



This article contains online supplementary information that is available at <http://www.stroke.ahajournals.org>

Editorial

Plus Ça Change . . .

Stephen Oppenheimer, MD, PhD 249

Advances in Stroke 2007

Advances in Stroke 2007: Introduction

Marc Fisher, MD 250

Update on the Genetics of Stroke and Cerebrovascular Disease 2007

Robert A. Hegele, MD, FRCPC, FACP; Martin Dichgans, MD 252

Advances in Emerging Therapies 2007

Terence J. Quinn, MRCP; Kennedy R. Lees, MD, FRCP 255

Advances in Prevention and Health Services Delivery 2007

Larry B. Goldstein, MD, FAAN, FAHA; Peter M. Rothwell, MD, PhD 258

Advances in Critical Care and Emergency Medicine 2007

Stephan A. Mayer, MD, FCCM; Stefan Schwab, MD 261

Advances in Health Policy 2007

Renée F. Lyons, PhD; Anthony G. Rudd, FRCP(Lond); Celeste Alvaro, PhD 264

Advances in Interventional Neuroradiology 2007

David M. Pelz, MD, FRCPC; Elad I. Levy, MD; L. Nelson Hopkins, MD 268

Advances in Stroke Regenerative Medicine 2007

Lalit Kalra, MD, PhD; Rajiv R. Ratan, MD, PhD 273

Advances in Imaging 2007

A. Gregory Sorensen, MD; Wolf-Dieter Heiss, MD 276

Advances in Vascular Cognitive Impairment 2007

Philip B. Gorelick, MD, MPH, FACP; John V. Bowler, MBBS, MD, FRCP 279

Advances in Population Studies 2007

George Howard, DrPH; Valery Feigin, PhD 283

Advances in Neuronal Cell Death 2007

Maged M. Harraz, MD, PhD; Ted M. Dawson, MD, PhD; Valina L. Dawson, PhD 286

Advances in Emerging Nondrug Therapies for Acute Stroke 2007

Aneesh B. Singhal, MD; Eng H. Lo, PhD 289

Original Contributions

Stroke Awareness in Brazil: Alarming Results in a Community-Based Study

Octávio Marques Pontes-Neto, MD; Gisele Sampaio Silva, MD, PhD; Marley Ribeiro Feitosa, MD; Nathalie Lôbo de Figueiredo, MD; José Antonio Fiorot, Jr, MD; Talitha Nery Rocha; Ayrton Roberto Massaro, MD, PhD; João Pereira Leite, MD, PhD 292

