LETTER TO THE EDITOR

Thrombolysis for acute ischaemic stroke is evidence-based

FORUM

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To the Editor—We thank Professors Kumana and Cheung[1] for their interest in our article. However, we feel that they provided limited references to the use of recombinant tissue plasminogen activator (rt-PA) in acute stroke.

The highest level of evidence-based medicine is a meta-analysis of all available trials. The Cochrane Library identified 13 randomised trials and concluded that thrombolysis for acute stroke within 3 hours was associated with a significant reduction in the number of dead or dependent patients (49.7% of those allocated to thrombolysis were dead or dependent compared with 60.3% of those allocated to control therapy; odds ratio=0.66; 95% confidence interval, 0.53-0.83; P=0.0003).[2]

Even the conservative National Institute for Health and Clinical Excellence guidelines from the United Kingdom concluded that "rt-PA plus best supportive care is clinically and cost effective compared with best supportive care alone".[3] Kumana and Cheung[1] underestimate the benefits of rt-PA for stroke; the number needed to treat (NNT) to gain one independent life is 8.[4]

The evidence supports early aspirin use in patients with acute stroke initiated within 48 hours from stroke onset, not 24 hours. The benefit of aspirin in acute stroke is trivial when compared with rt-PA, with an NNT of 77 to gain one independent life.

Interestingly, in contrast to the conservative view of Kumana and Cheung,[1] their neurology colleagues in Queen Mary Hospital have embraced the concept of stroke thrombolysis and are actively providing the service. While management of acute stroke by general physicians outside a stroke unit is associated with poorer outcomes,[5] acute stroke patients should be treated in acute stroke units under specialists who have suitable training and expertise.

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