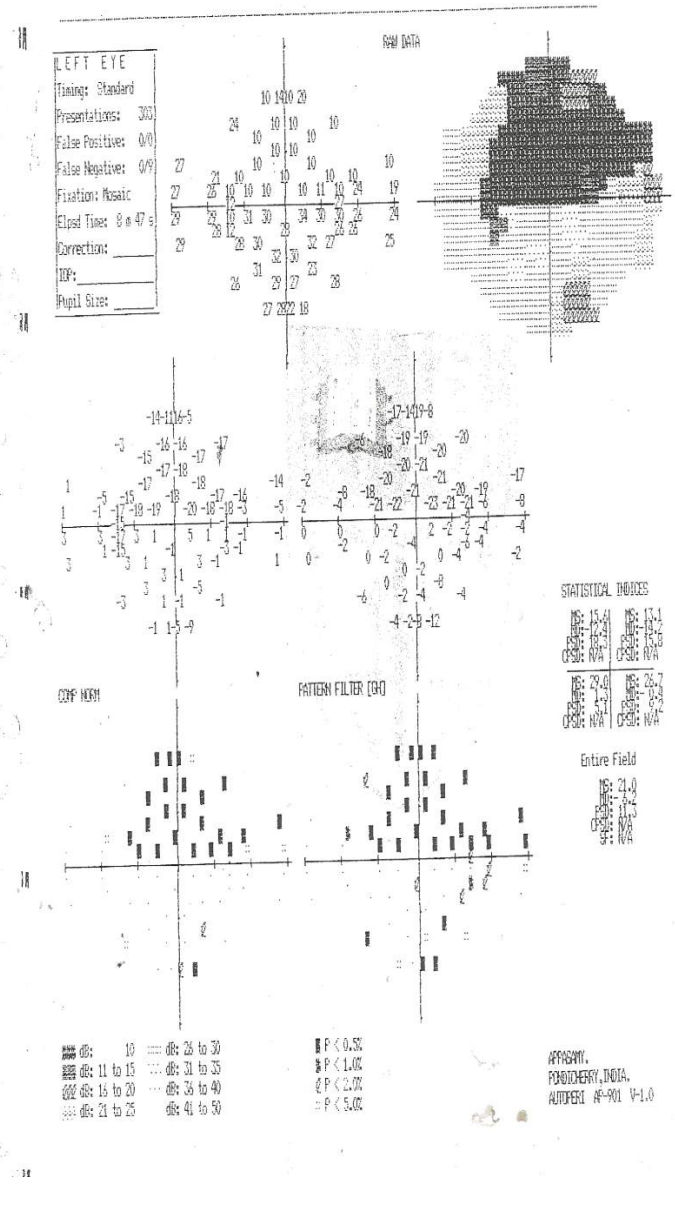


LE CCT 510 μ

VISUAL FIELDS



RE- INCOMPLETE BIARCUATE SCOTOMA



LE- SUPERIOR ARCUATE SCOTOMA



□ INVESTIGATIONS:

- RBS – 75 mg/dl
- URINE – Albumin – Nil
Sugar – Nil
- CBP- normal
- ECG – within normal limits
- Lipid profile – normal
- ESR – 16mm / 1 hr

DIAGNOSIS



- BE – Normotensive glaucoma with nuclear sclerosis grade I

MANAGEMENT



MEDICAL MANAGEMENT:

- Eyedrops Timolol 0.5% twice daily
- RE – Deep sclerectomy with cataract extraction and PCIOL implantation was done under Local anesthesia



RE - Post operatively:

- Visual acuity – 6/36
- IOP by applanation tonometry – 12mm Hg

LE – IOP by applanation tonometry – 14mm Hg

- Eyedrops Timolol 0.5% twice daily
- Advised cataract surgery with deep sclerectomy after 1 month

CASE 3



- NAME – XXX
- AGE – 45yrs
- SEX – Male
- Occupation – business
- Village - Akkinapally

CHIEF COMPLAINT




- Head ache since 2 years

HISTORY OF PRESENT ILLNESS



- Patient was apparently alright 2 years back,
- Headache was dull aching type, in temporal region, no radiation, no aggravating or relieving factors

- 
- No history of coloured halos , photophobia
 - History of usage of spectacles since 3years
 - No history of ocular trauma

PAST HISTORY



- ❑ No history of similar complaints in the past
- ❑ Not known hypertensive / diabetic / Asthmatic
- ❑ No significant past medical history
- ❑ No history of usage of long term systemic / topical steroids

