

Neurotrauma & Critical Care NEWS



August 1999

AANS/CNS Section on Neurotrauma & Critical Care

Editor: Michael G. Fehlings, MD, PhD

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Chairman's Message



Brian T. Andrews,
MD, FACS

A survey recently distributed by the California Association of Neurological Surgeons (CANS) reviewed the emergency room on-call situation for practicing neurosurgeons in California. Several interesting outcomes were identified that are

useful for all of us as we make future arrangements with our own emergency rooms.

The recent changes in the EMTALA (Cobra) laws requiring that ERs have daily staffing by a neurosurgeon has had an effect on ER transfers—more patients are being transferred to hospitals where such designated staffing is available. Up to half of the neurosurgeons polled, provide ER coverage under written contract, with an average of 42 percent receiving a financial incentive to do so. This is most often by way of an on-call stipend, which averages over \$900 per day (range \$165-\$2,000).

In the vast majority of cases, it is the hospital that desires the neurosurgical coverage that pays this reimbursement. In fact, in

16 percent of the cases, the hospital also pays for the neurosurgeon's malpractice insurance as part of the incentive to provide coverage.

It is clear that across the country readily available neurosurgical ER coverage is among the most important to have, and is the most difficult to achieve. I believe that reimbursement for on-call availability is one way to solve this crisis.

By establishing a reimbursement protocol, neurosurgeons who are willing to cover ERs are paid to do so, and obligated to offer proper coverage. Those neurosurgeons who do not want to participate forgo the reimbursement. I believe that there is a trend toward more neurosurgeons being justly compensated for ER coverage, particularly in hospitals that are designated trauma centers.

For those neurosurgeons interested in altering their arrangement with their hospital emergency rooms, use the CANS survey to your advantage. The survey can be found in the CANS Newsletter Vol. 24, No. 2.

With kindest personal regards,

Brian T. Andrews, MD, FACS

New Resident Research Awards

The Executive Committee of the AANS/CNS Section on Neurotrauma and Critical Care and Synthes (Spine and Maxillofacial Divisions) are pleased to announce the creation of two new awards: 1) Synthes Award for Resident Research on Spinal Cord and Spinal Column Injury, and 2) Synthes Award for Resident Research on Brain and Craniofacial Injury. The awards, which will recognize an outstanding resident for his or her research in spinal and cranial neurotrauma, will be presented at both the AANS and CNS Annual Meetings.

The Trauma Section's Executive Committee wishes to acknowledge the support of Tom Higgins (President, Synthes Spine), Kevin Carouge (President, Synthes Maxillofacial) and Paul Gordon (Manager, Neurosurgery Market Development, Synthes) in creating these awards that recognize and support outstanding resident research in neurotrauma.

For more information regarding the awards, please contact Michael G. Fehlings, MD, PhD, AANS/CNS Section on Neurotrauma and Critical Care Secretary/Treasurer, via e-mail at mfehlings@torhosp.toronto.on.ca.

Neurotrauma and Critical Care Section Highlights at the CNS Annual Meeting

Saturday, October 30, 1999 Practical Courses

1–5 PM

020 Pediatric Traumatic CNS Injury and Critical Care

Course Directors: *Brian T. Andrews, P. David Adelson*
Faculty: *Ann-Christine Dubaime, John Ragheb,
Thomas G. Luerssen, Douglas L.
Brockmeyer, Harvey S. Levin*

Sunday, October 31, 1999 Practical Courses

8 AM–12 PM

034 Critical Care—Neurotrauma

Course Directors: *Brian T. Andrews, Alex B. Valadka*
Faculty: *Perry A. Ball, M. Ross Bullock, John L. D.
Atkinson*

1–5 PM

044 Critical Care—Acute Stroke/Neurovascular

Course Directors: *Brian T. Andrews, Joshua B. Bederson*
Faculty: *Lee Schwamm, Howard Yonas*

Monday, November 1, 1999 Luncheon Seminars

12–2 PM

114/114R Current and Emerging Technologies for Monitoring Head-Injured Patients

Moderator: *M. Ross Bullock*
Faculty: *Alex B. Valadka, Jamie S. Ullman, David
M. McKalip, Donald W. Marion, Howard
Yonas*

119/119R Neurosurgical Management of Athletic Injuries

Moderator: *Joseph C. Maroon*
Faculty: *G. Robert Nugent, Donald P. Becker,
John E. McGillicuddy, Dennis G.
Vollmer, Julian E. Bailes, Jr.*

