Early trials of prehospital stroke care could shed light on treating stroke

T

reating Stroke in the Field: Lessons from the First Generation of Prehospital Stroke Trials” at 8:40-10:10 a.m. Wednesday in Ballroom 20BC will explore findings from trials involving informed consent, blood pressure control, IVA treatment and using telemedicine in the field.

“Stroke is an incredibly time-sensitive disease, and interventions often need to be given in the first minutes or hours after brain injury,” said Robert Silbergleit, MD, co-moderator of the symposium and professor of emergency medicine at the University of Michigan Health System in Ann Arbor. “Those of us in the stroke field have spent a lot of time trying to figure out how to extend the window of treatment for revascularization and neuroprotection, but the bigger gains may be in treating earlier, in the pre-hospital period.

“This symposium will highlight trials that have looked at ways to move stroke care into the prehospital setting and expand the therapeutic window forward by moving treatment closer to the stroke event. Even if the first trials that have moved therapy into the field are not successful, there is a lot to be learned from those experiences so we can figure out how to do it right the next time.”

Natalia S. Rost, MD, MPH, director of acute stroke services at Massachusetts General Hospital and associate professor of neurology at Harvard Medical School in Boston, is co-moderator of the symposium.

Nerses Sanossian, MD, assistant professor of neurology and associate director of the neurocritical care/stroke section at the University of Southern California in Los Angeles, will talk about FAST-Mag (Field Administration of Stroke Therapy-Magnesium), a trial of intravenous magnesium given as a neuroprotective medication to patients with acute stroke by paramedics in the field before arriving at a hospital.

“In the symposium, Dr. Sanossian will talk about what it took to enroll people in the trial and how informed consent for the trial was achieved in an ambulance setting,” Silbergleit said.

Philip M. Bath, MD, Stroke Association professor of stroke medicine and head of the division of clinical neuroscience at the University of Nottingham School of Medicine in the United Kingdom, will discuss the RIGHT (Rapid Intervention with GTN in HTensive Stroke), a study designed to determine the feasibility of ambulance-based treatment of patients with ultra-acute stroke using glyceryl trinitrate.

In the RIGHT trial, paramedics treated patients with GTN, a drug that dilates blood vessels and reduces blood pressure, within four hours of stroke. The study could provide important information on the effects of GTN in very acute stroke patients.

Henrich Audebert, MD, head of neurology at the Charité University’s Benjamin Franklin Hospital in Berlin, will describe a trial of tissue plasminogen activator treatment of acute stroke patients with acute ischemic stroke is associated with worsening of neurologic function, increased mortality and decreased functional recovery.” Obstructive sleep apnea may be present before and after a stroke occurs, said Robert Bryan Jr., PhD, symposium co-moderator and professor and vice-chair for basic research in the Department of Anesthesiology at Baylor College of Medicine in Houston.

“Sleep apnea can precede stroke and sometimes stroke may precipitate sleep apnea,” Bryan said. “The risk factors for stroke, such as hypertension, diabetes and smoking, have a strong link with sleep apnea. It looks like sleep apnea may be an independent risk factor for stroke.”

Costantino Iadecola, MD, chief of the Division of Neurobiology and professor of neuroscience at New York Presbyterian Hospital/Weill Cornell Medical College, will discuss neurovascular coupling following chronic intermittent hypoxia and its role in stroke.

Dave J. Durgan, PhD, a postdoctoral fellow in Bryan’s lab at Baylor College of Medicine, will discuss his research into cerebrovascular sensitivity to endothelin.

“Dave Durgan and collaborators have developed an animal model of obstructive sleep apnea and have found that endothelin is being upregulated to enhance the contractile side of the blood vessels in the brain at the expense of the dilator side,” Bryan said.

Sigrid Veasey, MD, associate professor of medicine at the University of Pennsylvania’s Perelman School of Medicine and the Center

Treating sleep apnea can improve stroke recovery

Oleg Chernyshov, MD, PhD

Robert Bryan Jr., PhD

Robert Silbergleit, MD

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Treating sleep apnea can improve stroke recovery
The Solitaire™ 2 Revascularization Device is intended to restore blood flow by removing thrombus from a large intracranial vessel in patients experiencing ischemic stroke within 8 hours of symptom onset. Patients who are ineligible for intravenous tissue plasminogen activator (IV t-PA) or who fail IV t-PA therapy are candidates for treatment. Indications, contraindications, warnings and instructions for use can be found on the product labeling supplied with each device.