Rapid Identification of High-Risk Transient Ischemic Attacks: Prospective Validation of the ABCD Score <i>Rossella Sciolla, MD; Fabio Melis, MD; for the SINPAC Group</i>	297
Role of Promoter Polymorphisms in the Plasma Glutathione Peroxidase (GPx-3) Gene as a Risk Factor for Cerebral Venous Thrombosis <i>Barbara Voetsch, MD, PhD; Richard C. Jin, BS; Charlene Bierl, MD, PhD; Leonardo Deus-Silva, MD; Erica C.S. Camargo, MD, PhD; Joyce M. Annichino-Bizacchi, MD, PhD; Diane E. Handy, PhD; Joseph Loscalzo, MD, PhD</i>	303
The Cerebral Vasculopathy of PHACES Syndrome <i>Geoffrey L. Heyer, MD; Michael M. Dowling, MD, PhD; Daniel J. Licht, MD; Stacey Kiat-Hong Tay, MBBS; Kimberly Morel, MD; Maria C. Garzon, MD; Philip Meyers, MD</i>	308
Neurological Signs in Relation to Type of Cerebrovascular Disease in Vascular Dementia <i>Salka S. Staekenborg, MD; Wiesje M. van der Flier, PhD; Elisabeth C.W. van Straaten, MD; Roger Lane, MD; Frederik Barkhof, MD, PhD; Philip Scheltens, MD, PhD</i>	317
Association of Adiponectin With Cerebrovascular Disease: A Nested Case–Control Study <i>Masatoshi Matsumoto, MD; Shizukiyo Ishikawa, MD; Eiji Kajii, MD</i>	323
Risk Factor Associations With the Presence of a Lipid Core in Carotid Plaque of Asymptomatic Individuals Using High-Resolution MRI: The Multi-Ethnic Study of Atherosclerosis (MESA) <i>Bruce A. Wasserman, MD; A. Richey Sharrett, MD, DrPH; Shenghan Lai, MD, PhD; Antoinette S. Gomes, MD; Mary Cushman, MD, MSc; Aaron R. Folsom, MD, MPH; Diane E. Bild, MD, MPH; Richard A. Kronmal, PhD; Shantanu Sinha, PhD; David A. Bluemke, MD, PhD</i>	329
Cerebrovascular Responses to Hypoxia and Hypocapnia in Ethiopian High Altitude Dwellers <i>Victoria E. Claydon, PhD; Giosué Gulli, MD, PhD; Marat Slessarev, MSc; Otto Appenzeller, MD, PhD; Guta Zenebe, MD; Amha Gebremedhin, MD; Roger Hainsworth, MB, PhD, DSc</i>	336
Predicting Stroke Risk in Hypertensive Patients With Coronary Artery Disease: A Report From the INVEST <i>Antonio Coca, MD; Franz H. Messerli, MD; Athanase Benetos, MD, PhD; Qian Zhou, PhD; Annette Champion, MBA; Rhonda M. Cooper-DeHoff, PharmD; Carl J. Pepine, MD</i>	343
Abnormal Regional Cerebral Blood Flow in Cognitively Normal Elderly Subjects With Hypertension <i>Weiyang Dai, PhD; Oscar L. Lopez, MD; Owen T. Carmichael, PhD; James T. Becker, PhD; Lewis H. Kuller, MD; H. Michael Gach, PhD</i>	349
Early Neutrophilia Is Associated With Volume of Ischemic Tissue in Acute Stroke <i>Brian H. Buck, MD; David S. Liebeskind, MD; Jeffrey L. Saver, MD; Oh Young Bang, MD, PhD; Susan W. Yun, BSc; Sidney Starkman, MD; Latisha K. Ali, MD; Doojin Kim, MD; J. Pablo Villablanca, MD; Noriko Salamon, MD; Tannaz Razinia, BSc; Bruce Ovbiagele, MD</i>	355
A Systematic Review of Outcomes in Patients With Staged Carotid Artery Stenting and Coronary Artery Bypass Graft Surgery <i>Luis A. Guzman, MD; Marco A. Costa, MD, PhD; Dominick J. Angiolillo, MD, PhD; Martin Zenni, MD; Peter Wludyka, PhD; Scott Silliman, MD; Theodore A. Bass, MD</i>	361
Association of Characteristics of Blood Pressure Profiles and Stroke Outcomes in the ECASS-II Trial <i>Mei Yong, PhD, MSc(Epi); Markku Kaste, MD, PhD, FAHA, FESC</i>	366
Middle Cerebral Artery Infarcts Encompassing the Insula Are More Prone to Growth <i>Hakan Ay, MD; E. Murat Arsava, MD; Walter J. Koroshetz, MD; A. Gregory Sorensen, MD</i>	373
Comparison of Intraarterial and Intravenous Thrombolysis for Ischemic Stroke With Hyperdense Middle Cerebral Artery Sign <i>Heinrich P. Mattle, MD; Marcel Arnold, MD; Dimitrios Georgiadis, MD; Christian Baumann, MD; Krassen Nedeltchev, MD; David Benninger, MD; Luca Remonda, MD; Christian von Büdingen, MD; Anca Diana, MS; Athina Pangalu, MD; Gerhard Schroth, MD; Ralf W. Baumgartner, MD</i>	379
Treatment of Hyperglycemia In Ischemic Stroke (THIS): A Randomized Pilot Trial <i>Askiel Bruno, MD; Thomas A. Kent, MD; Bruce M. Coull, MD; Ravi R. Shankar, MD; Chandan Saha, PhD; Kyra J. Becker, MD; Brett M. Kissela, MD; Linda S. Williams, MD</i>	384
A Very Early Rehabilitation Trial for Stroke (AVERT): Phase II Safety and Feasibility <i>Julie Bernhardt, PhD; Helen Dewey, PhD; Amanda Thrift, PhD; Janice Collier, PhD; Geoffrey Donnan, MD</i> ..	390

