

5)  
(2 pages)

Back Issues  
Past 5 Issues

# DAILY BRUIN

Tuesday, October 14, 2003

Fiv

Search Archives

Full Text Search

HOME

Archives

Select a date

- News
- Sports
- dB Magazine
- Viewpoint
- Science & Health
- Your Health**
- Finance & Economy
- Week in Photos
- Interactive Special Features

Online Forums  
Video / Audio  
Newsletter

What's Bruin  
View Print Edition  
Corrections  
About the DB  
Contact Us  
The Staff

DB Alumni Site  
BruinClassifieds  
Search Classifieds

BruinClassifieds

BruinWalk.com

ADVERTISEMENT

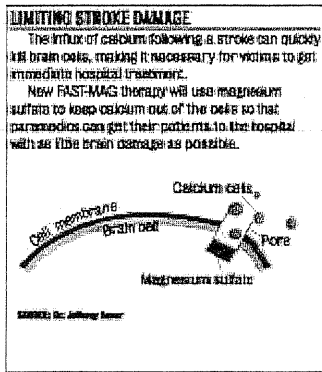
## UCLA leads clinical trial of promising new stroke drug

### Magnesium sulfate aids brain in critical first hour, researcher says

By Jennifer Lauren Lee  
DAILY BRUIN CONTRIBUTOR  
jlee2@media.ucla.edu

The National Institutes of Health awarded the UCLA Stroke Center a \$16 million grant earlier this month to be used in the clinical trial of a new treatment for acute strokes.

Unlike the standard FDA-approved "clot-busting" drugs, which clear out blocked blood vessels to the brain, the new treatment uses magnesium sulfate to



protect brain cells directly from the harmful effects of stroke.

"A lot of neuroprotective drugs have been tested before in neurostroke trials," said Dr. Jeffrey Saver, professor and director of the UCLA Department of Neurology, and the principal investigator for the study. "All have failed."

Instead, this trial will test whether the brain-protecting magnesium sulfate will be more effective if administered during the critical first two hours after a stroke, said Dr. Sidney Starkman, professor of emergency medicine and neurology at UCLA and co-principal investigator of the study.

"This is the first large trial having paramedics give drugs for stroke to patients on site, in time for (them) to work," Saver said. "Twelve (to) 26 hours after the stroke, most of the damage is done - and then it's too late to intervene."

According to Saver, a stroke, which is caused by a rupture or blockage of a blood vessel to the brain, deprives brain cells of oxygen-rich blood and kills them within five to six minutes.

But reduced blood flow to the areas surrounding that blockage allows cells to survive for a few minutes to hours.

"The golden hour is the first hour," Saver said. "The more time lost, the more brain is lost."

As headquarters for the study, UCLA will coordinate an effort involving 330 paramedics from the Los Angeles Fire Department and up to 80 receiving hospitals in the Los Angeles area, Saver said.

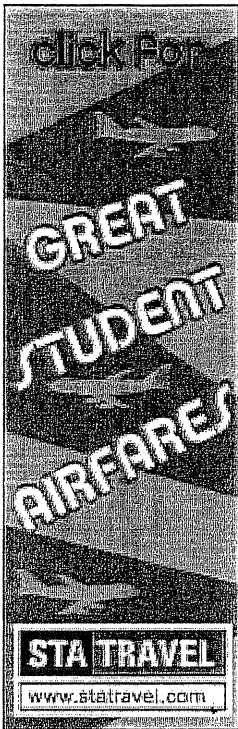
Other key figures in the trial study include co-principal investigators Dr. Marc Eckstein, medical director of the Los Angeles City Fire Department, and Dr. Chelsea Kidwell, co-director of the UCLA Stroke Center.

The trial will involve 1,298 patients over a four-year period in a randomized, double-blind,

Pri  
C  
prin

En  
He  
me  
cont

AD



ADVERTISEMENT

placebo-controlled study.

Paramedics at the scene will use the novel method of contacting a trial physician by cell phone to get the consent of the stroke victims or their family members to be enrolled in the study.

The FDA-approved clot-busting drug currently in use, tissue plasminogen activator, helps one in three of the patients who get it - but only 1 to 2 percent of acute stroke victims receive the drug, since it is dangerous for hemorrhaging patients and may only be administered in the hospital after a CAT scan, Saver said.

Magnesium sulfate is safer and can be administered right away. It helps the brain cells tolerate a lower blood flow, inducing a sort of chemical hibernation that would extend the time window until patients could get the currently approved drug, Saver said.

In addition to increasing blood flow to the brain, magnesium sulfate blocks calcium from entering and destroying brain cells, thereby slowing down the process of brain death that accompanies stroke.

The compound has also been used for 75 years to treat patients with eclampsia, a condition particular to pregnant women that includes seizures and agitation, Saver said.

The initial pilot study, which ran from May 2000 to January 2002, had encouraging results, with some of the stroke patients exhibiting a dramatic recovery in 24 hours.

"The pilot trial showed that paramedics can recognize stroke accurately and safely start magnesium sulfate in the field," Eckstein stated in a recent press release. "Now, we need to perform the large pivotal trial to determine definitively if early magnesium sulfate improves patient outcome."

Stroke is the third leading cause of death in the United States after heart disease and cancer, Saver said.

There are more than 40,000 stroke victims per year in the L.A. metropolitan area.

Symptoms of stroke include sudden weakness, change in vision, or difficulty speaking or walking.

According to Starkman, the consolidated effort of so many local hospitals with the county Emergency Medical Services could make this trial more efficient than if it were spread across many U.S. cities.

"If you're having a stroke," Starkman said, "you want to be in L.A."

**Br**  
 REAL  
 looki  
 Adm  
 Assis  
 Anah  
 Cust  
 Inter  
 Phon  
 Exce  
 avail  
 \$15/  
 FRO  
 ATHI  
 SHO  
 comj  
 Bren  
 looki  
 time  
 offer  
 sales  
 \$18/  
 vaca  
 medi  
 V-D  
 WAN  
 VALE  
 On-li  
 looki  
 ener  
 PART  
 SECL  
 OFFI  
 Cent  
 part-  
 office  
 \$12.  
 train  
**Br**