**REFERENCES**


A new frontier — nanotechnology — is opening in the battle against stroke, offering diagnostic and treatment modalities that don’t exist in the more familiar micro- and macro-scale worlds. Fabricating materials in particles less than 100 nm in diameter creates physical and biological characteristics that clinicians haven’t yet explored. “Nan-scale particle means an increase of surface-to-volume ratio; one obvious example,” said Seung-Hoon Lee, MD, PhD, clinical associate professor at Seoul National University Hospital and co-moderator of “Application of Nanotechnology for Stroke” at 8:40–10:10 a.m. Wednesday in Room 31. “These new features appearing in nano-scale materials bring an easy penetration of the blood-brain barrier, a greater treatment effect from familiar agents and multifunctional effects by combining or fusing two or more nanoparticles. Nanomedicine, the biological and medical applications of nanotechnology, is moving ahead quickly. We will see stroke as one of the most important areas of clinical application of nanotechnology.”

Nanotechnology is already a familiar theme in cardiovascular research, but basic research and translational science in stroke are moving forward quickly, Lee said. “A few nanotechnology products have been used in clinical research and even in clinical practices, basics such as iron oxide or manganese dioxide nanoparticles as contrast media for magnetic resonance imaging,” he said. “But there have also been many failures in translational research using nanotechnology, so it has been easy to miss the growing trend toward success in medical science, including stroke.”

Denis Buxton, PhD, associate director of the basic and early translational research program at the National Heart, Lung, and Blood Institute, is co-moderator of the symposium. Matthias Nahrendorf, MD, PhD, associate professor of radiology at the Center for Systems Biology at Massachusetts General Hospital and Harvard Medical School in Boston, will discuss work originally published in Nature Nanotechnology. One of the most dramatic advances in recent cardiovascular nanomedicine is the successful use of small interfering RNA encapsulated in nanoparticles to target macrophages. Samuel Wickline, MD, professor of medicine, physics, biomedical engineering, cell biology and physiology at Washington University in St. Louis, will discuss the potential application of multifunctional colloidal nanoparticles to image and treat cardiovascular disease.

Nanotechnology in stroke is still in the early stages, Lee said, but multiple approaches are under investigation. Samir Mitragotri, PhD, professor of chemical engineering and director of the Center for Bioengineering at the University of California in Santa Barbara, will discuss nanoparticles and the brain endothelium.

Chi Kim, MD, assistant professor, Seoul National University Hospital, will explore the potential neuroprotective effects of ceria nanoparticles in stroke through a strong free radical scavenging effect seen in animal models. “The basic goal of nanomedicine is to fabricate multifunctional nanoplatforms that enable the diagnosis and treatment of disease simultaneously,” Lee said. “Increasingly positive research results are shortening the interval between basic experiments and clinical application. We will begin to see general use of nanotechnology in medicine over the next five to 10 years.”

### International Stroke Conference honors awardees

### Plenary Session I, Hall E Wednesday

**10:59–11:11 a.m.**
Robert G. Siekert New Investigator Award in Stroke
David Y. Hwang, MD
Yale University School of Medicine, New Haven, Conn.
Subjective Judgments of Physicians and Nurses Are More Accurate Than Formal Clinical Scales in Predicting Functional Outcome After Intracerebral Hemorrhage
In recognition of Robert G. Siekert, MD, founding chairman of the American Heart Association’s International Conference on Stroke and Cerebral Circulation, this award encourages new investigators to undertake or continue stroke-related research.

**11:40 a.m.–Noon**
David S. Sherman Lecture Award
Marc Fisher, MD, FAHA
University of Massachusetts, Worcester
Considering the Future of Academic Vascular Neurology

**1:46–10:58 p.m.**
Stroke Care in Emergency Medicine Award
Evan Allen, MBA
Florida Hospital Neuroscience Institute, Orlando
Stroke Severity Adjusted EMS Triage Has Benefits for Bypassed Primary Stroke Centers
This award encourages investigators to undertake or continue research in the emergent phase of acute stroke treatment and submit an abstract to the International Stroke Conference.

