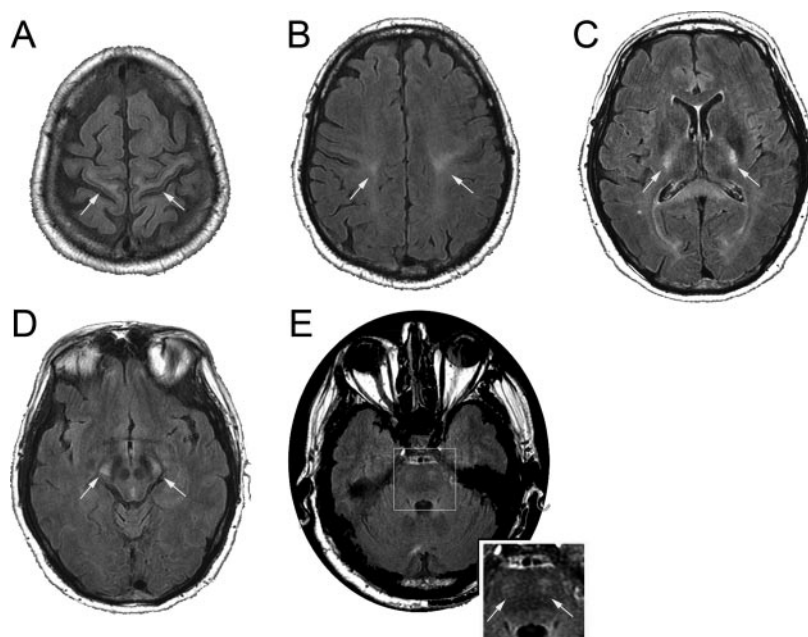


Teaching NeuroImage: Corticospinal tract

Sheng-Han Kuo, MD
Justin Y. Kwan, MD

Address correspondence and
reprint requests to Dr. Sheng-
Han Kuo, Neurology Resident,
Department of Neurology, Baylor
College of Medicine, 6550
Fannin, Suite 1801, Houston, TX
77030
kuo@bcm.tmc.edu

Figure Axial MRI of the brain with fluid-attenuated inversion recovery sequence revealing symmetric hyperintensities in precentral gyri (A), corona radiata (B), posterior limbs of the internal capsules (C), cerebral peduncles in the midbrain (D), and ventral pons (E) corresponding to the degeneration of the corticospinal tracts



A 60-year-old man presented with progressive weakness for 2 years that began in the right arm and subsequently spread to all limbs. On examination, he had both upper and lower motor neuron signs including spasticity, hyperreflexia, and fasciculations in addition to asymmetric weakness. The sensory examination was normal. He was diagnosed with amyotrophic lateral sclerosis (ALS). MRI showed bilateral symmetric hyperintensities on fluid-attenuated inversion recovery sequence, corresponding to the degeneration of the corticospinal tracts from the level of motor cortex to ventral pons as shown in the fig-

ure. From 22 to 39% of patients with ALS will have this finding on brain MRI.^{1,2}

REFERENCES

1. Hecht MJ, Fellner F, Fellner C, Hilz MJ, Heuss D, Neundörfer B. MRI-FLAIR images of the head show corticospinal tract alterations in ALS patients more frequently than T2-, T1- and proton-density-weighted images. *J Neurol Sci* 2001; 186:37–44.
2. Zhang L, Ulug AM, Zimmerman RD, Lin MT, Rubin M, Beal MF. The diagnostic utility of FLAIR imaging in clinically verified amyotrophic lateral sclerosis. *J Magn Reson Imaging* 2003;17:521–527.

From the Department of Neurology, Baylor College of Medicine, Houston, TX.

Disclosure: The authors report no disclosures.

Neurology[®]

Teaching *NeuroImage*: Corticospinal tract

Sheng-Han Kuo and Justin Y. Kwan

Neurology 2008;71:e10

DOI 10.1212/01.wnl.0000324484.76509.09

This information is current as of August 4, 2008

Updated Information & Services

including high resolution figures, can be found at:
<http://n.neurology.org/content/71/6/e10.full>

References

This article cites 2 articles, 0 of which you can access for free at:
<http://n.neurology.org/content/71/6/e10.full#ref-list-1>

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints

Information about ordering reprints can be found online:
<http://n.neurology.org/subscribers/advertise>

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright . All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