FAMILY HISTORY



- Other family members – father, aunt and sister have similar complaints

PERSONAL HISTORY



- Diet – Mixed
- Appetite – Adequate
- Sleep – Adequate
- Bowel and bladder - Regular

GENERAL EXAMINATION:



- Patient was conscious , coherent , well oriented to time, place, person
- No icterus
- No pallor
- No cyanosis
- No clubbing
- No lymphadenopathy
- No pedal edema
- All peripheral pulses felt

VITALS



- Patient afebrile
- PULSE RATE – 86/min
- BLOOD PRESSURE – 120/70mm Hg right arm
supine position
- RESPIRATORY RATE – 14/min

SYSTEMIC EXAMINATION



- Cardiovascular system:


S1 S2 – heard

no murmurs

- Respiratory system:

bilateral vesicular breath sounds heard

no added sounds

- 
- Central nervous system:
 - higher functions – normal
 - motor system - normal
 - Sensory system – normal
 - Cerebellar functions - normal


OCULAR EXAMINATION

UCVA:

- RE – 6/36 with pinhole 6/6
- LE – 6/24 with pinhole 6/9
- Near vision – N8 in BE

BCVA:

- RE -2.25D Sph – 6/6
- LE - 2.00D Sph – 6/9
- Near vision – BE – Add +1.50 D Sph – N6

- 
- HEAD POSTURE : Normal
 - FACIAL SYMMETRY : Normal
 - OCULAR SYMMETRY : Normal
 - EXTRAOCULAR MOVEMENTS: Full in all directions

	RIGHT EYE	LEFT EYE
LIDS	NORMAL	NORMAL
CONJUNCTIVA	NORMAL	NORMAL
CORNEA	CLEAR	CLEAR
ANTERIOR CHAMBER	NORMALDEPTH PACD = 1/2 CT (GR - III) CACD = 3 CT	NORMAL DEPTH PACD = 1/2 CT(Gr -III) CACD = 3 CT
IRIS	Normal colour and pattern	Normal colour and pattern
PUPIL	Normal size reacting to light	Normal size reacting to light
LENS	Transparent	Transparent



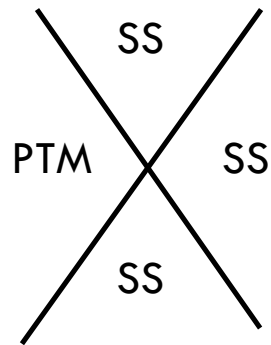
INTRA OCULAR PRESSURE:

- BY APPLANATION TONOMETRY under no anti glaucoma medication
- RE – 14 mm Hg
- LE – 14 mm Hg

