

Thrombolysis therapy in octogenarians

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Octogenarians can be selected for thrombolysis therapy after CT scan without a detrimental effect on outcome

In the current issue of *JNNP*, Ringleb *et al*¹ report data on patients, either younger or older than 80 years, treated with systemic thrombolysis for an acute ischaemic stroke (see page 690). Interestingly, the group of octogenarians were analysed with respect to the initial imaging modality (MRI or CT). The overall rate of haemorrhage and improved efficacy outcomes was not significantly different in the two age groups and no significant difference was observed for efficacy outcomes in MRI versus CT patients.

Ringleb *et al*¹ deal with two important issues: thrombolysis therapy in octogenarians and the search for an improved selection of patients for thrombolysis.

Acute treatment of acute stroke in octogenarians is a real challenge for stroke physicians. For many years, our primary concern has been the improvement of primary and secondary prevention and the setup of a network able to speed up hospital admission for intravenous thrombolysis. Undoubtedly, the results have been sub-optimal. Concerning prevention, many patients with atrial fibrillation are admitted to stroke units without having followed primary or secondary prophylaxis.² Furthermore, only a few patients are treated with thrombolysis. All stroke physicians would agree that there is a remarkable gap between what has been well recommended in guidelines and clinical practice.

What is the reality regarding thrombolysis treatment of octogenarians or older patients?

Some noteworthy case reports on thrombolysis treatment in centenarians have been published³⁻⁴ as well as studies with inconsistent results.¹ However, the reality is completely different: SITS-MOST excluded octogenarians or older patients from thrombolysis treatment despite the fact that the burden of ischaemic stroke is high in subjects older than 80 years. In Italy, which has one of the oldest population in Europe, the crude annual incidence rate among octogenarians and older patients has been reported to be 21.54 per 1000 (95% CI 20.42 to 22.72). Thus these patients represent approximately one-third of patients admitted to hospital for an acute stroke.⁵

In their study, Ringleb *et al*¹ not only treated these patients but used the most advanced technique (MRI) to select patients for thrombolysis with the aim of assessing whether haemorrhagic complications could be reduced and outcome improved. The results indicate that octogenarians can be selected after CT scan without a detrimental effect on outcome. This means that, even in departments without 24 hour availability of MRI, octogenarians can be treated and have a risk of haemorrhagic complications similar to that of younger patients.

EDITORIAL COMMENTARY

It is time for stroke physicians to really consider octogenarians or older patients as part of the target population for thrombolysis. The IST III trial is an ongoing study dealing with this challenge as it includes octogenarians. In the meantime, studies such as that of Ringleb *et al*¹ are needed to find a way to respond to the ever growing number of octogenarians or older patients.

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