### Plenary Session II, Hall E Thursday

**10:32–10:44 a.m.**
Monte Carlo Y. Globus New Investigator Award
Francesco Blasi, PharmD, PhD
Massachusetts General Hospital, Charlestown
In Vivo Molecular Imaging of Thrombosis and Thrombolysis Using a Fibrin-binding PET Probe
This award recognizes Monte Carlo Y. Globus for his major contributions to research in cerebrovascular disease and his outstanding contributions to the elucidation of the role of neurotransmitters in ischemia and trauma; the interactions among multiple neurotransmitters; mechanisms of hypothemic neuroprotection; and the role of oxygen radical mechanisms and nitric oxide in brain injury.

**10:46–10:58 a.m.**
Stroke Society for Academic Neurology Award
Susan Lichtman, MD
University of Arizona College of Medicine
Injury and Repair of Neuronal Cell Bodies
This award recognizes lifetime contributions to investigation, management, mentorship and community service in the stroke field.

### Plenary Session III, Hall E Friday

**12:03–12:23 p.m.**
William M. Feinberg Award for Excellence in Clinical Stroke Award
William Powers, MD, FAHA
University of North Carolina School of Medicine, Chapel Hill

**12:46–10:58 p.m.**
Stroke Society for Academic Neurology Award
Susan Lichtman, MD
University of Arizona College of Medicine
Injury and Repair of Neuronal Cell Bodies
This award recognizes lifetime contributions to investigation, management, mentorship and community service in the stroke field.
Getting patients to exercise after stroke focus of symposium

The symposium “Exercise after Stroke: Evidence and Application” at 1:30–3 p.m. Wednesday in Room 33 will examine the latest research and provide insights into the application of the results in everyday practice.

“Exercise should be considered a fantastic therapeutic pill,” said Julie Bernhardt, PhD, co-moderator of the symposium and head of the Stroke Division at the Florey Institute of Neuroscience and Mental Health in Heidelberg, Australia. “It can be very powerful. What we need to do is get clinicians and researchers working in this space, harnessing enthusiasm and building programs that will help our patients.

“People who attend this symposium will hear about cutting-edge research in this area. We want to build a groundswell of people interested in applying this knowledge so patients can get the health benefits. Clinicians will hear about how they might start exercise rehabilitation early after a stroke and what they might do to help their patients continue to exercise after they leave the hospital.”

Steven C. Cramer, MD, a neurologist at the University of California at Irvine Medical Center in Orange, is co-moderator of the symposium.

Sandra A. Billinger, PT, PhD, assistant professor of physical therapy and rehabilitation science at the University of Kansas in Kansas City, will talk about the current understanding of exercise and stroke physiology.

“Sandy will give an overview of the current guidelines for exercise after stroke and discuss why it’s important for people to exercise, focusing on the physiologic effects of exercise,” Bernhardt said. “She will also address some gaps in our knowledge of the effects of exercise.”

Alice S. Ryan, PhD, professor of medicine at the University of Maryland School of Medicine in Baltimore, will discuss the impact of stroke and physical inactivity on metabolic health and skeletal muscle, as well as the scientific evidence supporting exercise as a way to offset that impact.

“Alice has been doing research into the development of diabetes and insulin resistance in stroke survivors,” Bernhardt said. “People who were not previously diabetic may exhibit insulin resistance after they’ve had a stroke. They may also develop significant muscle atrophy after a stroke. Alice will talk about the relationship between muscle atrophy, stroke and becoming insulin resistant or diabetic and about how gene expression may play a role in that relationship.”

Toby Cumming, PhD, a postdoctoral research fellow at the Florey Institute, will discuss whether physical activity within the first hours or days after a stroke is exercise in acute stroke patients.

“Within the first hours and up to days after the stroke, clinicians try to get patients to be physically active and even start exercise rehabilitation,” Bernhardt said. “What we need to understand is whether physical activity in this early period actually constitutes exercise. We tend to use these terms interchangeably, but the key difference between the two is that exercise has some repetitive components directed at improving cardiovascular fitness.”