DIURNAL VARIATION TEST

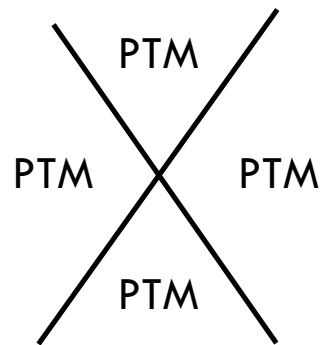
- no significant variation

GONIOSCOPY



RE

OPEN ANGLES



LE

OPEN ANGLES

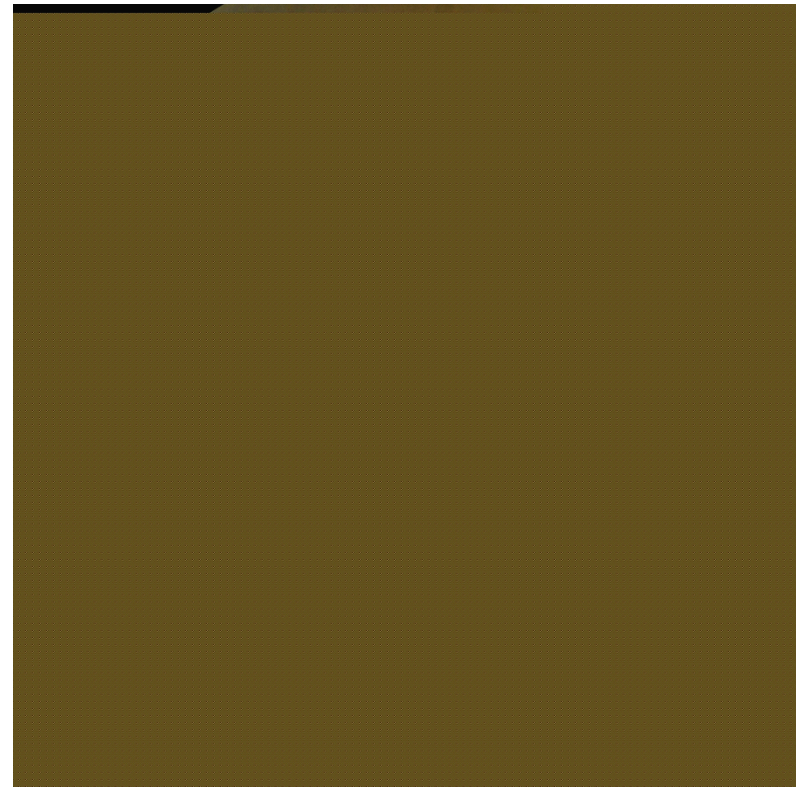
FUNDUS

68

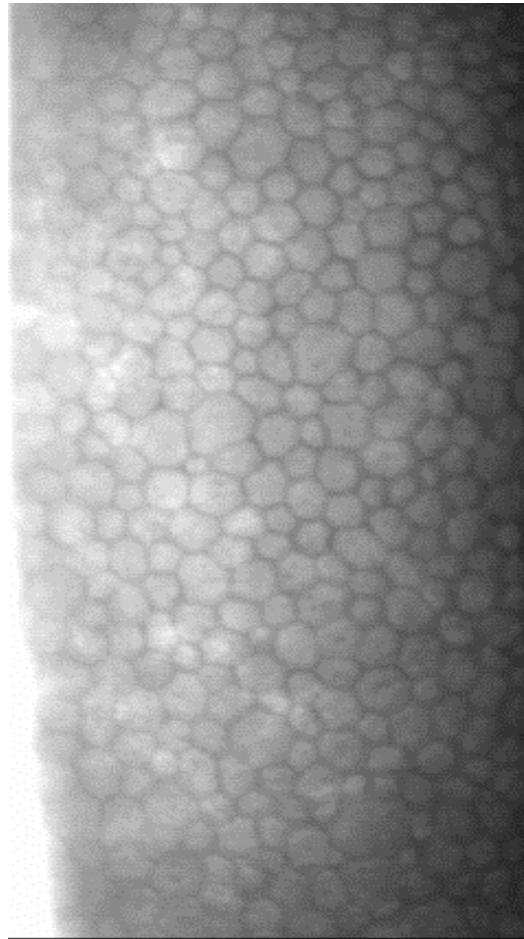
	RIGHT EYE	LEFT EYE
MEDIA	Clear	Clear
DISC - SIZE	Normal	Normal
SHAPE	Circular	Circular
COLOUR	Pink	Pink
MARGINS	Well defined	Well defined
C:D RATIO	0.4:1 CDR	0.6:1 CDR
VESSELS – A-V RATIO	2:3	2:3
MACULA	Foveal reflex present	Foveal reflex present



RIGHT EYE

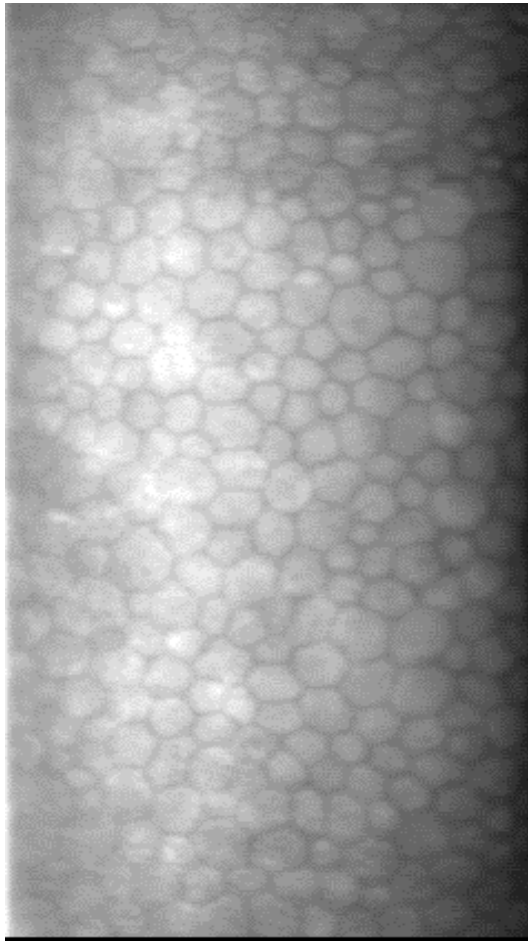


LEFT EYE



Cornea thick	: 0.510 (mm)
No. of cells	: 100
Minimum size	: 117.1 (μm^2)
Maximum size	: 962.7 (μm^2)
Average size	: 404.3 (μm^2)
S.D . Of size	: 165.8
C.V. of size	: 41 %
Cell density	: 2473.6 / m^2
Hexagonality	: 52 %