Subcortical Lacunes Are Associated With Executive Dysfunction in Cognitively Normal Elderly <i>Catherine L. Carey, PhD; Joel H. Kramer, PsyD; S. Andrew Josephson, MD; Dan Mungas, PhD; Bruce R. Reed, PhD; Norbert Schuff, PhD; Michael W. Weiner, MD; Helena C. Chui, MD</i>	397
Cognitive Outcome at Early School Age in Term-Born Children With Perinatally Acquired Middle Cerebral Artery Territory Infarction <i>Daniela Ricci, MD; Eugenio Mercuri, MD; Anna Barnett, PhD; Rachel Rathbone, MSc; Francesco Cota, MD; Leena Haataja, MD; Mary Rutherford, FRCR; Lilly Dubowitz, MD; Frances Cowan, PhD</i>	403
Factors Associated With the Decision to Hospitalize Patients After Transient Ischemic Attack Before Publication of Prediction Rules <i>S. Andrew Josephson, MD; Stephen Sidney, MD, MPH; Trinh N. Pham, MA; Allan L. Bernstein, MD; S. Claiborne Johnston, MD, PhD</i>	411
Medical Complications in a Comprehensive Stroke Unit and an Early Supported Discharge Service <i>Bent Indredavik, MD, PhD; Gitta Rohweder, MD; Eirik Naalsund, RN; Stian Lydersen, PhD</i> CME	414
Temporal Thresholds for Infarction and Hypothermic Protection in Long-Evans Rats: Factors Affecting Apparent ‘Reperfusion Injury’ After Transient Focal Ischemia <i>Megumi Hashimoto, MD, PhD; Liang Zhao, MD, PhD; Thaddeus S. Nowak, Jr, PhD</i>	421
Identification of Variations in Blood-Brain Barrier Opening After Cerebral Ischemia by Dual Contrast-Enhanced Magnetic Resonance Imaging and T_{1sat} Measurements <i>Tavarekere N. Nagaraja, PhD; Kishor Karki, MS; James R. Ewing, PhD; Richard L. Croxen, MS; Robert A. Knight, PhD</i>	427
Intravenous Rosuvastatin for Acute Stroke Treatment: An Animal Study <i>Vincent Prinz, MD; Ulrich Laufs, MD; Karen Gertz, MD; Golo Kronenberg, MD; Mustafa Balkaya, MSc; Christoph Leithner, MD; Ute Lindauer, DVM; Matthias Endres, MD</i>	433
Functional MRI of Delayed Chronic Lithium Treatment in Rat Focal Cerebral Ischemia <i>Young R. Kim, PhD; Maurits P.A. van Meer, MD; Emiri Tejima, MD, PhD; Yoshi Murata, MD; Joseph B. Mandeville, PhD; George Dai, PhD; De-Maw Chuang, PhD; Bruce R. Rosen, MD, PhD; Eng H. Lo, PhD</i>	439
Effects of Magnesium Treatment in a Model of Internal Capsule Lesion in Spontaneously Hypertensive Rats <i>Clotilde Lecrux, PhD; Christopher McCabe, PhD; Christopher J. Weir, PhD; Lindsay Gallagher, HNC; Jim Mullin, HNC; Omar Touzani, PhD; Keith W. Muir, MD; Kennedy R. Lees, MD; I. Mhairi Macrae, PhD</i> ...	448
Nortriptyline Protects Mitochondria and Reduces Cerebral Ischemia/Hypoxia Injury <i>Wen-hua Zhang, MD; Hongyan Wang, PhD; Xin Wang, PhD; Malini V. Narayanan, MD; Irina G. Stavrovskaya, PhD; Bruce S. Kristal, PhD; Robert M. Friedlander, MD, MS</i>	455
Edaravone Attenuates Brain Edema and Neurologic Deficits in a Rat Model of Acute Intracerebral Hemorrhage <i>Takehiro Nakamura, MD, PhD; Yasuhiro Kuroda, MD, PhD; Susumu Yamashita, MD; Xia Zhang, MD, PhD; Osamu Miyamoto, MD, PhD; Takashi Tamiya, MD, PhD; Seigo Nagao, MD, PhD; Guohua Xi, MD; Richard F. Keep, PhD; Toshifumi Itano, PhD</i>	463