Tuesday, November 2, 1999 Luncheon Seminars

12–2 PM

216/216R Contemporary Management of Head Injury

Moderator: *Jack E. Wilberger, Jr.*
Faculty: *Daniel F. Kelly, Robert M. Friedlander,
Jeffrey M. Lobosky, Juan Sabuquillo*

Wednesday, November 3, 1999 Luncheon Seminars

12–2 PM

301/301R Current Management of Odontoid Fractures

Moderator: *Michael G. Fehlings*
Faculty: *Nevan G. Baldwin, Paul M. Arnold, John
A. Wilson, Jr., Christopher E. Wolflla,
Charles B. Stillerman*

317/317R Management of Penetrating CNS Injuries

Moderator: *Michael E. Carey*
Faculty: *Peter B. Letarte, Brian T. Andrews,
Michael Lee Levy, James M. Ecklund,
Martin C. Holland*

319/319R Pediatric Head Injury

Moderator: *John D. Ward*
Faculty: *Thomas G. Luerssen, Ann-Christine
Dubaime, P. David Adelson, Ann Marie
Flannery, Joseph V. Queenan*



Skyline from harbor. Photo courtesy of the Greater Boston Convention & Visitors Bureau.

Spotlight on the Trauma Section

Scientific Program

Monday, November 1, 1999 2–5:30 PM
Section on Neurotrauma and Critical Care I
Trauma Update

Moderators: *Michael J. Caron, Alex B. Valadka*



Open Papers

- 730. Prolonged Prostaglandin E2 Expression Following Spinal Cord Injury.**
Peter H. Nguyen, Daniel K. Resnick.
- 731. GMI Ganglioside Acute Spinal Cord Injury Study II: Efficacy and Safety.**
Fred H. Geisler, Giacinto Grieco, Frank C. Dorsey, Francesca Pataell, Devinder Poonian, Roberto Fiorentini.
- 732. Implantation of Autologous Stimulated Macrophages to Paraplegic Rats Leads to Partial Recovery of Motor Activity.**
Michal A. Schwartz, Orly Lazarov-Spiegler, Evgenia Agranov, Eti Yoles, Gad Velan, Matt Fraidakis, Michal Neeman.
- 733. Reduction of Traumatic Spinal Cord Injury by Inhibition of Caspases.**
Mingwei Li, Victor O. Ona, Philip E. Stieg, Robert M. Friedlander.
- 734. Dexanabol Phase II Trial—Management of ICP/ CPP in Severe Head Trauma Patients.**
Nachshon Knoller, Leon Levi, Zvi H. Israel, Nissim Razon, Eli Reichenthal, Zvi Harry Rappaport, Aviva Fridman, Noa Ebrefreund, Anat Biegon.
- 735. Regeneration of Transected Optic Nerve Axons in Vivo.**
Wai Pui Ng, Andres M. Lozano.
- 736. Does CPP Therapy Really Do What We Think It Does?**
Jordi X. Kellogg, Michael A. Horgan, Jonathan Martin, Randall M. Chesnut.
- 737. Human Polio Virus Replicon Vectors in a Murine Model of Spinal Cord Injury.**
Curtis J. Rozzelle, Charles S. Cobbs, Jean Peduzzi, Casey Morrow, Andrea Bledsoe.
- 738. Stimulation of Axonal Regeneration and Enhanced Survival of Retinal Ganglion Cells Following Optic Nerve Injury.**
Steven P. Leon, Jennifer Nguyen, Nina Irwin, Larry I. Benowitz.
- 739. Response of Amino Acid Neurotransmitters and Metabolites by APOE Genotype.**
Mary Kerr, Lynn Kraus, Donald W. Marion, Ava Puccio, Steven T. DeKosky, Ilyas Kambob, Joseph Lucke.

2–2:25 PM

Are Anticonvulsants Overused in Neurosurgery?

David W. Newell

2:25–2:50 PM

What MRI Can Tell Us About Cerebrovascular Injury: The Clot Thickens.