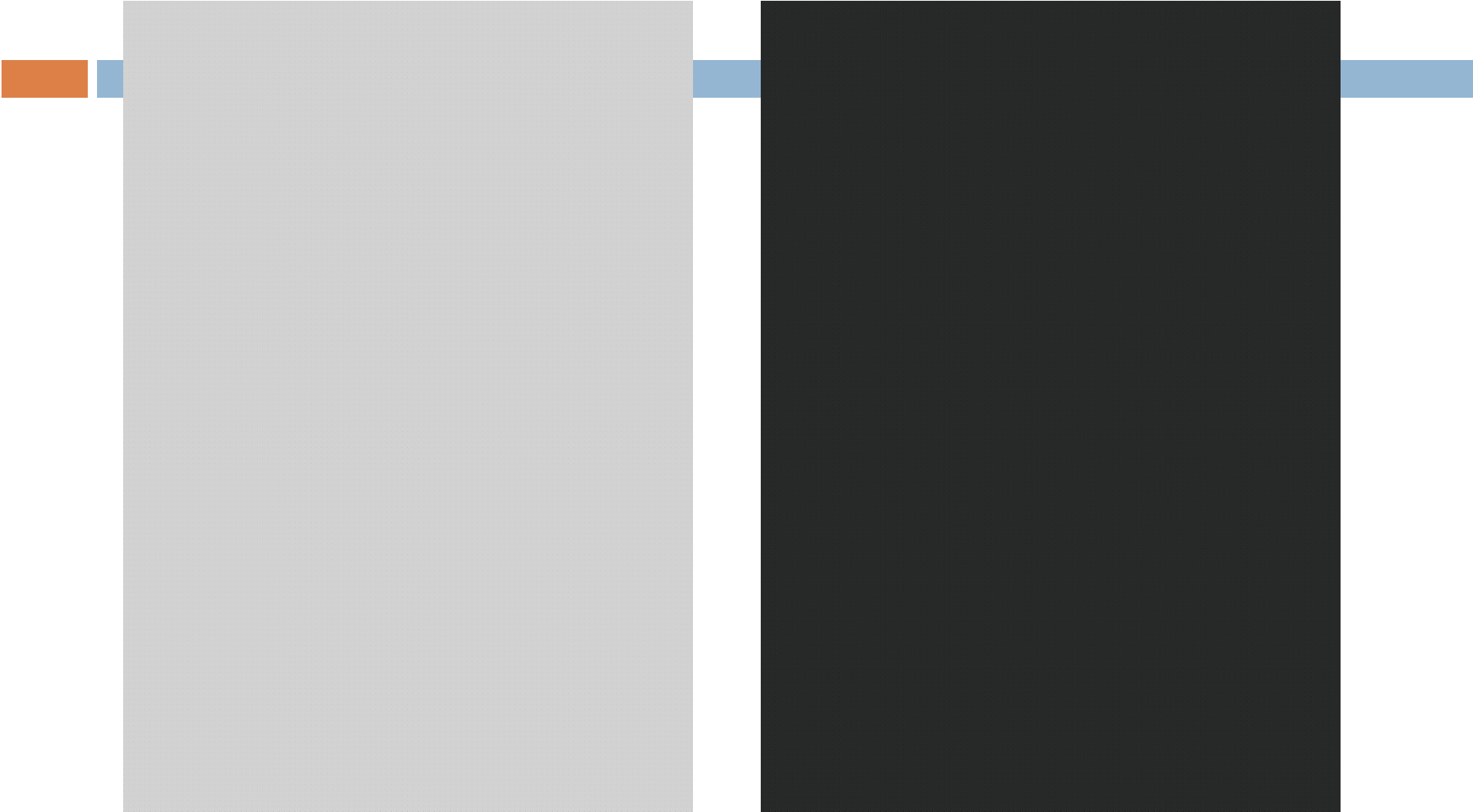
RE CCT 510 μ



Cornea thick	:	0.512 (mm)
No. of cells	:	80
Minimum size	:	179.2 (μm^2)
Maximum size	:	1016.8 (μm^2)
Average size	:	493.6 (μm^2)
S.D . Of size	:	177.8
C.V. of size	:	36 %
Cell density	:	2025.9 / m^2
Hexagonality	:	51 %

