



The REACH Connection

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**Remote Evaluation
for Acute Ischemic
Stroke (REACH)**

REACH Mission:

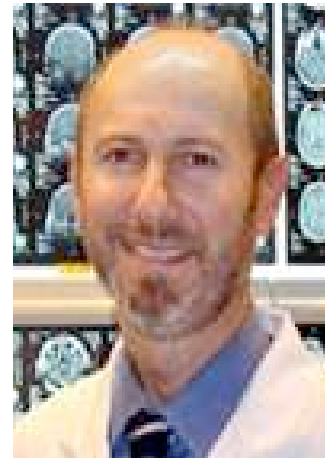
To improve the care of stroke patients within smaller communities in Georgia.



Keeping You Posted . . .

Welcome to MCG...

Dr. Askiel Bruno has recently joined the MCG Department of Neurology Stroke Section and will be taking REACH consultations within the Georgia telestroke network. Dr. Bruno comes most recently from the University of Indiana where he was director of the stroke program. His expertise in stroke includes the management of stroke in diabetics and hyperglycemia as a modifier of stroke outcome. We're excited to have him join our team!



Askiel Bruno, M.D.
Professor,
Department of
Neurology

REACH Hospitals:

- Doctor's Hospital
- Emanuel Medical Center
- Elbert Memorial Hospital
- Jefferson Hospital
- Jenkins County Hospital
- McDuffie Regional Medical Center
- Morgan Memorial Hospital
- Washington County Regional Medical Center
- Wills Memorial Hospital
- Ty Cobb Memorial
- Tift Regional

Thrombolysis with Alteplase 3 to 4.5 Hours after Acute Ischemic Stroke

Presented at the World Stroke Congress in Vienna and simultaneously published in the September 25, 2008 issue of the New England Journal of Medicine is new evidence regarding extended safety and efficacy of intravenous thrombolysis for acute ischemic stroke. European Cooperative Acute Stroke Study (ECASS) III was a multi-center, international, double-blinded clinical trial which randomly assigned 821 ischemic stroke patients to intravenous alteplase or placebo between 3 and 4.5 hours after stroke onset. The median time to administration of alteplase was 3 hours and 59 minutes. At 90 days, *more patients who received alteplase had a favorable outcome* (no symptoms or mild symptoms) compared with the placebo group (52.4% vs. 45.2%; P=0.04). Clinical benefit occurred despite a small but significant increase in symptomatic intracranial hemorrhage (2.4% vs 0.2%; P=0.008). There was no difference in mortality between the two groups.

from thrombolysis likely rapidly diminishes in most patients beyond three hours, and perhaps as little as a thirty minute difference can affect the likelihood of a favorable outcome. Second, this trial was powered to detect an anticipated smaller effect size than that seen in patients treated in less than three hours (7 to 10% absolute benefit), resulting in a planned sample size of more than 400 in each group.

How should this study affect acute stroke care at this time? The first important implication of this trial is confirmation that symptom duration is the key determinant of the likelihood of benefit from thrombolytics. Although treatment may benefit some patients beyond three hours, patients still need to be treated as soon as feasible because treatment under 90 minutes offers the greatest chance of favorable outcome, with smaller odds of a favorable outcome between 91 and 180 minutes, and now 181 and 270 minutes. Another significant result was the demonstration of preserved safety of thrombolytic therapy in this time window. Although the risk of intracranial hemorrhage was increased among alteplase recipients, the rate was relatively low, similar to the rate in patients treated under three hours, and did not result in an increase risk of death. Additionally, the small increase risk of hemorrhage appears to be counterbalanced by the overall efficacy of treatment in the population.

Since FDA approval of alteplase is limited to the three hour window for acute stroke, any use beyond this time window could occur only on a compassionate use basis with the approval of the patient and/or family.

Why was this study positive when previous studies of thrombolytics beyond three hours had been negative? There are probably several factors. First, prior studies had enrolled and treated patients out to five or six hours. Combining the results of ECASS 3 with prior thrombolytic trials, it appears that the benefit from alteplase administration is closely related to interval from onset to treatment. Benefit

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Happy Holidays and a
Happy New Year To
everyone. We look forward to continuing to
work with you in the
New Year!