Neuro *Images*

FDG-PET of poststroke oculomotor repair

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A 35-year-old woman with congenital heart disease status post surgical repair presented in coma due to a top of the basilar syndrome. Neuro-ophthalmologic examination disclosed a dorsal midbrain syndrome. FDG-PET revealed minimal uptake of tracer in the extraocular muscles 1 week from stroke onset (figure 1), with a

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dramatic increase in FDG uptake in the extraocular muscles noted at 1 month (figure 2). Concurrent intensification of FDG uptake in the extraocular muscles and bilateral parieto-occipital cortices correlated with improvement in her gaze paresis. Although extraocular muscle tracer uptake has been characterized as an artifact, this unique case illustrates poststroke oculomotor recovery.1

1. Law I, Svarer C, Rostrup E, Paulson OB. Parieto-occipital cortex activation during self-generated eye movements in the dark. Brain 1998;121: 2189-2200.

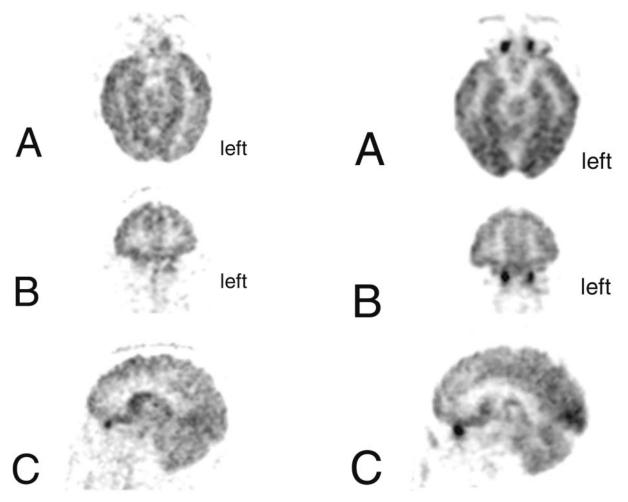


Figure 1. FDG-PET demonstration of minimal extraocular muscle tracer uptake at 1 week from stroke onset (A, axial; B, coronal; C, left parasagittal).

Figure 2. FDG-PET at 1 month from stroke onset (A, axial; B, coronal; C, left parasagittal) demonstrates marked extraocular muscle tracer uptake and increased uptake in the parieto-occipital cortex.



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