LE CCT 512 μ

VISUAL FIELDS



RE EARLY SUPERIOR
ARCUATE SCOTOMA

LE SUPERIOR ARCUATE
SCOTOMA



□ INVESTIGATIONS:

- RBS – 75 mg/dl
- URINE – Albumin – Nil
Sugar – Nil
- CBP - normal
- ECG – within normal limits
- Lipid profile – normal
- ESR – 15mm / 1 hr

DIAGNOSIS

- BE – Normotensive glaucoma

MANAGEMENT



- Eye drops . Latanoprost 0.005% once daily

Follow up after 15 days

IOP by applanation tonometry

- RE – 10 mm Hg
- LE – 10 mm Hg

CASE 4



- NAME – XXX
- AGE – 40yrs
- SEX – Female
- Occupation – House wife
- Village - Chityal

CHIEF COMPLAINT




- Head ache since 2 years

HISTORY OF PRESENT ILLNESS



- Patient was apparently alright 2 years back, then she developed headache which was dull aching type, in temporal region, no aggravating or relieving factors
- Not associated with nausea

- 
- No history of coloured halos , photophobia
 - History of usage of spectacles since 2 years
 - No history of ocular trauma

PAST HISTORY



- ❑ No history of similar complaints in the past
- ❑ Not known hypertensive / diabetic
- ❑ No history of bronchial asthma
- ❑ No significant past medical history
- ❑ No history of usage of long term systemic / topical steroids

FAMILY HISTORY



- Other family members – father, aunt and brother have similar complaints

PERSONAL HISTORY



- Diet – Mixed
- Appetite – Adequate
- Sleep – Adequate
- Bowel and bladder - Regular

GENERAL EXAMINATION:



- Patient was conscious , coherent , well oriented to time, place, person
- No icterus
- No pallor
- No cyanosis
- No clubbing
- No lymphadenopathy
- No pedal edema
- All peripheral pulses felt

VITALS



- Patient afebrile
- PULSE RATE – 72/min
- BLOOD PRESSURE – 120/70mm Hg right arm
supine position
- RESPIRATORY RATE – 16/min

SYSTEMIC EXAMINATION



- Cardiovascular system:


S1 S2 – heard

no murmurs

- Respiratory system:

bilateral vesicular breath sounds heard

no added sounds

- 
- Central nervous system:
 - higher functions – normal
 - motor system - normal
 - Sensory system – normal
 - Cerebellar functions - normal


OCULAR EXAMINATION

UCVA:

- RE – 6/60 with pinhole 6/9
- LE – 6/24 with pinhole 6/9
- Near vision – N8 in BE

BCVA:

- RE - 2.00D Sph – 6/9
- LE - 1.50D Sph – 6/9
- Near vision – Add +1.00 D Sph – N6

- 
- HEAD POSTURE : Normal
 - FACIAL SYMMETRY : Normal
 - OCULAR SYMMETRY : Normal
 - EXTRAOCULAR MOVEMENTS: Full in all directions

	RIGHT EYE	LEFT EYE
LIDS	NORMAL	NORMAL
CONJUNCTIVA	NORMAL	NORMAL
CORNEA	CLEAR	CLEAR
ANTERIOR CHAMBER	NORMALDEPTH PACD = 1/2 CT (GR - III) CACD = 3 CT	NORMAL DEPTH PACD = 1/2 CT(Gr -III) CACD = 3 CT
IRIS	Normal colour and pattern	Normal colour and pattern
PUPIL	Normal size reacting to light	Normal size reacting to light
LENS	Transparent	Transparent



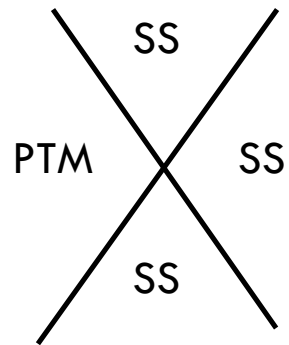
INTRA OCULAR PRESSURE:

- BY APPLANATION TONOMETRY under no antiglaucoma medication
- RE – 16 mm Hg
- LE – 16 mm Hg

