SPECIAL EDITORIAL

Is it research? An increasingly common question

Increasingly, clinicians wishing to implement practice changes are forced to ask, “Is this activity research?” The question is simple; the regulations are not. This editorial provides practical guidance and policy recommendations.

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ARTICLES

Predictors of future falls in Parkinson disease

The authors examined 101 patients with early-stage Parkinson disease who undertook a battery of neurologic and functional tests in their optimally medicated state. This prospective study determined an optimal combination of disease-specific and balance- and mobility-related tests that predicted falls with 78% sensitivity and 84% specificity.

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Central opioidergic neurotransmission in complex regional pain syndrome

In this case-control study, 10 patients with complex regional pain syndrome and 10 age- and gender-matched healthy subjects underwent a PET scan using the subtype-nonselective opioidergic radioligand [18F]fluoroethyl-diprenorphine. The results demonstrate altered central opioidergic neurotransmission in complex regional pain syndrome.

See p. 129; Editorial, p. 109

Head circumference, atrophy, and cognition: Implications for brain reserve in Alzheimer disease

This study of 270 patients with Alzheimer disease showed that with greater levels of MRI brain atrophy, cognition was higher for individuals with greater head circumference. The finding supports the notion that head circumference (and presumably brain size) offers protection against Alzheimer disease symptoms through enhanced brain reserve.

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White matter changes and diabetes predict cognitive decline in the elderly: The LADIS Study

In this multinational European project, 639 elderly subjects living independently were followed for 3 years. Cerebral white matter changes (WMC) and diabetes independently predicted cognitive decline. Two different profiles were identified: WMC severity and previous stroke as prognostic factors for vascular dementia; and temporal atrophy as prognostic factor for Alzheimer disease.

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Altered functional connectivity in the motor network after traumatic brain injury

The authors acquired fMRI data while 12 right-handed patients and 9 healthy controls performed the finger-thumb opposition task with their right hand along with tasks for working memory, face-place-object-emotional visual recognition, and word encoding tasks. Patients displayed compromised activation and connectivity patterns that may imply functional reorganization of motor networks following traumatic brain injury.

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SPECIAL ARTICLE

Evidence-based guideline: The role of diffusion and perfusion MRI for the diagnosis of acute ischemic stroke: Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology

The authors analyzed literature from 1966 to January 2008 to address the diagnostic and prognostic value of diffusion- and perfusion-weighted imaging in the diagnosis of patients with acute ischemic stroke. Diffusion-weighted imaging was considered more useful than noncontrast CT for this diagnosis within 12 hours of symptom onset.

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