Gillian E. Mead, MBBChir, MD, professor of stroke and elderly care medicine at the University of Edinburgh, United Kingdom, will look at post-stroke exercise guidelines and how to translate evidence for exercise into clinical practice.

“Gillian will talk about ways to overcome barriers to stroke patients exercising after they leave the hospital,” Bernhardt said. “She has done significant work introducing a model of community-based exercise for people who have had a stroke taught by exercise instructors, not physical therapists. She will discuss how to set up exercise programs for patients in the community.”

Session at-a-Glance

Exercise after Stroke: Evidence and Application

Wednesday, 1:30–3 p.m.
Room 33
Co-moderators: Julie Bernhardt, PhD, and Steven C. Cramer, MD

ISC 2015 award nominations

AHA Members: Submit your nominations for the ISC 2015 Feinberg, Willis and Sherman Awards:
• Nomination Period Opens: Wednesday, Feb 12, 2014
• Nomination Period Closes: Wednesday, July 9, 2014
Go to strokeconference.org/awardsandlectures for more information.
Neurons not sole targets in stroke therapy

Neuronal protection is the focus of stroke treatment. But conventional stroke treatment designed to minimize or prevent neuronal damage is largely ineffective.

“In the past, presentations on stroke therapy always focused on neuroprotection, on how do we keep neurons alive after stroke,” said Sharmaine Bake, PhD, assistant professor of neuroscience and experimental therapeutics at Texas A&M Health Science Center in Bryan and co-mediator of “Non-neuronal Targets for Stroke Therapy” at 1:50-3 p.m. Wednesday in Room 30-A-D.

“This session is focused on every type of cell in the brain except neurons. The highlight is that non-neuronal cells are emerging as effective targets of stroke therapy.”

Topics include the role of endothelial cell receptors, astrocytes, microglia, T lymphocytes and white matter progenitors.

“Researchers have been going back to the physiologic basics to consider new, more integrated approaches for stroke treatment versus just focusing on one cell type,” said Jerome Badaut, PhD, co-mediator of the symposium and research officer at the National Center for Scientific Research at the University Bordeaux in France. “These new approaches will take us beyond ischemic stroke to hemorrhagic stroke, in France. "These new approaches will take us beyond ischemic stroke to hemorrhagic stroke, traumatic stroke and other kinds of injuries to the brain.”

Gregory Bix, MD, PhD, FAHA, associate professor of anatomy and neurobiology and neurology at the University of Kentucky Sanders-Brown Center on Aging in Lexington, Ky., will discuss the role of endothelial receptors that are part of the extracellular matrix within the brain in “The Role of the Endothelial Cell alpha5beta1 Integrin and the Blood-Brain Bar-

If you want to enhance your career: Become a Professional Member

Access to the AHA Learning Library, a Web portal to a broad spectrum of professional resources provided by the AHA and organized in themed communities corresponding to AHA councils
• Opportunities to apply for and receive council awards
• Connections quarterly newsletter with council-specific information
• Online version of the Journal of the American Heart Association, a savings of $500 in publication fees
• Free access to Stroke OnDemand™ Premium
• Networking with peers
• Much more
Also, receive up to $500 off ISC 2015 registration rates and similar savings at other AHA scientific conferences.

Visit our staff at HeadQuarters, Booth 241 in the Science & Technology Hall (open at 10 a.m.-4 p.m. Wednesday and Thursday), or go to myamericanheart.org/membership to learn more about the benefits of joining our network of more than 30,000 Members.

Join or renew on site and receive either a canvas duffle bag or a fleece jacket (while supplies last). Each bears the AHA/ASA logo.
Transforming Stroke Treatment

Covidien is dedicated to continuously advancing the vascular field with

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**Reduced Risk of Mortality:** The CLOTS 3 Study additionally showed a 14.0% reduction in mortality risk. Used regularly, the device could potentially save 10,000 lives each year in the US alone.8

REFERENCES

Join us for an educational dinner symposium

7:00 to 9:30 PM • Wednesday, February 12, 2014

The SWIFT PRIME and CLOTS 3 Studies:
Advancing Systems of Care and Treatment of Acute Ischemic Stroke

During this scientific session, leading surgeons will discuss the latest data in improving outcomes and reducing mortality associated with Acute Ischemic Stroke, and the importance of optimizing randomized-trial patient enrollment for rigorous results. A discussion with distinguished panelists will follow.