DIURNAL VARIATION TEST

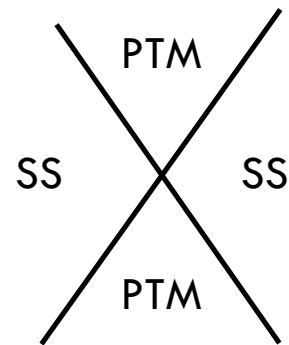
- No significant variation

GONIOSCOPY



RE

OPEN ANGLES



LE

OPEN ANGLES

RIGHT EYE

LEFT EYE

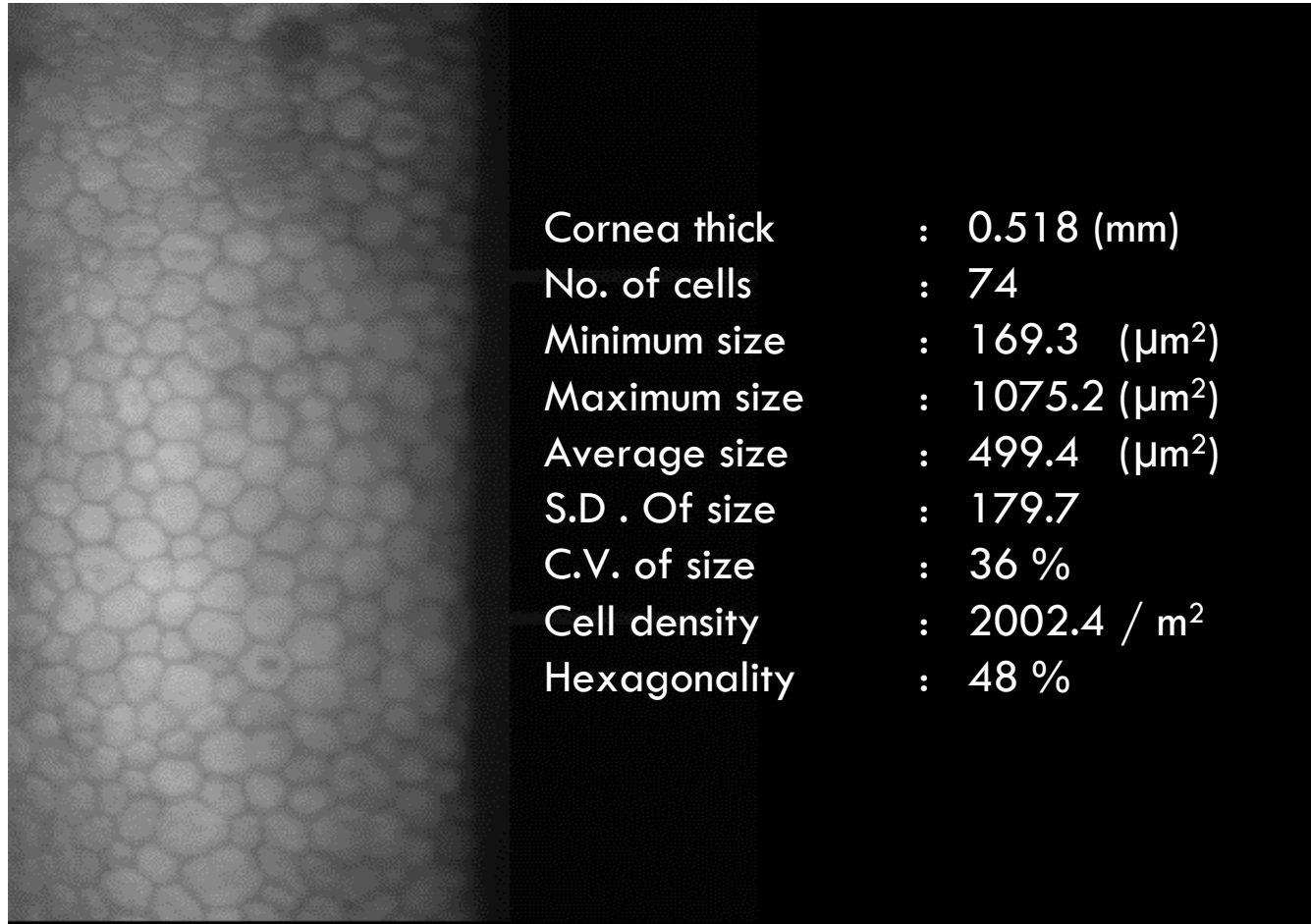
MEDIA	Hazy due to lenticular opacity	Hazy due to lenticular opacity
DISC - SIZE	Normal	Normal
SHAPE	Circular	Circular
COLOUR	Pink	Pink
MARGINS	Well defined	Well defined
C:D RATIO	0.5:1 CDR	0.6:1 CDR
VESSELS – A-V RATIO	2:3	2:3
MACULA	Foveal reflex present	Foveal reflex present