Research Letters

No Association of <i>PLIN</i> Polymorphisms With Hemorrhagic and Ischemic Stroke <i>Weihua Song, MD; Jingzhou Chen, PhD; Kai Sun, PhD; Hui Yu, MS; Rutai Hui, MD, PhD</i>	470
The Effect of Activated Factor VII for Intracerebral Hemorrhage Beyond 3 Hours Versus Within 3 Hours <i>Hen Halleivi, MD; Nicole R. Gonzales, MD; Andrew D. Barreto, MD; Sheryl Martin-Schild, MD, PhD; Karen C. Albright, DO, MPH; Elizabeth A. Noser, MD; Kachi Illoh, MD; Aslam M. Khaja, MD; Teresa Allison, PharmD; Miguel A. Escobar, MD; Hashem M. Shaltoni, MD; James C. Grotta, MD</i>	473
Lack of Evidence for Arterial Ischemia in Transient Global Amnesia <i>Manuel Toledo, MD, PhD; Francesc Pujadas, MD; Elisenda Grivé, MD; José Álvarez-Sabin, MD, PhD; Manuel Quintana; Alex Rovira, MD</i>	476

Serial Electrocardiographic Assessments Significantly Improve Detection of Atrial Fibrillation 2.6-Fold in Patients With Acute Stroke <i>Andre G. Douen, MD, PhD, FRCPC; Nicole Pageau, RN, BSc; Sejla Medic, RN</i>	480
Diffusion-Weighted Imaging in Stroke Attributable to Internal Carotid Artery Dissection: The Significance of Vessel Patency <i>Leo H. Bonati, MD; Stephan G. Wetzel, MD; Joubin Gandjour, MD; Ralf W. Baumgartner, MD; Philippe A. Lyrer, MD; Stefan T. Engelter, MD</i>	483
Tight Link Between Our Sense of Limb Ownership and Self-Awareness of Actions <i>Bernhard Baier, MD, PhD; Hans-Otto Karnath, MD, PhD</i>	486
Posturography in Patients With Stroke: Estimating the Percentage of Body Weight on Each Foot From a Single Force Platform <i>Nicolas Genthon, PhD; Anne-Sophie Gissot, PT, PhD; Jérôme Froger, MD; Patrice Rougier, PhD; Dominic Pérennou, MD, PhD</i>	489

Case Reports

Global Hemispheric CT Hypoperfusion May Differentiate Headache With Associated Neurological Deficits and Lymphocytosis From Acute Stroke <i>Jacqueline A. Pettersen, MD, MSc, FRCPC; Richard I. Aviv, MBChB, FRCR(UK); Sandra E. Black, MD, FRCPC; Allan J. Fox, MD, FRCPC; Andrew Lim, MD; Brian J. Murray, MD, FRCPC</i> ..	492
Preferred Involvement of the Basal Ganglia After Lenticulostriate Infarction as a Possible Indicator of Different Gray and White Matter Vulnerability <i>Yoshinari Nagakane, MD, PhD; Kei Yamada, MD, PhD; Tomoyuki Ohara, MD; Kenji Yoshikawa, MD, PhD; Nagato Kuriyama, MD, PhD; Natsuko Takayasu, MD; Takashi Kasai, MD; Natsuko Yuki, MD; Tsunehiko Nishimura, MD, PhD; Toshiki Mizuno, MD, PhD; Masanori Nakagawa, MD, PhD</i>	494

