Diffusion-Weighted MRI Guides Stroke Diagnosis

October 19, 2011
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University of Pennsylvania researchers led by neurologist Monisha Kumar, MD, performed electrocardiogram, non-contrast head CT, brain MRI, head and neck magnetic resonance angiography (MRA), and transoesophageal echocardiography studies with 273 patients. Stroke neurologists determined TOAST (Trial of Org 10172 in Acute Stroke Treatment) classification on admission and on discharge. If the stroke subtype changed between the initial diagnosis and the diagnosis testing, they considered how CT and MRI figured into that change. The team found that diffusion-weighted MRI patterns appear to predict the cause of stroke better than conventional methods. Further, they say their data suggest an MRI-based diagnostic algorithm can potentially eliminate the need for echocardiography in one-third of stroke patients and may cut back on the need for secondary extracranial vascular imaging studies.

Disclosures:

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