Michael Chopp

2:50–3:30 PM

Oral Posters

Michael J. Caron

Alex B. Valadka

3:30–4 PM

Coffee Break With Exhibitors

4–5:30 PM

Open Papers (730-739)

Michael J. Caron

Alex B. Valadka

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Spotlight on the Trauma Section

Continued from page 3

Scientific Program

Wednesday, November 3, 1999 2–5:30 PM
Section on Neurotrauma and Critical Care II
Sports Medicine: What Every Neurosurgeon Needs to Know

Moderators: *Martin C. Holland, Perry A. Ball*

2–2:25 PM Sports-Related Head Injury

Julian E. Bailes, Jr.

2:25–2:50 PM Sports-Related Spine and Spinal Cord Injury

Arthur L. Day

2:50–3:30 PM Oral Posters

Martin C. Holland

Perry A. Ball

3:30–4 PM Coffee Break With Exhibitors

4–5:30 PM Open Papers (823-831)

Martin C. Holland

Perry A. Ball

Open Papers

- 823. Helmets for Skiers and Snowboarders: Head Injury Prevention Through Intervention, a Pilot Program.**
Stewart Levy, Kelly Fulton, Kathy Shaver, Mary Bonville.
- 824. Evaluation of Ventriculoperitoneal Shunt Valve Effectiveness in Adults Using Intracranial Pressure Monitoring.**
Panayeotis Varelas, Romergryko G. Geocadin, Alex Y. Razumovsky, Maureen O'Brien, Daniel F. Hanley, Michael A. Williams.
- 825. Long-term Functional and Neuropsychological Outcomes Following Successful Treatment of Chronic Subdural Hematoma in the Elderly.**
Vikram C. Prabbu, Vincent J. Miele, Deborah Retting, Salli Lewis, Staci Robyn, Marc Haut, Barbara J. Holt, Joseph L. Voelker, Howard H. Kaufman.
- 826. Adult Respiratory Distress Syndrome (ARDS) Worsens Outcome Following Traumatic Brain Injury (TBI) is not Prevented by Insulin – Like Growth Factor 1 (IGF-1) and Growth Hormone (GH).**
Byron Young, Reza Shabim, Jimmi Hatton, Pharm.D, Phillip A. Tibbs, Robert J. Gewirtz, Deborah A. Blades, Benjamin C. Warf.
- 827. Utilization of Head Injury Guidelines in U.S. Trauma Centers.**
Jack E. Wilberger, Jr.
- 828. Risk Stratification of Mild Head Injury Patients: A Predictive Index for Outcome.**
Kelly Scrantz, Gregory C. Dowd, Deepak Awasthi.
- 829. Types of Temporal Profiles of CBFV After Head Injury: Correlation With Clinical Course and Outcome?**
Moshe Hadani, Bella Bruk, Nachshon Knoller, Zvi Ram.
- 830. How Safe is the Twistdrill?**
Leonardo Lustgarten, Nicholas Maartens, Tipu Z. Aziz.
- 831. Pump Regulated Lumbar-Subarachnoid Drainage.**
Paule J. Houle, Kostas N. Fountas, John R. Vender.

Committee Reports

Head Injury Committee

Alex B. Valadka, MD

The Head Injury Committee is analyzing the results of a survey that polled members of the American Association for the Surgery of Trauma on the role of the neurosurgeon in treating head-injured patients. One area that the survey addressed was the perception that some neurosurgeons had abandoned their role in caring for trauma patients leaving other physicians, or even mid-level practitioners, to perform such procedures as inserting intracranial pressure monitors. Unfortunately, there is very little information available that documents how neurosurgeons are utilizing mid-level practitioners. A survey of neurosurgeons' practices in this area is being considered.

Membership Committee

Alex B. Valadka, MD

There continues to be an overwhelmingly positive response to the offer made by our Section to waive membership fees for residents. This response reflects the interest that many young neurosurgeons have in neurotrauma and critical care.

In an effort to increase the international contingency of the AANS/CNS Section on Neurotrauma and Critical Care, our Section's Executive Committee also is waiving the one-time application fee and annual dues for neurosurgeons outside of North America.

Pediatric Neurotrauma Committee

P. David Adelson, MD

The Pediatric Neurotrauma Committee and its members continue to be active in the different facets of pediatric neurotrauma and neurotrauma education. Our most recent initiative was the development of a Child Abuse Subcommittee, which met at the AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting. Michael Partington, MD, Chair of the Committee, is preparing the agenda for the development of educational materials and guidelines.

