

Teaching Video NeuroImages: Acute Adie syndrome



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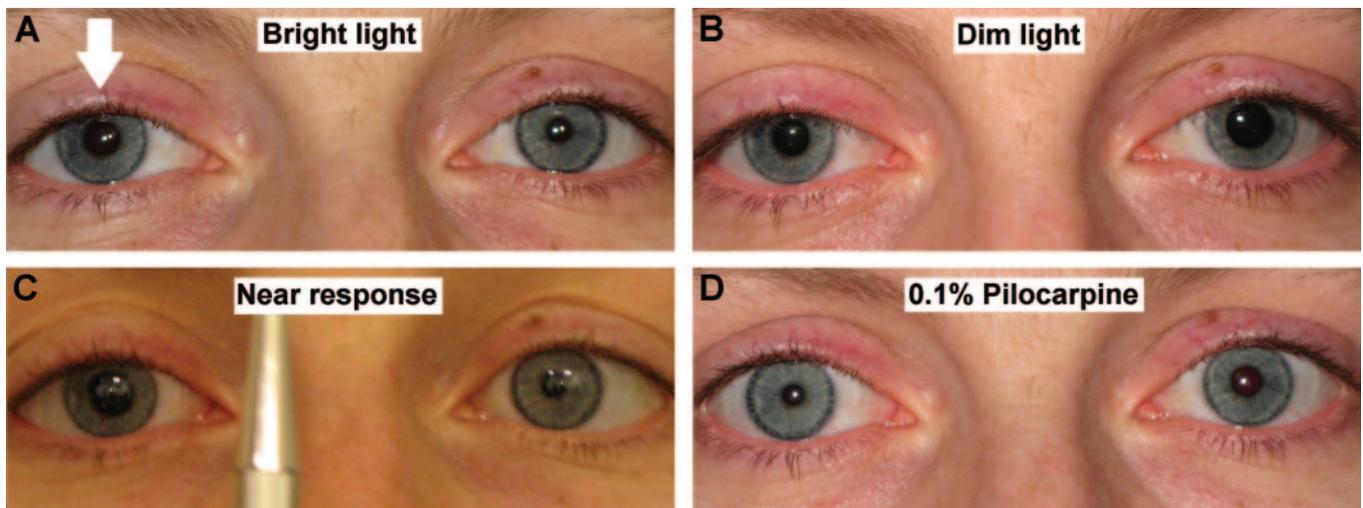
A healthy 30-year-old woman reported acute painless enlargement of the right pupil, associated with mild ipsilateral photophobia and blurring. An enlarged right pupil was observed, constricting poorly to light and with segmental vermiform movements (figure). Generalized deep tendon hyporeflexia was noted. The tonic right pupil constricted 30 minutes after instillation of dilute pilocarpine (0.1%) solution. William John Adie¹ (1886–1935) described this benign condition predominantly in young women, postulated to be secondary to

viral ciliary ganglionitis. Russell² noted cases with a poor near as well as light response, which we postulate may be a feature of an acute syndrome.

REFERENCES

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Figure Pupil appearances in Adie syndrome



Parasympathetic denervation of the iris sphincter muscle in Adie syndrome results in an enlarged tonic right pupil reacting poorly to light (A, B). Near response was also impaired (C). It is supersensitive to cholinergic agents (pilocarpine 0.1%) (D). Paralysis of the iris results in characteristic segmental vermiform movements. These are visible superolaterally acutely and inferomedially 6 months later (video on the *Neurology*[®] Web site at www.neurology.org).

Supplemental data at
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