As I succeed Alex Valadka, MD, as chair of the AANS/CNS Section on Neurotrauma and Critical Care, I want to thank the section members for this honor and for entrusting me to represent the section over the next two years. This is our section and subspecialty within neurosurgery, and I encourage you to contact me directly with your concerns, whether local, national, or international, and with your suggestions on how the Trauma Section can continue to help you in your practice and your continuing education. I am fortunate to have excellent help from the other section officers, including Chair-Elect Michael Fehlings, MD, and Secretary-Treasurer Shelly Timmons, MD, who is also the editor of this newsletter. The young and energetic Executive Committee will continue to serve the section well over the next couple of years.

A change in leadership offers a moment to reflect upon and reestablish the organization’s mission and goals. As I have had the opportunity to work with Dr. Valadka, I have come to appreciate the complex and important role that emergency services, and particularly neurotrauma, have had at the forefront of our national discussion. I have come to realize that the section must speak for neurotrauma and critical care issues in neurosurgery, and in medicine as well.

Neurosurgery issues are no longer confined to diagnosis and management, but have evolved over the last few years to include the optimal individuals and locations for the delivery of that management and whether neurosurgery as a specialty has been adequately engaged. The section’s leadership and membership have actively participated in this discussion, often correcting misinformation and politicization that come from many sources.

As an advocate for neurotrauma and critical care, the section must continue to highlight the need for neurosurgeons’ involvement in the care of neurological emergencies, whether they are due to traumatic injury or aneurysmal subarachnoid hemorrhage or ventriculoperitoneal shunt malfunction. In all of these situations, an active, engaged neurosurgeon is the optimal person to deliver care to the patient, whether the patient is operative or not. Neurosurgeons must be committed to the care of these patients and be clear as to our involvement. We need to be advocates not for “neurosurgery’s turf” but rather for the unique, highly expert, and expansive approach to patient care that we provide and that cannot easily be replaced with “certificate” courses.

This is an exciting time to further define our subspecialty and better educate others as to the unique, global perspective neurosurgeons have for such patients. We need to promulgate this message during neurosurgical training and set the expectation that neurosurgery handles—and should continue to handle—neurological emergencies. Training for neurosurgery residents provides access to high-level critical care and neurosurgical emergency training—training that is more in-depth and more extensive than fellowships in critical care and trauma. We must continue to highlight and define this extensive training so that neurosurgeons are not denied access to their patients in the emergency or critical care settings. The section leadership is already working with the AANS/CNS Cerebrovascular Section to adequately document the extent of residents’ critical care training to ensure they have continued access.

These are just a few examples of the topics we as a specialty must confront so we can address issues that come not only from outside of medicine (such as the lack of regionalization, too many trauma centers for neurosurgical coverage, medi-
Neurosurgeons Play Role on ACS Committee on Trauma

John Fildes, MD, FACS

The American College of Surgeons Committee on Trauma was established in 1922 to address issues related to fractures that were poorly treated in the United States. The committee published its first guidelines, Outline of the Treatment of Fractures, in 1931. Initially, members were general surgeons and orthopedic surgeons. In 1977, because they recognized the increasing significance of head and spinal cord injuries, the Board of Regents added neurosurgeons to the COT membership. There are currently about 70 members of the COT including general surgeons, neurosurgeons, orthopedic surgeons, pediatric surgeons, and plastic surgeons. I serve as the seventeenth chair of the COT.

Today the COT is dedicated to improving all phases of the care of the injured patient, including improvement in emergency care at the scene, transportation of the injured, care in the emergency department and hospital, teaching of the surgery of trauma, rehabilitation, injury prevention, and the practice of the surgery of trauma. Active cooperation with other national organizations having similar strategic goals augments the COT’s effectiveness in improving trauma care.

The major programs of the COT include the Advanced Trauma Life Support Course, the National Trauma Data Bank, the Verification/Consultation Program for Hospitals, and the Trauma System Planning and Evaluation Program. Other educational programs are also being planned for rural trauma, disaster and mass casualty management, and surgical skills.

Over the last 30 years neurosurgeons have played a key role in many aspects of the COT’s work, but especially in the Verification/Consultation Program, Trauma System Planning and Evaluation Program, revision of the ATLS course, revision of Resources for Optimal Care of the Injured Patient, the planning of educational programs, prehospital care, and many injury prevention projects.

In 2006, the COT increased the number of participating neurosurgeons. It also expanded the role of the neurosurgical professional organizations in the nomination process.

John Fildes, MD, FACS, is chair of the American College of Surgeons Committee on Trauma.

