5.13.1. Nonorganic Ophthalmic Disorders (I): Examination Techniques

Visual field defect

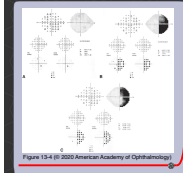
Figure 13-4 (© 2020 American Academy of Ophthalmology)

If repeating the field testing with both eyes open produces a similar, or even incomplete, defect, a nonorganic component is present

except patient with monocular defect that respects the vertical midline

no characteristic changes in automated perimetry confirm the suspicion of nonorganic deficit

machines are quite easy to fool

central scotomata are extremely rare in nonorganic vision loss and warrant further evaluation

automated perimetry testing

references

accurate saccades to nonauditory targets in the "nonseeing" field indicate an intact visual field

patient is tested for "motility"

a response of "none" each time the fingers are put up confirms vision in that area

patient is asked to report "none" when no fingers are seen in the "nonseeing" field

the area where the patient "can't see" is carefully identified

confrontation testing

the visual field is tested in a continuous fashion in a clockwise or counterclockwise direction starting with the #4e stimulus

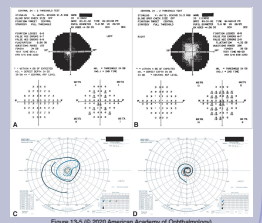
Figure 13-5 (© 2020 American Academy of Ophthalmology)

as larger stimuli (II4e and V4e) are employed, there is often further constriction, resulting in overlapping isopters

a common nonorganic response shows a spiraling isopter getting closer and closer to fixation as testing continues

Goldmann perimetry testing

A step across the midline may indicate that at least some physiologic component is present

make sure there is no step across the vertical or nasal horizontal midline

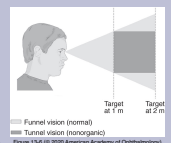

Figure 13-6 (© 2020 American Academy of Ophthalmology)

failure of field to expand to twice the original size indicates nonorganic component

patient is moved back to 2 m and tested with an 18-mm white stimulus

tested with a 9-mm white stimulus at 1 m

Tangent screen testing

tubular or gun-barrel field

eyelid position and function

ptosis

can usually be distinguished by the position of the brow

true ptosis

brow is usually elevated

orbicularis overactivity

brow is lowered

with upward gaze, the ptosis will "resolve"

often the patient will not cooperate

examiner can use his/her thumb to elevate the ptotic eyelid and the patient will then look upward

examiner's thumb is then slowly moved away

if the ptosis returns, the condition may be organic

if ptosis "resolves," it is nonorganic

blepharospasm

unilateral or bilateral

children or young adults

triggered by an emotionally traumatic event

may cause nonorganic ptosis

pressure over the supraorbital notch is often useful in raising the eyelids

ocular motility and alignment

voluntary flutter ("nystagmus")

rapid frequency and low amplitude eye movements

brief bursts

irregular

no slow phase

gaze palsy

claimed gaze palsies may be overcome by

oculocephalic reflex (doll's head phenomenon)

optokinetic testing

mirror tracking

caloric testing

episodes of intermittent convergence, increased accommodation, and miosis

patients generally complain of diplopia and, at times, micropsia

features aiding in diagnosis

lack of other neuro-ophthalmic abnormalities

miosis with convergence

variability of the eye movements (convergence)

presence of full abduction when ductions are examined with

1 eye occluded

oculocephalic testing

spasm of the near reflex

may be mistaken for

unilateral or bilateral sixth nerve palsies

divergence insufficiency

horizontal gaze paresis

ocular myasthenia

almost always observed in patients with nonorganic disturbances

etiology

has been associated with

Arnold-Chiari I malformation

posterior fossa tumors

pituitary tumors

head trauma

Management of the Patient With Nonorganic Complaints

confrontation is seldom of benefit to either the patient or the doctor

best managed with an understanding approach and words of encouragement

patients should be reassured of an "excellent prognosis"

reassure them that their disorder is unlikely to reflect a serious condition and will resolve over time

symptoms may clear with 1 or 2 follow-up visits

allow patients a graceful way out of the situation

this approach is usually more effective with children than adults

removing the "overuse of television"

children may be further encouraged through the prescription of "eye rest"

manage the organic problem

attempt to downplay the nonorganic portion

in patients with combined organic and nonorganic (nonorganic overlay) complaints

for an underlying psychological illness

consultation with a psychiatrist or psychologist

occasionally, an organic disorder becomes apparent later

monitor a patient with what initially appears to be a nonorganic visual disturbance

Ophthalmology Mind Maps/Arman Mashayekhi, MD