Progress Reviews

Statin Treatment and the Occurrence of Hemorrhagic Stroke in Patients With a History of Cerebrovascular Disease <i>Mervyn D.I. Vergouwen, MD; Rob J. de Haan, PhD; Marinus Vermeulen, MD, PhD; Yvo B.W.E.M. Roos, MD, PhD</i>	497
Occurrence and Clinical Impact of Microembolic Signals During or After Cardiosurgical Procedures <i>Ralf Dittrich, MD; E. Bernd Ringelstein, MD</i>	503

Cochrane Corner

Mannitol for Acute Stroke <i>Dániel Bereczki, MD, PhD, DSc; Ming Liu, MD; Gilmar Fernandes do Prado, MD, PhD; István Fekete, MD, PhD</i>	512
Calcium Antagonists for Aneurysmal Subarachnoid Hemorrhage <i>Sanne M. Dorhout Mees, MD; Gabriel J.E. Rinkel; Valery L. Feigin, MD, MSc, PhD; Ale Algra, MD; Walter M. van den Bergh, MD, PhD; Marinus Vermeulen, MD; Jan van Gijn, MD, FRCP, FRCP(E)</i>	514
Effectiveness of Memory Rehabilitation After Stroke <i>Roshan das Nair, BA, MSc, MPhil (Clin Psychol); Nadina Lincoln, BSc, MSc, PhD</i>	516
Acupuncture for Stroke Rehabilitation <i>Hongmei Wu, PhD; Jinling Tang, PhD; Xiaoping Lin, MD; Joseph Lau, PhD; Ping C. Leung, PhD; Jean Woo, PhD; Youping Li, PhD</i>	517
Physiotherapy Treatment Approaches for Stroke <i>Alex Pollock, PhD, MCSP; Gillian D. Baer, BSc, MCSP; Peter Langhorne, PhD, MRCP; Valerie M. Pomeroy, PhD, MCSP</i>	519

Controversies in Stroke

Research Into Neuroprotection Must Continue . . . but With a Different Approach <i>Muhammad S. Hussain, MD; Ashfaq Shuaib, MD</i>	521
Neuroprotection Does Not Work! <i>Joachim Röther</i>	523
Neuroprotection: Still Achievable in Humans <i>Geoffrey A. Donnan, MD, FRACP; Stephen M. Davis, MD, FRACP</i>	525

