Skew deviation and retinal photography

Figure 1 Nonmydriatic retinal photography (i.e., no pharmacologic pupil dilation required)

Ocular cyclotorsion measured at admission (top) and after 3 days (bottom, right [A, C] and left [B, D] eyes).

Figure 2 Diffusion-weighted images showing a focal acute ischemic stroke located in the pons

Axial (A), sagittal (B), and coronal (C) images.

A 50-year-old man was admitted for the acute onset of vertical diplopia worse on left gaze. The right eye appeared hypertropic. Either right fourth nerve palsy or skew deviation was possible.^{1,2} Nonmydriatic retinal photography revealed an excyclotorsion of the hypotropic eye associated with incyclotorsion of the hypertropic eye (figure 1, A and B) providing a key element for skew deviation. In case of an acquired fourth nerve palsy, an excyclotorsion of the hypertropic eye would have been expected. MRI showed a pontine ischemic stroke (figure 2). Nonmydriatic retinal photography is a noninvasive examination that can help to distinguish fourth nerve palsy from skew deviation.

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1. Wong AM. Understanding skew deviation and a new clinical test to differentiate it from trochlear nerve palsy. *J AAPOS* 2010;14:61–67.
2. Brodsky MC, Donahue SP, Vaphiades M, Brandt T. Skew deviation revisited. *Surv Ophthalmol* 2006;51:105–128.

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