A 68-year-old hypertensive man presented with binocular horizontal diplopia associated with drooping of right eyelid. Examination revealed medial rectus palsy, noncorrectable ptosis of the right eye (figure 1), normal pupils, and no long tract signs. Brain MRI showed a hyperintense T2 signal in the dorsal midbrain and diffusion restriction on diffusion-weighted imaging with corresponding reduced apparent diffusion coefficient (figure 2, A, C, and D). At 2 months, diplopia and ptosis improved significantly. Individual third nerve fascicles in the ventral mesencephalon have a topographic arrangement (figure 2B). The medial rectus fascicle occupies the intermediate position between superior rectus and levator palpebrae superioris.1,2

AUTHOR CONTRIBUTIONS
Dr. Sinha: drafting of manuscript, data acquisition. Dr. Khurana: drafting and revising of manuscript, concept of the manuscript.

REFERENCES
(A) Brain MRI shows hyperintense signal in the dorsal midbrain on the right side on axial T2-weighted image and (B) schematic representation of the oculomotor nerve fascicles in the midbrain with the arrangement of various fibers in the oculomotor nerve fascicle: IO – inferior oblique; IR – inferior rectus; LPS – levator palpebrae superioris; MR – medial rectus; PF – pupillary fibers; SR – superior rectus. (C, D) Diffusion-weighted imaging (coronal) with reduced apparent diffusion coefficient on the corresponding site.
Teaching NeuroImages: A case of partial oculomotor palsy
Human Sinha and Dheeraj Khurana
*Neurology* 2011;77:e150-e151
DOI 10.1212/WNL.0b013e31823d7674

This information is current as of December 12, 2011