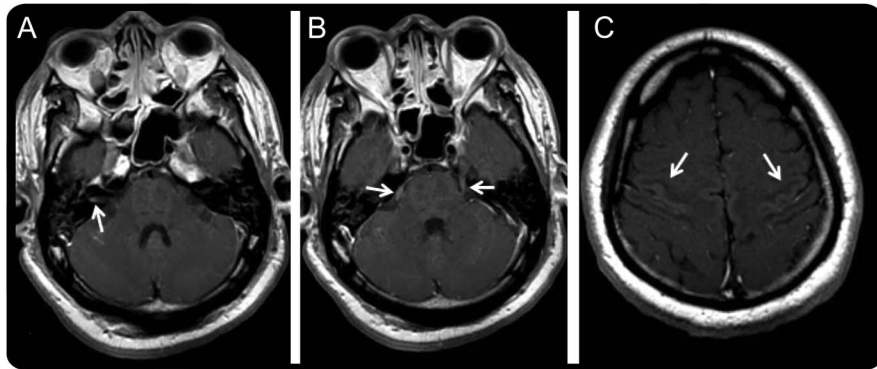


A case of rabies encephalitis

New dog, old tricks

Figure Cranial nerve enhancement in a patient with rabies encephalitis



MRI of the brain. Axial contrast-enhanced T1-weighted images demonstrate enhancement of the right seventh and eighth cranial nerves in the internal auditory canal (arrow in A) and of the fifth cranial nerves bilaterally (arrows in B). The third and ninth cranial nerves on the left were enhanced as well (not shown in the images). Abnormal faint enhancement involving the cortex of the precentral and postcentral gyri was also seen (arrows in C). Light hyperintensity involving the heads of the caudate nuclei bilaterally was also noted (not in images).

A 41-year-old Canadian man presented with a 1-week history of new bizarre behavior including agoraphobia. Nested PCR confirmed the presence of rabies in both nuchal snips and saliva. An initial MRI with gadolinium enhancement was normal. On day 8, repeat neuroimaging revealed new cranial nerve enhancement and slight hyperintensities of the caudate nuclei bilaterally (figure). This is consistent with cranial nerve involvement reported in animal studies¹ and with a remote report of electron microscopic evidence of rabies virus in trigeminal ganglion cells reported in 2 human cases.²

M. Elizabeth Wilcox, MPH, Susan M. Poutanen, MPH, Sigmund Kraiden, MD, Ronit Agid, MD, Tim-Rasmus Kiehl, MD, David F. Tang-Wai, MD

From the University Health Network (M.E.W., S.M.P., R.A., T.-R.K., D.F.T.-W.), Toronto; Mount Sinai Hospital (S.M.P.), Toronto; St. Joseph's Health Centre (S.K.), Toronto; and the University of Toronto (S.M.P., S.K., R.A., T.-R.K., D.F.T.-W.), Canada.

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Correspondence to Dr. Wilcox: elizabeth.wilcox@utoronto.ca

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