



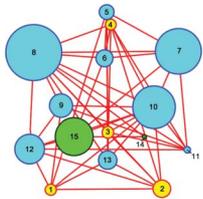
## In Focus

Spotlight on the May 14 Issue

**Robert A. Gross, MD, PhD, FAAN**  
Editor-in-Chief, *Neurology*<sup>®</sup>



### Traumatic brain injury impairs small-world topology



The authors used resting-state functional MRI to investigate connectivity in 20 patients with traumatic brain injury and 21 controls. Graph theoretical analysis was then applied to partial correlation matrices. Changes in large-scale brain networks are likely to explain many of the cognitive

problems seen after traumatic brain injury.

See p. 1826

*From editorialists Zhou & Lui: "What exactly these observations represent, whether they be transient disorganization of brain networks, pathologic rerouting of neuronal signals, or adaptive brain plasticity, is not yet known."*

See p. 1822

### Newly diagnosed atrial fibrillation linked to wake-up stroke and TIA: Hypothetical implications

This study assessed 274 patients with acute ischemic stroke and 82 with TIA. Forty-one events occurred during night sleep. Atrial fibrillation was detected in 27 of 272 patients without known atrial fibrillation. Atrial fibrillation could explain, at least in part, the poorer prognosis of wake-up stroke and TIA.

See p. 1834

### White matter microstructure deteriorates across cognitive stages in Parkinson disease

Diffusion tensor imaging in 109 patients with Parkinson disease revealed slight microstructural white matter damage in those with normal cognition. This damage was worse in those with mild cognitive impairment and increased only slightly more in those with dementia. Development of white matter pathology may precede progression to substantial cognitive impairment in Parkinson disease.

See p. 1841

### Serotonergic loss in motor circuitries correlates with severity of action-postural tremor in PD

Using <sup>11</sup>C-DASB PET, the function of serotonergic terminals was investigated in 12 patients with tremor-predominant Parkinson disease (PD), 12 patients with akinetic-rigid PD, and 12 controls. Serotonergic dysfunction in motor networks may contribute to postural tremor in PD.

See p. 1850

### Effect of 4-aminopyridine on vision in multiple sclerosis patients with optic neuropathy

Patients underwent visual evoked potentials, optical coherence tomography, and visual acuity testing before 5 weeks of either placebo or 4-aminopyridine (4-AP) therapy. Repeat evaluation occurred at 5 and 10 weeks. Evidence supported the use of 4-AP in certain patients with optic neuropathy to improve visual function.

See p. 1862

### Motor neuron involvement in multisystem proteinopathy: Implications for ALS

Genetic mutations occurred in 7 of the 8 families with inclusion body myopathy, Paget disease, and frontotemporal dementia (IBMPFD). Mutations in at least 4 genes caused IBMPFD, and its phenotypic spectrum extended beyond IBM, Paget, and frontotemporal dementia. Weakness was the most common and disabling manifestation of muscle disease.

See p. 1874

### Twenty-year changes in dementia occurrence suggest decreasing incidence in central Stockholm, Sweden

The authors explored whether prevalence, survival, and incidence of dementia changed in 523 patients diagnosed with dementia from the Kungsholmen Project and the Swedish National Study on Aging and Care in Kungsholmen. From the late 1980s to the early 2000s in central Stockholm, Sweden, survival of patients with dementia increased and incidence of dementia decreased.

See p. 1888; Editorial, p. 1824

## IEWS & REVIEWS

### Subcortical epilepsy?

This review examined the possibility that subcortical structures initiate seizures independently. There is a need to consider this, especially when clinical features are conflicting, as this will have important consequences on subsequent syndromic diagnosis and management.

See p. 1901

*NB: "Carotid dissection following a generalized tonic-clonic seizure," see p. 1911. To check out other Neurolmages, point your browser to [www.neurology.org](http://www.neurology.org).*

Podcasts can be accessed at [www.neurology.org](http://www.neurology.org)

# Neurology®

**Spotlight on the May 14 Issue**  
Robert A. Gross  
*Neurology* 2013;80;1821  
DOI 10.1212/WNL.0b013e318294e3bf

**This information is current as of May 13, 2013**

<b>Updated Information &amp; Services</b>	including high resolution figures, can be found at: <a href="http://n.neurology.org/content/80/20/1821.full">http://n.neurology.org/content/80/20/1821.full</a>
<b>Permissions &amp; Licensing</b>	Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="http://www.neurology.org/about/about_the_journal#permissions">http://www.neurology.org/about/about_the_journal#permissions</a>
<b>Reprints</b>	Information about ordering reprints can be found online: <a href="http://n.neurology.org/subscribers/advertise">http://n.neurology.org/subscribers/advertise</a>

*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 © 2013 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