The Pediatric Neurotrauma Committee also continues to work on the Pediatric Head Trauma Guidelines for Severe Head Injury, as well as for Mild Head Injury/Concussion. The individual Guideline chapters have been completed, and Thomas G. Luerssen, MD, is collating these into a working draft that will be reviewed by Beverly Walters, MD, and the Executive Committees of the AANS/CNS Section on Neurotrauma and Critical Care and the AANS/CNS Section on Pediatric Neurological Surgery.

In addition, the Pediatric Neurotrauma Committee is planning another practical course at the 1999 CNS Annual

Meeting. Per the recommendation of previous attendees, as well as members of the CNS Scientific Committee, we have added more speakers and asked the course faculty to move beyond the basics and discuss the practical aspects of pediatric neurotrauma care. The Pediatric Committee will present a similar lecture at the 2000 AANS Annual Meeting as well.

The multi-center study for the use of moderate hypothermia for severe traumatic brain injury in children, the development of new injury assessments for infants and young children and the new outcome measures to better define morbidity following traumatic brain injury began on July 1, 1999. The principal investigators in this study are all members of the AANS/CNS Section on Neurotrauma and Critical Care. The pilot clinical investigations will be conducted over the next two years and the results of the data gathered will hopefully result in a Phase III clinical trial for children.

Spinal Cord Injury Committee

Charles H. Tator, MD

Fifteen investigators in the STASCIS (Surgical Treatment of Acute Spinal Cord Injury Study) group have recently become members of the newly constituted AANS/CNS Section on Neurotrauma and Critical Care's Spinal Cord Injury Committee. Martin C. Holland, MD, Associate Professor of Neurosurgery at the University of California (San Francisco); Gregory Przybylski, MD, Assistant Professor of Neurosurgery at Thomas Jefferson Medical College; and Russ P. Nockels, MD, Director of Spinal Disorders at Henry Ford Hospital, also have joined the Committee as well.

The investigators have published six reports based on the STASCIS pilot studies conducted. Four of the reports appeared in the January 15, 1999 issue of *Neurosurgical Focus*, and can be accessed at www.neurosurgery.org/journals/summary.html. The other two reports were published in the *Journal of Neurosurgery: Spine*.

The Committee also is planning to submit another proposal to the National Institutes of Health. The proposal will request funding for the pilot study on early versus standard decompression based on an eight-hour interval from trauma to spinal cord decompression. Unfortunately, the applications for funding to the Paralyzed Veterans of America, the American Paralysis Association and the Eastern Paralyzed Veterans of America were unsuccessful. There also is an effort underway to obtain corporate support for this study.

The Committee also has discussed the concept of establishing a North American registry for spinal cord and head injuries. This concept will be further discussed at future meetings of the Spinal Cord Injury and Head Injury Committees.

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Sports Medicine Committee

Julian E. Bailes, Jr., MD

The AANS/CNS Section on Neurotrauma and Critical Care, in conjunction with the National Football League Players Association and the National Athletic Trainers Association, recently endorsed the Sixth Annual Concussion and Nervous System Injuries conference. The event, which took place May 28-30, 1999, in Orlando, Florida, was sponsored by the Orlando Regional Healthcare System and attracted experts from around the world to discuss the latest research in cognitive, neuropsychological and investigative aspects of minor head injuries in athletes. Spinal and peripheral nerve injuries also were discussed.

The meeting is the only conference of its kind to focus exclusively on central and peripheral nervous system injuries in athletes, and our Section's support emphasizes the commitment of organized neurosurgery to care for patients with minor head injuries.

The AANS/CNS Section on Neurotrauma and Critical Care also is working in conjunction with the AANS Publications Office on a sports medicine book. The book will be tailored specifically for neurosurgeons and emergency care technicians and is slated to be published in winter 2000.

A subcommittee of neurosurgeons interested in sports medicine and promoting the role of the neurosurgeon in caring for patients with sports-related head injuries is currently being formed and will meet this fall. If you, or anyone you know, are interested in participating, please contact me at (407) 944-0515 or via e-mail at julianb@neuro-link.com.

With other medical specialties taking on a more active and, in some cases, high profile role in neurological sports medicine, particularly in the area of concussions, we must continue our active involvement and interest at both the local and national levels. We must remain leaders in the care of the concussion patient.