Please arrive early to this special event, as seating is limited.

San Diego Marriott Marquis and Marina
Marina Ballroom, Salons F–G
San Diego, California

Visit us at booth #535 during ISC to learn how Covidien is committed to stroke treatment through clinical evidence.
Science & Technology Exhibit Hall: Explore this must-see destination

Join us in AHA/ASA Headquarters, Booth 241

Wednesday
10–11:00 a.m.
Does your Hospital Have What It Takes?
Test your knowledge by joining the American Heart Association/American Stroke Association and The Joint Commission for an interactive session about Primary Stroke Center Certification and Comprehensive Stroke Center Certification.

11:10 a.m.–12:10 p.m.
Stroke Journal webinar: Stroke Risk Factors and their Management
Ralph Sacco, MD

Thursday
11:10–11:30 a.m.
Advocacy — A Year of Advocacy Successes: You’re the Cure
Laura Powell, Double Dutch

11:35 a.m.–12:15 p.m.
Education On-demand: LearnHeart.org
Michelle Brans, AHA

Professional Education

Tuesday
12:15–12:45 p.m.
SC Mobile Meeting Guide App demonstration
Learn tips on how to access all of the International Stroke Conference in the palm of your hand. Browse content and connect with others.

AHA/ASA Headquarters
241 17th Street NW, 2nd floor
Washington, DC 20006

WEB: aha.org

EXHIBITOR LIST
**National Institute of Neurological Disorders and Stroke (NINDS)**

1151 5th St., NW
Washington, DC 20823

**National Stroke Association**

9707 E. Easter Lane
Boca Raton, FL 33486

**Physicians for Patients (PFP)**

2082 Michelson Drive, suite 450
San Clemente, CA 92673

**NeuroOptics**

201 Nevins Street, suite 450
Irvine, CA 92612

**Healthcare Marketplace**

2501 E. Easter Ave.
Boca Raton, FL 33486

**StrokeCare into the Community**

233 Hospital Drive
Alpharetta, GA 30009

**Vitamin World**

2082 Michelson Drive, suite 450
San Clemente, CA 92673

**Stryker Neurovascular**

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Wayland, MA 01778

**World Stroke Organization**

1-3 Champier
Geneva 01111 Switzerland

**AHA, ASA Headquarters**

1650 Eye Street, NW
Washington, DC 20006

**American Academy of Neurology**

1222 K Street, NW
Washington, DC 20005

**American Heart Association**

7272 Greenville Avenue
Dallas, TX 75231

**American Thoracic Society**

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Washington, DC 20036

**North America, Inc.**

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**Philips Medical Systems**

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Wayland, MA 01778

**Telespecialists, LLC**

2510 Corporate Parkway
Wayland, MA 01778

**ISC 2014 Unofficial Satellite Events**

**Wednesday, 7–9:30 a.m.**

**Diagnosis and Management of Atrial Fibrillation: Working Together to Reduce Ischemic Stroke Risk**

Hilton San Diego Bayfront, Indigo AB
Ballroom, Level 2
Sponsored and Supported by Boehringer Ingelheim Pharmaceuticals Inc.

**Integrating Stroke Care into the Cardiovascular Continuum**

San Diego Marriott Marquis & Marina, San Diego Balboa A
Sponsored by Massachusetts General Hospital, Institute for Heart, Vascular and Stroke Care and Post Graduate Institute for Medicine

**7–9:30 a.m.**

**Integrating Stroke Care into the Cardiovascular Continuum**

San Diego Marriott Marquis & Marina, San Diego Balboa A
Sponsored and Supported by Boehringer Ingelheim Pharmaceuticals Inc. & Medtronic

**Thursday, 6:30 p.m.**

**Update on Blood Pressure Management**

San Diego Marriott Marquis & Marina, San Diego Balboa B
Sponsored and Supported by The Medicines Company