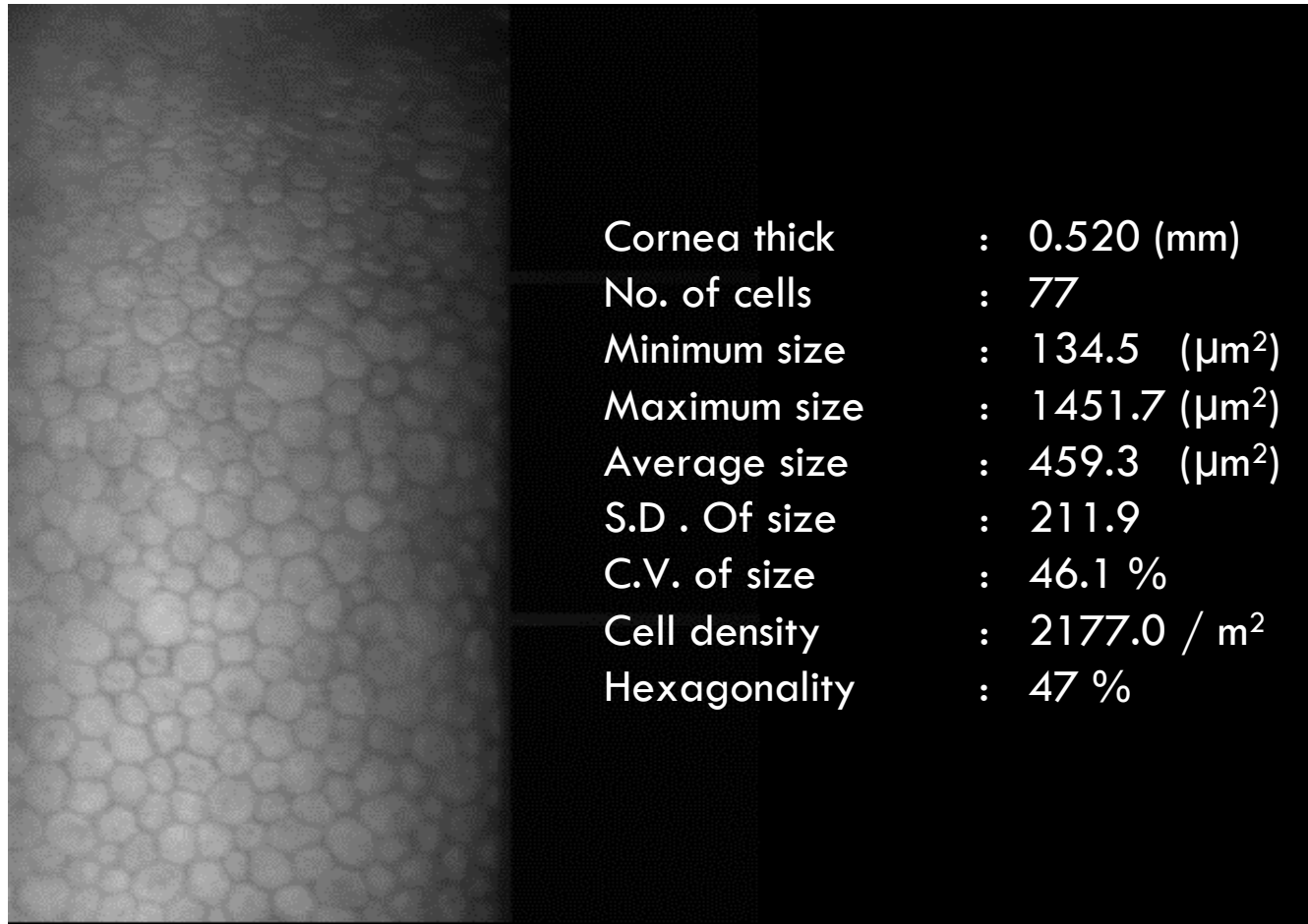
RIGHT EYE



LEFT EYE

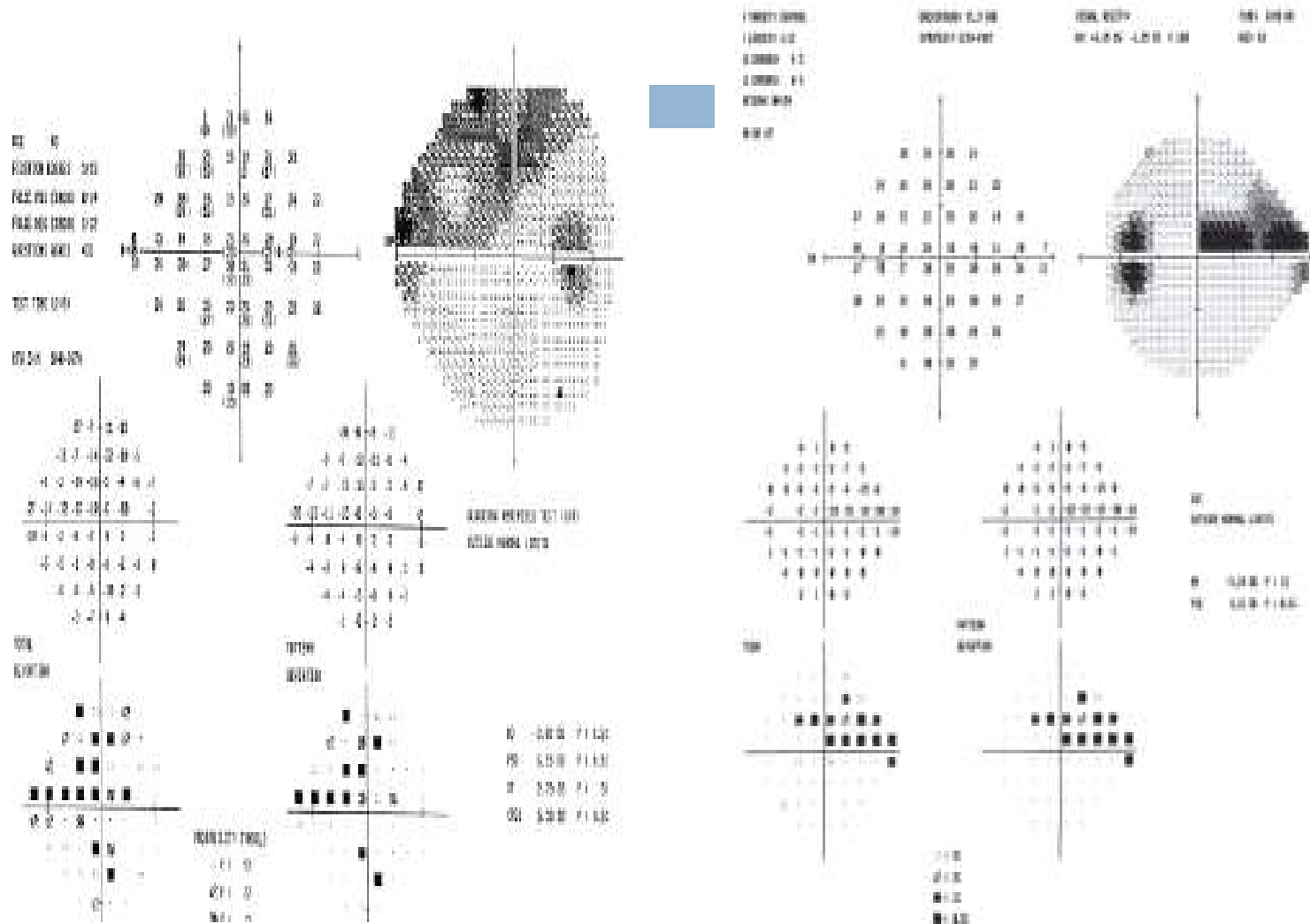


RE CCT 518 μ



LE CCT 520 μ

VISUAL FIELDS



BE INCOMPLETE SUPERIOR ARCUATE SCOTOMA



□ INVESTIGATIONS:

- RBS – 75 mg/dl
- URINE – Albumin – Nil
Sugar – Nil
- CBP - normal
- ECG – within normal limits
- Lipid profile – normal
- ESR – 12mm / 1 hr

DIAGNOSIS



- BE – Normotensive Glaucoma

MANAGEMENT



- Eye drops. Latanoprost 0.005% once daily

Follow up after 15 days

IOP by applanation tonometry

- RE – 12 mm Hg
- LE – 12 mm Hg



THANK YOU