Section News

Washington Committee Liaison Established

The AANS/CNS Section on Neurotrauma and Critical Care recently made a \$10,000 commitment to the AANS/CNS Washington Committee, in recognition of the Committee's dedication to matters pertaining to trauma and critical care. The Washington Committee, which is constantly expanding to meet the needs of neurosurgeons in the changing milieu of organized medicine, represents the AANS/CNS on such issues as reimbursement, CPT coding, managed care reform, and more. Members of the AANS/CNS Section on Neurotrauma and Critical Care will be invited to attend meetings of the Washington Committee on an ad hoc invitation basis.

Neurotrauma Society Meeting Approved for Category I CME Credits in Trauma

The National Neurotrauma Society Annual Meeting will be held in Miami Beach, Florida, October 22-23, 1999, immediately preceding the Neuroscience meeting. The focus of the meeting is "Recent Advances in Neurotrauma: Bench to Bedside," and has been approved for 14.75 CME credit hours in trauma.

The meeting will include sessions on clinical trials, the role of early surgery in spinal cord injury, mitochondria in traumatic brain and spinal cord injury, and the role of cytokines in traumatic brain injury. For more information, visit the National Neurotrauma Society Web site at www.neurotrauma.org, or e-mail Ross Bullock, MD, PhD, President of the National Neurotrauma Society, at robulloc@hsc.vcu.edu.

Trauma Resources Available on N://OC®

Are you constantly searching the Web for neurosurgical information relating to neurotrauma and critical care? Do you wish that there was one site you could visit to speak with others in your specialty and find out the latest information on topics emerging in the neurosurgical arena? Well, look no further. This information and more can be found on the official Web site of AANS and CNS—

NEUROSURGERY://ON-CALL®

On N://OC®, Trauma Section members can browse through more than 40 neurosurgery-sponsored grants; explore the

Section's fellowship opportunities; peruse through a listing of more than 15 neurotrauma-related publications; and learn about the latest neurotrauma guidelines under development.

To access the Neurotrauma and Critical Care Section of N://OC®, visit www.neurosurgery.org and click on the "Professional Pages." On the Welcome Page, select the "Sections" link and explore all of the information and services your Section has to offer.

Speaking Up for Neurosurgery

Recently, two articles were published in *USA Today* and *AM News* titled “Hospitals Plagued With On-Call Shortages” and “Is there a Dearth of Specialists in the ED,” respectively. The articles both addressed the problems plaguing this country’s trauma systems, including the lack of timely emergency medical treatment and the shortage of on-call emergency room specialists.

Martin H. Weiss, MD, President of the AANS; H. Hunt Batjer, MD, President of the CNS; and Brian T. Andrews, MD, Chair of the AANS/CNS Section on Neurotrauma and Critical Care, responded to these concerns surrounding emergency medical services by drafting a letter to the editors of *USA Today* and *AM News*. Following is an excerpt from one of the letters.

“...The availability of timely and appropriate sophisticated emergency medical treatment is a priority public health concern. However, it is our experience as leaders in the field of neurosurgery, that the problem is often not a lack of specialists, but instead the adequate provision of health insurance coverage for emergency specialty care and the larger issue of a coherent, universal emergency care system.

“Fortunately, there are several national initiatives currently under consideration that would help address these problems. Organized medicine must support these, and future such initiatives, in order to provide our patients with the best emergency trauma care possible.

“First, the Patient’s Bill of Rights legislation currently being debated by the U.S. Congress would establish a “prudent layperson” definition of emergency and would allow managed care patients to seek out-of-network medical care when they

are faced with an emergency medical condition. This is an excellent start to emergency-related reform needed in the managed care industry.

“Second, the current informal system of relying on outside physicians or other medical centers with different capabilities to provide emergency care is often sufficient, but is not standardized. The 9-1-1 emergency initiative has laid the groundwork for an effective and consistent trauma system in most communities; however, getting a patient to a hospital is only the first step in managing emergency medical conditions. Trauma systems need to be expanded so that every patient and every doctor has the required resources, organized and financed just like ambulance, police and fire systems are today.

“The Trauma Care Systems Planning and Development Act, enacted by the U. S. Congress in 1990 could go a long way to establish these mechanisms. This Act provides states with federal grant money to develop systems for the effective management of trauma victims. Unfortunately, since its inception, this program has been severely underfunded and has not reached its full potential. Congress needs to recognize this and provide adequate funding for the program.