**EXHIBITOR PRODUCT & RESOURCE SECTION**

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<thead>
<tr>
<th>Booth Number</th>
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<tbody>
<tr>
<td>219</td>
<td>Telespecialists, LLC</td>
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**EXHIBIT HALL MAP**

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<td>Public Service</td>
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| H. Lundbeck A/S | 115 |
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| Vascular and Stroke | 526 |
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Poster Tours, Sessions kick off today

SC 2014 offers two types of poster sessions: professor-led poster tours and one-on-one individual Q&A poster presentations. Choose from 10 Professor-Led Poster Tours from 5:15 to 6:15 p.m. Wednesday in Hall G. Expert moderators will lead these tours, which are organized by category; they provide a short presentation and Q&A with each of the poster authors in that section. To take part, simply review the Poster Abstracts section of the Final Program (page 48). Decide which section/category of posters you would like to attend. Then, at 5:10 p.m., arrive at the correspondingly numbered “Section” sign for your selected section/category.

During the Regular Poster Sessions, poster presenters will be at their posters for informal Q&As with attendees from 6:15 to 6:45 p.m. today in Hall G. These one-on-one posters are not a part of the earlier Professor-Led Poster Tours. To see the posters featured in Wednesday’s Regular Poster Sessions, go to page 55 of the Poster Abstracts section of the Final Program.

Posters also will be available for viewing in the Poster Hall (Hall G) from 8 a.m. to 6:45 p.m. Wednesday and Thursday. See Thursday’s Stroke News for details on Thursday’s Professor-Led Poster Tours and Regular Poster Sessions.

Please see page 47 of the Final Program for the Poster Hall map.

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Stroke quality campaign reaches major milestone

Stroke quality improvement campaign to get faster clot-busting treatment to ischemic stroke patients. The campaign, launched in February 2010, has reached its goal of ensuring at least 50 percent of eligible stroke patients treated nationwide receive IV tPA in 60 minutes or less.

Target: Stroke provides health care professionals with 10 best practice strategies for reducing door-to-needle times aimed at better patient outcomes. Nearly 1,500 hospitals across the country are now registered with Target: Stroke, and about 400 of those have achieved Honor Roll status for consistently meeting the best practice criteria of the campaign. AHA/ASA will recognize these hospitals during special events held at the International Stroke Conference this week.

Find Target: Stroke hospitals near you at heart.org/myhealthcare. Learn more about the campaign at strokeassociation.org/target-stroke.

Thomas G. Liman, MD, MSc, a researcher at the Center for Stroke Research at Charité University in Berlin, will discuss a study of the use of advanced life-support ambulances with telemedicine capabilities to manage acute stroke patients in the prehospital period.

“We need to learn whether advanced telemedicine video and audio technology, allowing stroke assessments to begin in the ambulance, can actually help patients by facilitating earlier interventions or earlier neurologic assessments by virtual acute stroke team presence in the field,” Silbergleit said.

Preliminary results showed that the patients were given thrombolytics 25 minutes sooner in the field than in an emergency department.

SLEEP APNEA

continued from page 1

for Sleep and Circadian Neurobiology in Philadelphia, will talk about the neurobiology and neuropsychophysiology of obstructive sleep apnea. Her research laboratory focuses on metabolic injury to wake-active neurons and neural injury incurred by hypoxia and re-oxygenation related to obstructive sleep apnea.

Antonio Culebras, MD, professor of neurology at the State University of New York at Stony Brook, will discuss the clinical aspects of obstructive sleep apnea and cerebral cognitive impairment.

“Uncontrolled obstructive sleep apnea may cause refractory hypertension, arrhythmias and heart failure, all of which may act as intermediate risk factors for stroke, so clinicians need to diagnose and treat sleep apnea in stroke practice,” Chernyshov said. “Recent feasibility trials have shown that treating sleep apnea in acute stroke setting can improve stroke recovery and outcomes.”

Thanks to supporters of ISC 2014

The American Stroke Association would like to acknowledge the following company for its generous educational grant in support of the International Stroke Conference 2014 education programming:
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1. Stop by the Communication Center, which is located in the Hall F Lobby, Ground Level of the San Diego Convention Center.
2. Visit learn.heart.org from any computer with Internet connection.

