Pupillary responses can signal potentially serious problems

1. The consensual light reflex occurs because:
   a. The optic tract carries pupillary fibers from both eyes.
   b. The anterior commissure carries pupillary fibers from both eyes.
   c. The optic nerve carries pupillary fibers from both eyes.
   d. Both a and b

2. The parasympathetic pupillary fibers are physically closely associated with which cranial nerve?
   a. CN II
   b. CN III
   c. CN IV
   d. CN V

3. Which eyelid muscle(s) innervation closely follows the sympathetic pupillary pathway?
   a. Levator
   b. Orbicularis oculi
   c. Mueller
   d. Both A and C

4. What makes light-near dissociation possible?
   a. The pretectal nucleus
   b. The afferent pupillary near response pathway’s bypassing of the pretectal nucleus
   c. The dorsal midbrain
   d. Higher cortical centers in the striate cortex

5. In what pathologic situation will the near response be abnormal with a normal pupillary light reflex?
   a. Tertiary syphilis
   b. Horner’s syndrome
   c. There are no situations where this would apply.
   d. Pupil-sparing CN III palsy

6. When does a fixed pupil indicate an afferent pupillary defect?
   a. Always
   b. Never
   c. If the other eye dilates when the light is shown into the fixed pupil
   d. If the other eye constricts when the light is shown into the fixed pupil

7. Physiologic anisocoria:
   a. Shows 0.4 mm to 1.0 mm difference between pupil sizes
   b. Shows 20% difference between pupil sizes
   c. Affects 0.4% of the population
   d. None of the above

8. Efferent parasympathetic pupillary defects will cause an abnormally ______ pupil, and anisocoria will be greater in the ______.
   a. Miotic, dark
   b. Dilated, dark
   c. Miotic, light
   d. Dilated, light

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   c. Miotic, light
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10. In a complete pupil-involving CN III palsy, the pupil will appear:
    a. Mid-dilated sluggish
    b. Miotic or minimally reactive
    c. Miotic and sluggishly
    d. Dilated and minimally reactive

11. In pupil-involving CN III palsies, the unaffected eye’s consensual response will be normal because:
    a. The CN III palsy affects the efferent, not afferent pathway.
    b. It compensates for the lack of pupillary reactivity in the affected eye.
    c. The fibers controlling the consensual pupillary response are deeper in the cranial nerve.
    d. The pupil is probably compressive rather than ischemic.

12. Emergent imaging is recommended in:
    a. All CN III palsies
    b. Partial CN III palsies
    c. Pupil-involving CN III palsies
    d. Pupil-sparing CN III palsies in patients with vasculopathic risk factors

13. In pupil-sparing CN III palsies, imaging should be ordered:
    a. Immediately
    b. If there is no improvement within 3 months
    c. If the pupil does not become involved
    d. If there is no improvement within 6 months

14. Adie’s tonic pupil typically exhibits:
    a. Abnormal miosis
    b. Sluggish near response
    c. A brisk light response
    d. Normal accommodative function

15. All of the following are true regarding a confirmatory test for Adie’s pupil with diluted pilocarpine except:
    a. A positive test will exhibit pupillary constriction in the affected eye(s).
    b. A positive test leads to constriction in the affected eye due to prolonged denervation hypersensitivity.
    c. A positive test will exhibit no pupillary constriction in the unaffected eye.
    d. A positive test will cause the affected pupil to dilate.

16. Which of the following is false in regard to Horner’s syndrome?
    a. The classic clinical triad is ptosis, miosis, and facial anhydrosis.
    b. Anhydrosis will only occur if the postganglionic neuron is affected.
    c. The affected pupil retains normal light and near responses.
    d. The affected pupil will exhibit a dilation lag in the dark due to passive iris sphincter release.

17. What topical ophthalmic test is used to differentiate a first- from second-order neuron lesion in Horner’s syndrome?
    a. Cocaine
    b. Apraclonidine
    c. Hydroxyamphetamine
    d. No topical ophthalmic drop is available to differentiate

18. A positive apraclonidine test would show:
    a. Reversal of anisocoria
    b. Constriction of the Horner’s affected pupil
    c. Dilation of the unaffected pupil
    d. Constriction of the unaffected pupil

19. An Argyll Robertson pupil typically exhibits all of the following except:
    a. Light-near dissociation
    b. Miosis
    c. Irregular shape
    d. Sluggish near response

20. If a patient exhibits anisocoria that is greater in the light, and the larger pupil shows a poor light response, what would be an appropriate test to administer?
    a. Cocaine
    b. Apraclonidine
    c. Pilocarpine
    d. Hydroxyamphetamine

PCon CE Quiz

1. a b c d 11. a b c d 12. a b c d 13. a b c d 14. a b c d 15. a b c d 16. a b c d 17. a b c d 18. a b c d 19. a b c d 20. a b c d