Tadpole pupil

Figure Patient's pupils

(Top) On examination, the pupils are round, isocoric, and reactive to light. (Bottom) On this self-taken photograph, the left pupil is no longer round and is larger than the right pupil. Focal dilation of the superonasal sector of the left pupil is readily visible.

A young woman has recurrent episodes of unilateral mydriasis lasting several minutes. The left pupil becomes large and deformed, described as "egg-shaped" (figure). Examination, including pharmacologic pupil tests, revealed no ophthalmologic or neurologic abnormalities. Cranio-orbital MRI was normal. Diagnosis of tadpole pupil was confirmed by self-taken photographs using a cellular phone.

Spontaneous segmental spasm of the iris dilator can cause pupillary distortion that resembles the shape of a tadpole.[1,2] Occasional patients with tadpole pupil have underlying Horner syndrome; otherwise, the syndrome is benign and self-limited.[1] Cellular phone "telemedecine" was particularly helpful in diagnosing this form of episodic mydriasis.

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