





The Eye Exam Medical History Preliminary Tests Refraction Eye Health Special Tests

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Patient History Chief Complaint (CC)

- Patient's Medical History
- Medications
- Visual & Ocular History
- Family Ocular History
- Family Medical History
- Vocational and Recreational Demands

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Chart Abbreviations Preliminary Tests VA Visual Acuity Vision Assessment with correction (latin: cum correctione) ► cc Visual Fields without correction (latin: sine correctione) ▶ sc Accommodation N Near Convergence D Distance Color Vision PH Pinhole Ocular Muscle Deviations ۶J Jaeger notation Neutralize Glasses 10



























- > 20/40 unrestricted, 20/70 or better daytime restrictions (CT)
- Check your state
- Legally Blind: 20/200 best corrected acuity or 20 degree field or less
 - Social Security used in US as definition
 - > Other definitions exist (WHO, etc), but we use above.
- Low percentage of the legally blind are totally blind (NLP)

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Convergence Color Vision Near Point of Pseudoisochromatic Convergence (NPC) Plates Light Ishihara Wool Test Break Point • Greater then 7cm abnormal

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- Look at isolated letter with current Rx
- Cover right eye 2-3 sec.
- Switch occluder to left eye and observe right eye for movement
- If right eye moves in when uncovered, it was exo.













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Refraction

Lensometry
Keratometry
Retinoscopy
Subjective Refraction

Methods of Corneal Analysis • Keratoscope, Placido's Disc

- Ophthalmometer / Keratometer
- Autokeratometer
- Corneal Topgrapher

Types of Astigmatism: Corneal

- Regular: Meridians 90 Degrees Apart
- "With the Rule" Flattest "K" @ 180 Degrees (+/- 30 Degrees) ex: 41.00@180 / 43.00@90 • "Against the Rule" Flattest "K" @ 90 Degrees (+/- 30
- Degrees) ex: 45.00@180 / 42.00@90
- "Oblique" Flattest "K" between 30 & 60 or 120 & 150 Degrees ex: 42.50@35 / 44.75@125
- Irregular: Flattest & Steepest meridians are notably more or less than 90 Degrees Apart ex: 41.00@180 / 42.00@60

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Regular With The Rule Astigmatism

MI Last Na T Thomas

 Axis
 ID Number
 I

 0/1
 Axis
 K Values
 1

 0.75
 180
 44 50 D @ 90 deg
 3

 Refraction
 HVID
 Flat K
 1

 11.8
 43.50
 1
 3

Targ

RZD 0.475 mm 0.475 deg 36.0

LZA OAD

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JKOF-99A

mm 8.30

0 0 50

10.5 mm 10.5 0.125







Intercept

- Streak opposite the meridian you are neutralizing
- With Motion: Eye has too much minus power, add plus
- Against motion: Eye has too much plus power, add minus
- Light extending beyond pupil
- > Aligns with reflex if no astigmatism or on axis

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- Pupil fills with light when neutralized.
- > To verify, move toward patient and you should see with motion.
- Move away from the patient and you should see against motion.











Binocular Balance
Purpose
Prism Dissociation Test
Duochrome Test



Medications Used During an Exam Mydriatics Cycloplegics Miotics Topical Anesthetics

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Cycloplegic Refraction Purpose

- Precautions
- Cycloplegic Agents
- Tropicamide (Mydriacyl) 0.5% to 1% (20min 3Hrs)
- Cyclopentolate (Cyclogyl)0.5% (Infants) or 1 %(3-6 Hrs)
- ▶ Homatropine 2% or 5% (1-3 Days)
- Atropine 0.5% or 1% (Up to two weeks)

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When to Refer

Reduced Acuity (sudden or unexplained)

Flashes/Floaters (possible Retinal Detach)

Pathology

Cornea

Cataract

Retina

Visual Pathway

Muscles

