# In Focus

## Spotlight on the January 21 Issue

**Robert A. Gross, MD, PhD, FAAN**
Editor-in-Chief, *Neurology*®

AMERICAN ACADEMY OF NEUROLOGY®

### Development of movement-related intracortical inhibition in acute to chronic subcortical stroke

The authors investigated GABAergic intracortical inhibition longitudinally (acute to chronic) in 11 stroke patients. Recovery was more effective in patients who showed reduction of motor cortical inhibition in the lesion hemisphere within the first week after stroke. Modulation of GABAergic cortical inhibition is a crucial mechanism for recovery of function after stroke.

**See p. 198**

*From editorialists Celinik & Birmbaumer: "Although this is an interesting proof of concept in a specific subtype of stroke patients, future investigations will need to determine whether this potential predictive measure can generalize to other stroke types, different stroke locations, and patients with more severe deficits."*

**See p. 192**

### Herpes zoster as a risk factor for stroke and TIA: A retrospective cohort study in the UK OPEN

Using Cox proportional hazard models to analyze 106,000 cases and 213,000 controls, the authors identified increased risk of TIA up to 23 years following herpes zoster, independent of other vascular risk factors. TIA and stroke increased 1.4–2.4-fold in persons less than 40 years of age.

**See p. 206**

### In utero exposure to levetiracetam vs valproate: Development and language at 3 years of age

Children exposed to levetiracetam and controls scored higher on some tests of neurodevelopment when compared to children exposed to valproate. Where appropriate, levetiracetam may be a viable alternative treatment for women with epilepsy in terms of later development of the child.

**See p. 213; Editorial, p. 194**

### Age at surgical menopause influences cognitive decline and Alzheimer pathology in older women

The authors followed women who underwent surgical menopause for up to 18 years. In 32% there was faster decline in global cognition, specifically episodic memory and semantic memory, along with increased Alzheimer disease neuropathology. There were some benefits of hormone replacement therapy started within a 5-year perimenopausal time window.

**See p. 222; Editorial, p. 196**

### In vivo signatures of nonfluent/agrammatic primary progressive aphasia caused by FTLD pathology

The authors collected clinical, neuroimaging, and neuropathologic data in 11 patients with sporadic nonfluent/agrammatic variant of primary progressive aphasia (nfvPPA) with frontotemporal lobar degeneration (FTLD)-tau or FTLD-TDP pathology, analyzing patterns of cognitive and gray and white matter atrophy. Early white matter damage on neuroimaging may provide a biomarker for FTLD-tau pathology in the nfvPPA syndrome.

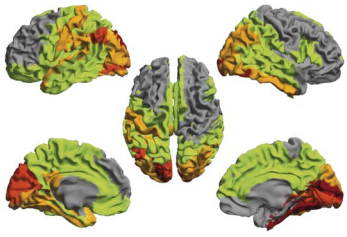
**See p. 239**

### Tongue pressure as a novel biomarker of spinal and bulbar muscular atrophy

In 47 patients with spinal and bulbar muscular atrophy (SBMA) and 38 controls, tongue pressure was measured using an intraoral pressure probe and questionnaires were used to evaluate swallowing functions. Tongue pressure measurement may be a novel and useful biomarker of SBMA.

**See p. 255**

### Predicting dementia in Parkinson disease by combining neurophysiologic and cognitive markers



Baseline cognitive assessments and magnetoencephalographic recordings from 63 prospectively enrolled Parkinson disease (PD) patients without dementia were analyzed in relation to PD-related dementia conversion over a 7-year period; 19 patients developed dementia. Combining neurophysiologic markers with cognitive assessment may improve dementia risk profiling in PD, providing potential benefits for clinical care.

**See p. 263**

*NB: "Expanding neurologic education to resource-poor countries: Lessons from Moi Teaching Hospital," see p. e18. To check out other Resident & Fellow International Issues articles, point your browser to www.neurology.org and click on the link to the Resident & Fellow Section.*

*Podcasts can be accessed at www.neurology.org*

**Spotlight on the January 21 Issue**

Robert A. Gross

*Neurology* 2014;82;191
DOI 10.1212/WNL.0000000000000058