In Focus

Spotlight on the June 10 Issue

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Thrombolytic therapy for stroke in patients with preexisting cognitive impairment

One patient out of 4 who receive thrombolytic therapy for stroke is over 80 years of age, and the proportion with cognitive decline in this age category is high. This article shows that the safety profile of thrombolytic therapy is good in the presence of cognitive decline. Ischemic stroke patients with preexisting cognitive impairment should receive recombinant tissue plasminogen activator if eligible.

See p. 2048; Editorial, p. 2044

Asymptomatic HIV-associated neurocognitive impairment increases risk for symptomatic decline

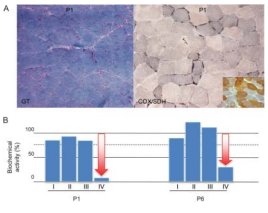
Three hundred forty-seven participants from the CHARTER cohort were neurocognitively normal or had asymptomatic neurocognitive impairment (ANI) at baseline. Neurocognitive assessments occurred approximately every 6 months. ANI conveyed a 2-fold to 6-fold increase in risk for earlier development of symptomatic HIV-associated neurocognitive disorders, supporting the prognostic value of the ANI diagnosis in clinical settings.

See p. 2055

From editorialists Albert & Martin: "With longer follow-up will most CHARTER participants who were initially diagnosed as cognitively normal also develop neurocognitive impairment and disability in their 40s and 50s? These results suggest that they may. Less clear is how well these results will apply to other HIV + populations…."

See p. 2046

Novel (ovario) leukodystrophy related to *AARS2* mutations



Exome sequencing revealed mutations in *AARS2* in patients with a leukodystrophy and ovarian failure. MRI shows multifocal, inhomogeneous, and often asymmetrical white matter abnormalities that could easily be interpreted as nonspecific. It is the specific involvement of descending tracts and left-right connections in the corpus callosum that characterizes this disease.

See p. 2063

PDE5 inhibition alleviates functional muscle ischemia in boys with Duchenne muscular dystrophy

This study shows that phosphodiesterase type 5 (PDE5) inhibition with either tadalafil or sildenafil promptly corrects the muscle blood flow abnormality in boys with Duchenne muscular dystrophy (DMD). The data provide in-human proof of concept for PDE5 inhibition as a putative new treatment for DMD in a phase 3 clinical outcomes trial.

See p. 2085

DEPDC5 mutations in families presenting as autosomal dominant nocturnal frontal lobe epilepsy

DEPDC5 sequencing was performed in 30 probands from families with autosomal dominant nocturnal frontal lobe epilepsy. The authors found that *DEPDC5* mutations were a frequent cause, accounting for 13% (4/30) in this series of families. The involvement of *DEPDC5* provides new pathways other than channelopathies, such as nicotinic acetylcholine receptor gene abnormalities.

See p. 2101

Gerstmann-Straüssler-Scheinker disease: Novel *PRNP* mutation and VGKC-complex antibodies

In a treatment-resistant VGKC-complex antibody–positive patient, postmortem examination revealed Gerstmann-Straüssler-Scheinker disease with a novel mutation in the *PRNP* gene. The failure to respond to aggressive immunotherapy suggests against VGKC-complex antibodies being pathogenic; however, their presence does not preclude the possibility of prion disease.

See p. 2107

Intensive care unit admission in multiple sclerosis: Increased incidence and increased mortality

The authors used population-based administrative and clinical data to study critical illness in multiple sclerosis (MS). The risk of intensive care unit admission was increased in patients with MS, and 1-year mortality after admission was 2-fold higher than expected. Greater attention to preventing infection and managing comorbidity is needed in the MS population.

See p. 2112

VIEWS & REVIEWS

Presence and progression of white matter hyperintensities and cognition: A meta-analysis

In this meta-analysis of cross-sectional and longitudinal studies, there were small but consistent effects of white matter hyperintensities (WMHs) on all cognitive domains, with the largest effects in those with progressive WMHs. These data demonstrate the clinical relevance of WMHs with a global, diffuse effect on cognitive functions.

See p. 2127

NB: "The Old Sheriff," see p. 2142. To check out other Reflections: Neurology and the Humanities submissions, point your browser to Neurology.org.

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