Thrombolytic treatment in acute stroke

To the Editor—Lau et al[1] have highlighted the importance of a dedicated stroke team in the treatment of acute ischaemic stroke. The majority of screened cases were not eligible for thrombolysis, due to the narrow time window for therapy and other exclusion factors. Approximately two patients were treated every month at a busy teaching hospital but those with wake-up stroke (WUS) were excluded, as the time of onset was uncertain.[1] Data from other registries indicate that 25 to 30% of acute stroke cases lie in this category.[2-5] More patients might benefit from this form of treatment if the indications are revised to include WUS. One reason is the early morning peak incidence of ischaemic stroke; this circadian distribution is also observed in disorders such as myocardial infarction and sudden death. Therefore some patients may have their stroke near awakening. Another reason is the similar rates of diffusion- and perfusion-weighted imaging mismatch in both WUS and stroke of known onset.[2] The computed tomographic characteristics including Alberta Stroke Program Early CT Score (ASPECTS) are also similar in these two groups.[3,4] The experience from off-label use of thrombolysis in WUS shows that treated patients have better outcomes compared to non-treated individuals.[5] In one study, there was no difference in safety and clinical outcomes in the WUS group compared to those with known onset that were treated within 3 hours.[5] Identifying a subgroup of patients with WUS that are eligible for reperfusion may allow more people to receive acute stroke treatment, even without a clear time of symptom onset.

Andrew CF Hui, FRCP
Email: neurologycare@yahoo.com
PacifiCare
12/F, 26 Nathan Road
Kowloon
Hong Kong

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