Letters to the Editor

Transforming Guidelines in Routine Practice <i>Maria Luisa Sacchetti, PhD; Danilo Toni, MD; Massimiliano Prencipe, PhD</i> Web Site Feature	★e22
Response to Letter by Sacchetti et al <i>Harold P. Adams, Jr, MD</i> Web Site Feature	★e23
Can Patients With Atrial Fibrillation Be Optimally Risk Stratified for Stroke and Thromboembolism? <i>Jaspal S. Taggar, MRCP; Timothy Watson, MRCP; Gregory Y.H. Lip, MD</i> Web Site Feature	★e24–e25
Response to Letter by Taggar et al <i>Lawrence Baruch, MD; Brian Gage, MD; Jay Horrow, MD</i> Web Site Feature	★e26
Stent-Assisted Endovascular Thrombolysis Versus Intravenous Thrombolysis in Internal Carotid Artery Dissection With Tandem Internal Carotid and Middle Cerebral Artery Occlusion <i>Ralf W. Baumgartner, MD; Dimitrios Georgiadis, MD; Krassen Nedeltchev, MD; Gerhard Schroth, MD; Hakan Sarikaya, MD; Marcel Arnold, MD</i> Web Site Feature	★e27–e28
Statistical Error in Interpretation of Aneurysm Coil Results <i>Harry J. Cloft, MD, PhD; David F. Kallmes, MD</i> Web Site Feature	★e29
Response to Letter by Cloft and Kallmes <i>Andreas J. Bartsch, MD; Christian F. Beckmann, DPhil; László Solymosi, MD; Martin Bendszus, MD</i> Web Site Feature	★e30–e31
The Relationship Between Leptin:Adiponectin Ratio and Carotid Intima-Media Thickness in Asymptomatic Females <i>Kazuhiko Kotani, MD, PhD; Hisashi Shimohiro, BSc; Naoki Sakane, MD, PhD</i> Web Site Feature	★e32–e33
Response to Letter by Kotani et al <i>Giuseppe D. Norata, PhD; Paolo Magni, MD, PhD; Alberico L. Catapano, PhD</i> Web Site Feature	★e34
Perinatal Stroke With No Obvious Cause <i>Péter Temesvári, MD, PhD, DSc</i> Web Site Feature	★e35
Response to Letter by Temesvári <i>Tuuli Metsvaht, MD; Rael Laugesaar, MD; Anneli Kolk, PhD; Tiina Talvik, PhD</i> Web Site Feature	★e36–e37
Vertebral Artery Occlusion After Chemotherapy <i>Guillermina García Martín, MD; Susana Puerta Fernández, MD; Vicente Serrano Castro, MD; Omar Hamad Cueto, MD; Manuel Romero Acebal, MD</i> Web Site Feature	★e38
Response to Letter by García Martín et al <i>Daniel Periard, MD; Stephan Eyer, MD; Chantal M. Boulanger, PhD; Mahmut Ozsahin, MD, PhD; Daniel Hayoz, MD</i> Web Site Feature	★e39
To FAST or Not to FAST: SHOUT-FAST! <i>Alberto Chiti, MD; Elisa Giorli, MD; Giovanni Orlandi, MD</i> Web Site Feature	★e40–e41
Mobile Message for a Better Stroke Recognition: the New Concept of National Campaign <i>Je Sung You, MD; Saehwan Park, MD; Sung Pil Chung, MD, PhD</i> Web Site Feature	★e42
Response to Letters by Chiti et al and You et al <i>Dawn O. Kleindorfer, MD</i> Web Site Feature	★e43

Diagnosis of Right-to-Left Shunt: Possible Alternative Approaches

Bijan Vatankhah, MD; Birte Mesche, MD; Rüdiger Körber, MD; Henning Stolze, MD **Web Site Feature** ★e44

Response to Letter by Vatankhah et al

Massimo Del Sette, MD; Lavinia Dinia, MD; Carlo Gandolfo, MD **Web Site Feature** ★e45

Splinting Poststroke: the Jury Is Still Out

Jeno E. Marossezky, MBBS; Joseph A. Gurka, MBBS; Ian J. Baguley, MBBS **Web Site Feature** ★e46

Response to Letter by Marossezky et al

*Natasha Lannin, PhD; Annie McCluskey, PhD; Robert Herbert, PhD;
Anne Cusick, PhD* **Web Site Feature** ★e47

The Impact of Intensity of Aphasia Therapy on Recovery

Robert C. Marshall, PhD **Web Site Feature** ★e48

Response to Letter by Marshall

*Sanjit K. Bhogal, MSc, PhD (candidate); Norine Foley, MSc; Robert Teasell, MD;
Mark Speechley, PhD* **Web Site Feature** ★e49

Targeting Stroke Awareness Public Campaigns

*Maria Luisa Sacchetti, PhD; Maria Teresa Di Mascio, MD; Giordana Pelone, MD; Valentina Gallo, MD;
Massimiliano Prencipe, PhD* **Web Site Feature** ★e50

Abstracts From the 2008 International Stroke Conference 527

Abstracts From the 2008 State-of-the-Art Stroke Nursing Symposium 731

Major Ongoing Stroke Trials **Web Site Feature** ★e51–e60

On the cover: Cover image created by Dr Carolina Maier and artist Cameron Slayden for the 2008 Thomas Willis Lecture to be presented at the International Stroke Conference sponsored by the American Stroke Association (a Division of the American Heart Association). The Conference will be held February 20–22, 2008, in New Orleans, Louisiana.