

European Stroke Conference - additional news

21-24 May, 2003,
Valencia, Spain

Largest Secondary Stroke Prevention Trial Launched

The European Stroke Conference in Valencia, Spain recently saw the European launch of the world's largest ever secondary stroke prevention trial PROFESS (Prevention Regimen for Effectively avoiding Second Strokes). The combination of modified-release dipyridamole and aspirin has proven to be a useful combination in the ESPS-2 study, doubling the efficacy of the single agent use. Therefore, a natural progression is to explore combination regimes of antiplatelet regimes with clopidogrel. PROFESS compares aspirin plus modified-release dipyridamole (Asasantin Retard) with aspirin plus clopidogrel.

Professor Antonio Coca (Barcelona University, Spain) told the conference that the trial would also investigate whether the angiotensin receptor blocker telmisartan would prevent recurrent stroke independently of its anti-hypertensive effect. Studies had indicated that angiotensin II was an independent risk factor for stroke, implicated in gradually evolving cerebrovascular damage that could culminate in stroke.

Over 15,000 patients in more than 20 countries will be recruited for the trial which aims to report in 2007.

Challenges for thrombolysis in stroke

Some of the challenges of treating acute ischaemic stroke with thrombolytic therapy were addressed at the conference.

Alteplase (Actilyse, rt-PA) was recently launched in the UK for treatment of ischaemic stroke when used within three hours of stroke onset by specially registered centres.

At a Boehringer Ingelheim symposium on May 22, Professor Werner Hacke (Heidelberg University) outlined pooled analysis showing that, when used within 90 minutes, the chance of a good recovery with alteplase treatment (modified Rankin scale 0.1) was increased 2.3 times. "Time is a real issue here," he said, stating the odds ratio of 1.53 for good recovery when alteplase was given between 90 and 180 minutes. Although benefits declined with increasing time, Professor Hacke noted that alteplase efficacy was seen up to four and a half hours after stroke onset. A new trial, ECASS III, at the request of European regulatory authorities would investigate the efficacy of treatment between and three and four hour time window.

However, Professor Hacke said that rapid treatment depended on the right infrastructure and fast referral. "Getting patients to the hospital in due time requires major changes in the way hospitals and neurology departments are organised. In addition to changes in patient referral, advanced organisation of emergency departments, stroke units and neuroradiological services is essential," he stated.

Professor Nils Wahlgren, Associate Professor of Neurology at the Karolinska Institute, Sweden said that for every 10 patients treated with alteplase, one extra patient would be living independently after stroke. However, the treatment also produced one extra case of intracranial haemorrhage for every 22 patients treated. Although this caused a lot of concern, this figure included a number of very small bleeds. He acknowledged that safety concerns may lead to slow implementation of the treatment but pointed out that the therapy could allow over 2,000 stroke patients in Europe each year to be living independently, and he called for fast but safe implementation of this approach.

He described the SITS-MOST observational safety monitoring study, with which all European centres using alteplase would have to be registered. The study will compare the outcome of treatment with a systematic review of randomised controlled trials. Its primary and secondary aims include the following:

- Assessing symptomatic intracranial haemorrhage, mortality and independence related to background variables
- Independence compared with expected outcome
- A risk model for haemorrhage and death
- Outcome in stroke subgroups.

Professor Wahlgren said that data entry time had been kept to around 10 minutes, with entries being entered over a secure online site www.acutestroke.org.

Professor Hacke acknowledged that patients with very mild stroke would not need thrombolytic therapy even though its labelling allowed it to be used for measurable neurological deficit after ischaemic attack. His centre would not treat patients scoring 4 or less on the NIH stroke scale. However, these patients had a very low risk of bleeding with the treatment. Bleeding risk had something to do with stroke severity.

Bleeding was seen more in patients with increased age, co-morbidity and with more severe stroke - the very patients in whom neurologists might want to use thrombolysis. Although dictated more by "impression" than clinical trial, this approach had led centres to exclude patients with very severe stroke (over 22 on the NIH stroke scale).

Professor Hacke suggested that this approach had led to a lower incidence of symptomatic haemorrhage after alteplase treatment in most local or multicentre registries, compared with that seen in randomised trials.

Neurologists were developing a "feeling" as to which patients to treat and which not to treat, he believed.

Other news...

Other research reported in Valencia included a study of the effect of time on the accuracy of stroke prognosis. Researchers from the University of Central Lancashire found an association between prognostic accuracy and the time between prognosis and outcome. "Thus in planning services or stratifying for trials we should base decisions on updated information and not rely on data collected early after stroke. They suggest that planning late rehabilitation decisions should be based on data recorded at 12 months and not 7 days.

A study from Bradford Elderly Care and Rehabilitation Research Department reported on a structured communication strategy they had developed. Although the scheme did not appear to have an impact on knowledge, it was associated with a significantly greater reduction in anxiety scores in the early months after stroke.

This news has been supplied by Boehringer Ingelheim.