



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 tectotegmental tract 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
9. **Efferent sympathetic 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
10. **In a complete pupil-involving CN III palsy, the pupil will appear:**
 - a. Mid-dilated sluggish
 - b. Miotic and minimally reactive
 - c. Miotic and sluggish
 - 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 palsy 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. A 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 ipsilateral ptosis, miosis and facial anhidrosis.
 - b. Anhidrosis will only occur if the post-ganglionic 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

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