Case NiCIqyQerUlUpVHTGO88 — Questions

Case Details

Demographics 8-year-old Asian female; student

Chief complaint double vision

History of present illness

Secondary complaints/symptoms none

Patient ocular history 1st eye exam

Family ocular history mother: "lazy eye" and has worn glasses since age 5, maternal grandmother: glaucoma

Patient medical history allergies; normal birth history and developmental milestones

Medications taken by patient Claritin®

Patient allergy history grass and pollen, NKDA

Family medical history father: cardiovascular disease, type II diabetes

Review of systems

Mental status

Clinical findings

Uncorrected visual acuity

Pupils: PERRL, negative APD

EOMs: full, no restrictions OU

Cover test: distance: 6 esophoria, near: 8 esophoria

Confrontation fields: full to finger counting OD, OS

Oculomotor system

Subjective refraction

Accommodative system

Vergence system

Sensory system

DEM test (percentile rank): horizontal: 50%, vertical: 50%, ratio: 50%, errors: 99%
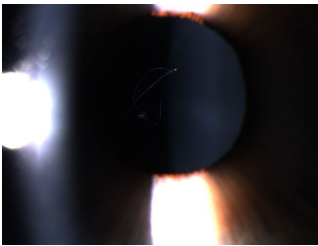
Slit lamp

IOPs: OD: 16 mmHg, OS: 16 mmHg @ 4:10 pm by iCare tonometer

Fundus OD

Fundus OS

- Character/signs/symptoms: horizontal diplopia at both distance and near
- Location: OU
- Severity: moderate
- Nature of onset: gradual
- Duration: 6 months
- Frequency: intermittent
- Exacerbations/remissions: worse at the end of the day or when tired; better if she rests her eyes
- Relationship to activity or function: mostly notices when watching television and viewing the board in class, or reading for prolonged periods of time
- Accompanying signs/symptoms: headaches and eyestrain at the end of the day; is easily distracted when doing schoolwork
- Constitutional/general health: denies
- Ear/nose/throat: denies
- Cardiovascular: denies
- Pulmonary: denies
- Dermatological: denies
- Gastrointestinal: denies
- Genitourinary: denies
- Musculoskeletal: denies
- Neuropsychiatric: denies
- Endocrine: denies
- Hematologic: denies
- Immunologic: denies
- Orientation: oriented to time, place, and person
- Mood: appropriate
- Affect: appropriate
- OD: VA distance: 20/20
- OS: VA distance: 20/20
- Pursuits: normal
- Saccades: normal
- Fixations: normal

- OD: plano DS; VA distance: 20/20, VA near: 20/20 @ 40 cm
- OS: plano DS; VA distance: 20/20, VA near: 20/20 @ 40 cm
- Amplitudes: OD: 14 D, OS: 14 D, OU: 13 D
- Facility (+/- 2.00): OD: 11 cycles/minute, OS: 12 cycles/minute, OU: 3 cycles/minute (difficulty clearing minus-powered lenses)
- NRA/PRA: +2.75 / -1.00
- Monocular estimation method (MEM): OD: +1.00, OS: +1.25
- NPC: 2 cm
- Vergences: NFV @ distance: x / 6 / 2, NFV @ near: x / 12 / 6, PFV @ distance: x / 20 / 15, PFV @ near: 18 / 32 / 24
- Facility: 8 base-out/8 base-in: 2 cycles/minute (difficulty fusing base-in prism)
- Worth 4 dot: far: no suppression, near: no suppression
- Stereopsis: far: 120", near: 80"
- lids/lashes/adnexa: unremarkable OD, OS
- conjunctiva: normal OD, OS
- cornea: clear OD, OS
- anterior chamber: deep and quiet OD, OS
- iris: see image 1 OD, normal OS
- lens: clear OD, OS
- vitreous: clear OD, OS
- C/D: 0.35 H/0.30 V
- macula: normal
- posterior pole: normal
- periphery: unremarkable
- C/D: see image 1 OD, normal OS
- macula: normal
- posterior pole: normal
- periphery: unremarkable

Question 1 / 5

Based on the patient's chief concern and examination findings, what is the MOST likely cause of her symptoms?

    A) Accommodative infacility

    B) Convergence excess

    C) Basic exophoria

    D) Accommodative insufficiency

    E) Basic esophoria

    F) Divergence insufficiency

Question 2 / 5

What type of AC/A ratio is expected for this patient?

    A) High AC/A ratio

    B) Average AC/A ratio

    C) The AC/A ratio is not relevant to this case

    D) Low AC/A ratio

Question 3 / 5

Which 3 of the following tests directly examine the accommodative system? (Select 3)

    A) Positive fusional vergence ranges

    B) Stereopsis

    C) Monocular amplitudes

    D) Monocular facility testing with +/- 2.00 D lenses

    E) Monocular estimation method

    F) Second-degree fusion

Question 4 / 5

Which of the following represents an example of shallow suppression of the right eye while performing the red lens test (red lens over the right eye)?

  A) The patient reports seeing two lights, one red and one white, with the white light being to the left of the red light

  B) The patient reports seeing one white light in moderate illumination and one white light in dim illumination

  C) The patient reports seeing one red light in moderate illumination and one pinkish light in dim illumination

  D) The patient reports seeing two lights, one red and one white, with the white light being to the right of the red light

  E) The patient reports seeing one red light in moderate illumination and one red light in dim illumination

  F) The patient reports seeing one pinkish light in moderate illumination and one pinkish light in dim illumination

  G) The patient reports seeing one white light in moderate illumination and one pinkish light in dim illumination

Question 5 / 5

Which of the following represents the MOST likely cause of the patient's right eye anterior segment findings?

  A) Posterior polymorphous dystrophy

  B) Epicapsular stars

  C) Persistent pupillary membrane

  D) Mittendorf dot

  E) Lattice dystrophy