“Finally, the implementation of organized trauma systems could help prevent the kind tragedies described in the media recently, and would complete the trauma systems in our communities. These systems would provide citizens with the security of knowing that the services they need will be accessible when they arrive at an emergency treatment center. Neurosurgeons are actively seeking passage of these national initiatives and we remain committed to creating a trauma system that meets the needs of all the people in this country.”

AANS/CNS Support Universal Emergency Care Systems

The availability of timely and appropriate sophisticated emergency medical treatment has recently become a public health concern. The AANS and CNS have recognized this problem and issued a position statement in support of emergency neurosurgical services.

AANS/CNS Position Statement on the Management of Emergency Neurosurgical Services

Healthcare facilities that provide emergency medical services have a responsibility to maintain an organized system for providing, or insuring referral for, emergency neurosurgical care.

A neurosurgeon who has accepted the responsibility of being “on-call” at a given time to assist a healthcare facility in meeting these demands is obligated to respond promptly when called to provide emergency neurosurgical care, regardless of the patient’s race, ethnic background, religious affiliation or ability to pay. In the event the on-call neurosurgeon cannot personally deliver care because of an irresolvable, professional conflict, the healthcare facility trauma system should have a protocol for obtaining other neurosurgical services.

Application for Membership

AANS/CNS Section on Neurotrauma and Critical Care



I. Biographical

(A) Name: _____

(B) Home Address: _____

(C) Office Address: _____

Phone: _____ Fax: _____

(D) E-Mail: _____

II. Category of Membership Requested: (Must be a member of the AANS or CNS.)

- Active Associate
 International Resident

III. Membership, Certification and Practice:

(A) Are you certified by the American Board of Neurological Surgery?

Yes No

(B) Are you a member of

1. The American Medical Association? Yes No

2. A Local or Regional Medical Society? Yes No

3. A State or Provincial Medical Society? Yes No

Name: _____

4. The American Association of Neurological Surgeons? Yes No

5. The Congress of Neurological Surgeons? Yes No

Signature of Applicant

Date

*Membership dues are waived for applicants currently enrolled in a neurosurgical residency program.

**Please return the completed application with your membership fee of \$50 to:
AANS/CNS Section on Neurotrauma and Critical Care
Dept. 77-7597
Chicago, Illinois 60678-7597**

ABIC Continues to Work Hard

Anthony Marmarou, PhD

The American Brain Injury Consortium (ABIC) has made great progress in its five years of operation, due in large part to the contributions of Lawrence Pitts, MD, Professor of Neurosurgery at the University of California (San Francisco) and Chair of ABIC. Dr. Pitts has worked hard and devoted considerable time and effort to keep ABIC on track during these formative years.

At the recent ABIC meeting in New Orleans, Dr. Pitts passed the gavel to our new Chair, Raj Narayan, MD, Professor and Chair of Neurosurgery at Temple University. Dr. Pitts will remain on the Advisory Board of the Consortium in an advisory role. We wish him well and extend him our deepest appreciation for all of the work he has done on our behalf. We also congratulate Dr. Narayan on his new position and are confident that the ABIC will continue to grow under his leadership.

Focus on Clinical Trials

Recognizing the difficulties in providing clinical trial results to the scientific community in a timely fashion, the AANS/CNS Section on Neurotrauma and Critical Care has partnered with the ABIC to ensure pharmaceutical and medical device companies allow for the timely publication of clinical trials, regardless if they are positive or negative.

The ABIC is pleased to announce the results from the "Bradycor" trial (SmithKline Beecham and Cortech) have been released and are published in the June 1999 issue of the *Journal of Neurotrauma*. Our sincerest thanks go out to Dan Burnham (SmithKline Beecham) and Jan Troha (Cortech) for working with ABIC and making the publication of this data possible.

ABIC continues to provide clinical review for the ongoing Pfizer trial, and is in negotiation with other pharmaceutical companies for future clinical trials in head injury. Currently, Pfizer is the only active traumatic brain injury trial in the U.S., and pharmaceutical companies are proceeding cautiously in the wake of so many negative trials. Nevertheless, there is optimism among several companies that have contacted ABIC, and we are confident that the new compounds will soon be available for trial.