International attendees may obtain an attendance verification form at one of the self-service terminals in Registration.

ISC 2014 abstract categories

• Acute Endovascular Treatment
• Acute Neuroimaging
• Acute Nonendovascular Treatment
• Aneurysm
• Basic and Preclinical Neuroscience of Stroke Recovery
• Cerebral Large Artery Disease
• Clinical Rehabilitation and Recovery
• Community/Risk Factors
• Diagnosis of Stroke Etiology
• Emergency Care/Systems
• Experimental Mechanisms and Models
• In-hospital Treatment
• Intracerebral Hemorrhage
• Nursing
• Outcomes, Quality and Health Services Research
• Pediatric Stroke
• Preventive Strategies
• SAH and Other Neurocritical Management
• Vascular Biology in Health and Disease
• Vascular Cognitive Impairment
• Vascular Malformations
• Ongoing Clinical Trials

RECANALISATION

continued from page 1

Bruce Orbiagile, MD, MSc, co-moderator of the session and professor and chairman of neurology at the Medical University of South Carolina in Charleston, Bo Norrving, MD, PhD, professor of neurology at Lund University in Switzerland, is co-moderator.

About one-third of ischemic strokes occur in people 80 years old and older. Some of the patients often have several chronic medical conditions and are on many different medications. Relatively little clinical trial evidence is available on the best way to manage patients in this age range compared to their younger counterparts.

“The goals of this symposium are to encourage stroke clinicians to strongly consider very elderly patients for intravenous thrombolytic treatment, try to discriminate potential treatment response, properly manage medical comorbidities and appropriately relay the risks and benefits of treatment and the patient’s prognosis to the patients themselves and their family,” Orbiagile said.

“Mounting evidence suggests that these patients benefit from intravenous thrombolysis. Risk calculators may assist clinicians in discriminating treatment responses and predicting extent of recovery after the stroke,” he said.

Four experts’ case-based talks will cover key issues that arise when clinicians consider a therapeutic approach to acute ischemic stroke in this patient population.

S Testament

Gene Knudtzon, MD, PhD, associate professor of medicine and director of the Stroke Center at the University of Texas Southwestern Medical Center in Dallas, will discuss the development of preclinical stroke models. The use of animal models is essential in the preclinical evaluation of potential new therapies for stroke.

“Experimental models of ischemic stroke serve two purposes: they serve as proof of concept for an intervention and they allow us to test potential therapies in a controlled manner,” Knudtzon said. “While preclinical stroke models have been undergoing many advances, the accuracy of these models in predicting clinical outcomes is limited.”

Gary A. Ford, MBBCChir, an honorary consultant physician in stroke medicine, clinical director of research and development and Jacobson chair of clinical pharmacology at Newcastle University, Newcastle Upon Tyne in the United Kingdom, will discuss the impact of comorbidities and frailty on acute stroke outcomes.

Richard Lindley, MBBS, MD, professor of geriatric medicine at the University of Sydney Medical School in Australia, will address intravenous thrombosis in the very elderly. His research focus has been in large-scale clinical trials in vascular disease and aged-care medicine, with an emphasis on stroke.

Albert J. Yoo, MD, assistant professor of radiology at the Harvard Clinical and Translational Science Center and Massachusetts General Hospital in Boston, will discuss the potential role of thrombectomy in treating acute ischemic stroke in the very elderly. His research interests include endovascular stroke therapy, stroke imaging, aneurysm treatment and embolization for arteriovenous malformations.

Gustavo Saposnik, MD, associate professor of medicine at St. Michael’s Hospital, University of Toronto in Canada, will describe ways to assess the individual risk and benefits of acute therapies in the very elderly with the goal of optimizing outcomes. His research focuses on the delivery of stroke care and improving recovery from a stroke.

Grant submission deadline...

The American Stroke Association is accepting grant submissions through March 1, 2014 for the 2015 American Stroke Association International Stroke Conference.

The Conference is the premier forum for translational and clinical research in stroke and cerebrovascular disease.

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