Case qMoYcfqknfGDJMT12594 — Questions

Case Details

Demographics 18-year-old Hispanic male; college student

Chief complaint double vision

History of present illness

Secondary complaints/symptoms none

Patient ocular history last eye exam 2 years ago; unremarkable

Family ocular history unremarkable

Patient medical history unremarkable

Medications taken by patient ibuprofen PRN (for headaches)

Patient allergy history NKDA

Family medical history mother: 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: 14 esophoria, near: 2 esophoria

Confrontation fields: full to finger counting OD, OS

Oculomotor system

Subjective refraction

Accommodative system

Vergence system

Sensory system

DEM test (percentile rank): horizontal: 80%, vertical: 80%, ratio: 80%, errors: 90%

Slit lamp

IOPs: OD: 14 mmHg, OS: 15 mmHg @ 4:40 pm by Goldmann applanation tonometry

Fundus OD

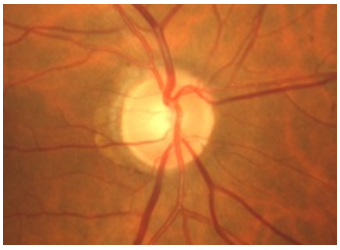
Fundus OS

Blood pressure: 125/78 mmHg, right arm, sitting

Pulse: 68 bpm, regular

- Character/signs/symptoms: occasional horizontal double vision when viewing distant objects
- Location: OU
- Severity: moderate
- Nature of onset: gradual
- Duration: 1 year
- Frequency: intermittent
- Exacerbations/remissions: worsens at the end of the day or when fatigued; improves with rest
- Relationship to activity or function: noticed when he started college last year; mostly occurs when viewing the board in a large lecture hall
- Accompanying signs/symptoms: headaches, eyestrain, fatigue
- Constitutional/general health: denies
- Ear/nose/throat: denies
- Cardiovascular: denies
- Pulmonary: denies
- Dermatological: denies
- Gastrointestinal: denies
- Genitourinary: denies
- Musculoskeletal: denies
- Neuropsychiatric: headaches
- Endocrine: denies
- Hematologic: denies
- Immunologic: denies
- Orientation: oriented to time, place, and person
- Mood: appropriate
- Affect: appropriate
- OD: distance: 20/20
- OS: distance: 20/20
- Pursuits: normal

- Saccades: marked undershoots
- Fixations: normal
- OD: -0.25 -0.25 x 035; VA distance: 20/20; VA near: 20/20 @ 40 cm
- OS: plano -0.50 x 140; VA distance: 20/20; VA near: 20/20 @ 40 cm
- Amplitudes: OD: 12 D, OS: 12 D, OU: 13 D
- Facility (+/- 2.00): OD: 12 cycles/minute, OS: 12 cycles/minute, OU: 9 cycles/minute
- NRA/PRA: +2.25 / -2.25
- Monocular estimation method (MEM): OD: plano, OS: plano
- NPC: to the nose
- Vergences: NFV @ distance: x / 3 / 1, NFV @ near: 11 / 22 / 10; PFV @ distance: 17 / 26 / 13, PFV @ near: 18 / 24 / 16
- Facility: 8 base-out/8 base-in: 7 cycles/minute
- Worth 4 dot: far: uncrossed diplopia, near: fusion/no suppression
- Stereopsis: far: none, near: 25"
- lids/lashes/adnexa: unremarkable OD, OS
- conjunctiva: normal OD, OS
- cornea: clear OD, OS
- anterior chamber: deep and quiet OD, OS
- iris: normal OD, OS
- lens: clear OD, OS
- vitreous: clear OD, OS
- C/D: see image 1
- macula: normal
- posterior pole: normal
- periphery: unremarkable
- C/D: similar to image 1
- macula: normal
- posterior pole: normal
- periphery: unremarkable



Question 1 / 6

What is the BEST diagnosis for the patient's symptoms of diplopia and headaches?

A) Basic esophoria

B) 6th cranial nerve palsy

C) Divergence paralysis

D) Divergence insufficiency

E) Convergence excess

Question 2 / 6

According to Sheard's criterion, which of the following BEST represents the amount of prism needed for this patient to maintain single and comfortable binocular vision?

A) 7 prism diopters base-in

B) 4 prism diopters base-out

C) 8 prism diopters base-out

D) 7 prism diopters base-out

E) 8 prism diopters base-in

F) 4 prism diopters base-in

Question 3 / 6

Which of the following treatments has been proven to be MOST effective for patients with this diagnosis?

A) Base-out prism at distance

B) Additional minus lenses at distance

C) Vision therapy with divergence training

D) Vision therapy with convergence training

E) Base-in prism at distance

F) Additional plus lenses at distance

Question 4 / 6

You decide to begin vision therapy on this patient with Variable Tranaglyphs. When training divergence, what do you expect the patient to observe as you increase the divergence demand?

A) The target should appear to become smaller as it moves closer

B) The target should appear to become larger as it moves farther away

C) The target should appear to become smaller as it moves farther away

D) The target should appear to become larger as it moves closer

Question 5 / 6

When training divergence, what is the vergence demand using a Variable Tranaglyph when the separation is measured as 4 cm at a distance of 80 cm?

A) 20 prism diopters base-out

B) 10 prism diopters base-in

C) 20 prism diopters base-in

D) 5 prism diopters base-in

E) 10 prism diopters base-out

F) 5 prism diopters base-out

Question 6 / 6

If a patient scores low on both the horizontal and vertical portions of the Developmental Eye Movement test (DEM), but the ratio and error scores are normal, what may be concluded regarding the patient's oculomotor function?

A) Normal oculomotor function, normal automaticity

B) Abnormal oculomotor function, poor automaticity

C) Abnormal oculomotor function, normal automaticity

D) Normal oculomotor function, poor automaticity