Codman Neurotrauma Young Investigator's Award Available

The AANS/CNS Section on Neurotrauma and Critical Care has established a one-year fellowship, in the amount of \$40,000, intended to cover travel and living expenses for a resident who wishes to broaden his or her exposure in the area of neurotrauma and critical care. The fellowship must be undertaken in a reputable North American or European center, and the results of the recipient's research must be presented as a lecture at either the AANS or CNS Annual Meeting, as well as published in a national peer-reviewed journal. Residents interested in applying should submit the following to Jack E. Wilberger, Jr., MD, Allegheny General Hospital, East Wing Office Building, 420 East North Avenue, Suite 302, Pittsburgh, PA 15212-4746.

1. A current curriculum vitae.
2. A letter from the applicant's neurosurgery residency program director confirming the date of his or her successful completion of neurosurgical residency or indicating his or her current status in the training program.
3. A letter from a critical care or neurosurgical mentor, who will be responsible for the applicant's activities during the year of the fellowship.
4. A detailed description of the applicant's planned activities for the fellowship year. If the money is to be used for salary support, a detailed proposal with respect to the nature and type of research that will be undertaken is to be provided. If the money is to be used to support a research project, a detailed research proposal, along with a budget must be submitted. In addition, if the latter is to be accomplished the Section will require a letter from the sponsoring institution that ensures that the applicant has adequate space and resources to bring such a project to fruition. This letter should most likely come from either the Dean of the School of Medicine or, depending on the hierarchy of the applicant's institution, the Director of Neuroscience/Neurosurgical/Critical Care research.

The deadline for application submission is December 1, 1999.

Research Award Recipients Recognized

At this year's AANS Annual Meeting, two outstanding researchers were recognized for their work in the area of neurotrauma and critical care. Liana Beni-Adani, MD, a resident at Hadassah University, was awarded with the 1998-99 Resident Research Award for her paper "Activity Dependent Neurotrophic Protein is Neuroprotective in a Mouse Model of a Closed Head Injury". Also, Gordon Chu, MD, a resident at McGill University, was presented with the 1998-99 Research Fellowship Award for his paper "Calcium and Regeneration in a Cell Structure Model of Neurite Transection."

1999-2000 Codman Neurotrauma Fellow Recognized

The Executive Council of the AANS/CNS Section on Neurotrauma and Critical Care is proud to announce Amir Malik, MD, a resident at Temple University, as the first recipient of the Codman Neurotrauma Fellowship Award. The award was presented to Dr. Malik at the 1999 AANS Annual Meeting and will provide him with a research stipend of \$45,000.

Following is a summary of his work thus far.

Project Update

The Temple Neurotrauma Research Laboratory is currently in the process of studying a new class of drugs, the dehydroe-piandrosterone (DHEA) analogs, for the treatment of experimental traumatic brain injury (TBI).

Over the past decade, lowered endogenous DHEA levels in humans and lab animals have been associated with a variety of undesirable physiological processes including aging, cognitive decline, aggression, obesity, cardiovascular disease, immune dysfunction and changes in basal metabolism. The DHEA analog Dihydrofluasterone (DHEF) has been shown to have beneficial effects on free radical formation, inflammation, neuronal gene expression, and neurotransmitter receptor function.

Further, DHEF lacks the side effects linked to glucocorticoids, androgenic steroids, and non-steroidal anti-

inflammatory drugs (NSAIDs). DHEF is a non-androgenic fluorinated analog of DHEA, developed by John Williams (Department of Chemistry, Temple University) that has shown promise in its preliminary use with the inflammatory disease models.

Recent experiments in the Temple Neurotrauma Research Laboratory have shown that fluasterone (50mg/kg, intraperitoneally) markedly improves memory and neurological performance compared to vehicle-treated controls in the rat lateral cortical impact model of TBI. In other mammalian models of inflammation, as well as in human subjects, DHEA, fluasterone and other DHEA analogs have proven beneficial in reducing cellular proliferation, attenuating free radical formation, and altering inflammatory-mediated gene expression.

Our current work focuses on two goals: 1) define the therapeutic window and duration of treatment needed to optimize behavioral improvement in a rat model of closed head injury; and 2) utilize intravital microscopy to evaluate real time changes in pial microcirculation, prostaglandin levels, and vascular reactivity, before and after TBI. The effect of fluasterone on these changes will be assessed. Results will be correlated to improvements in memory, learning, and motor deficits in treated animals.

FIRST CLASS
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Permit No. 329

AANS/CNS Section on Neurotrauma and Critical Care
22 South Washington Street
Park Ridge, Illinois 60068-4287