Current Neurosurgeon Members of the ACS-COT

P. David Adelson, MD, FACS
James M. Ecklund, MD, FACS
Domenic P. Esposito, MD, FACS
Karen M. Johnston, MD, PhD, FACS
John H. McVicker, MD, FACS
Shelly D. Timmons, MD, PhD, FACS
Alex B. Valadka, MD, FACS

From the Chair continued from front page

cal liability and reimbursement), but also from within medicine itself (for example, the recent development of an acute care surgery curriculum and specialty, and the exclusion of neurosurgeons from the care of their critically injured patients in the ICU setting).

We also must continue to educate and update practicing neurosurgeons as to cutting-edge diagnosis and management of patients with neural injury and emergencies, and provide recommendations based on the latest literature and algorithms of treatment and patient care. This type of education primarily takes place at each of the annual meetings, though other avenues are being explored to provide even greater exposure to and updated information on to future approaches in neurotrauma and critical care. We additionally are exploring new ways to educate postgraduate neurosurgeons.

Lastly, I would like to thank Dr. Valadka for his incredible leadership of the Trauma Section over the past two years. He has brought the section to the forefront as a strong voice for neurosurgery in Washington, D.C., and across the United States, highlighting the importance of neurosurgeons in neurotrauma and critical care. He has had a major impact at all levels, often having to put out many fires at once. I have very large shoes to fill, and I will do my best to do so. I would be remiss not to continue to benefit from Dr. Valadka’s experience. He has been a wonderful mentor and role model for me during my time as chair-elect, and I have made a commitment to the section, to the Washington Committee, and to neurosurgery to continue to tap Dr. Valadka’s expertise and voice. He has agreed to continue to assist us. Alex, I cannot say “thank you” enough.

I look forward to working with all of you and to hearing from each of you, and I invite you to contact me with any questions or concerns that you may have.

My e-mail address is David.Adelson@chp.edu.
The Acute Care Surgery Curriculum

Alex B. Valadka, MD, FACS

In recent years, trauma surgeons have become increasingly concerned about surgical residents’ lack of interest in careers in trauma. Recent data indicate that roughly half of trauma surgery fellowship positions go unfilled.

Some in the trauma surgery community believe that these trends can be reversed by restructuring the training and practice of those whom we currently describe as trauma surgeons. This restructuring focuses on attempted improvements in lifestyle and job satisfaction. The “trauma surgeon” as we currently know him or her would be replaced by the “acute care surgeon,” whose training and practice would include not only trauma and surgical critical care, but also acute general surgery problems that are not related to trauma. The term “surgical hospitalists” has been used to describe these new practitioners, but some feel that description is too narrow to describe the various practice opportunities that might be available to these surgeons.

A broader scope of practice would purportedly enable these practitioners to perform more surgeries, thereby addressing surgical residents’ common complaint that trauma surgeons do not make it to the operating room often enough. More operative cases would also mean greater revenue for these physicians’ practices, which is another common concern of trauma surgeons. This new specialty might also place greater emphasis on performing elective surgeries and developing an elective practice, instead of relying solely on whatever comes in through the emergency department and transfer center.

Curriculum

Training for this proposed new specialty would begin with the standard five-year general surgery fellowship, although it has been proposed that this core general surgery training be reduced to three or four years, followed by early specialization in a number of surgical specialties.

Of a two-year acute care surgery fellowship, nine months would be spent in critical care. Six of these months would be in trauma and general surgical critical care, and three would be available for electives, which may include pediatric surgical critical care, neurocritical care, burns, and so on.

The other 15 months would be devoted to emergency and elective surgery. Acute care surgery would occupy four to six months. One to three months would be devoted to separate rotations in thoracic surgery, vascular/interventional radiology, and transplant/pancreatic/hepatobiliary surgery. Orthopedic surgery and neurosurgery would each occupy one month. An additional one to three months would be available for electives to gain additional experience in the above areas or to acquire experience in burn surgery, pediatric surgery, endoscopy, imaging, plastic surgery, and so on.

Analysis

Is all of this really necessary? One goal of this new training paradigm is to increase the appeal of emergency work by codifying a scope of practice beyond only trauma patients, a practice choice which is not popular with young surgeons. However, many or even most trauma surgeons already cover nontrauma emergencies and also see elective patients. Thus, this goal of those who would create this new curriculum is already being met.

The basic issue seems to be one of practice opportunities, or at least an awareness of the variety of practice opportunities that are available to young surgeons. It might be more effective for those who are pushing this new specialty to focus instead on educating hospitals, medical schools, group practices, and others who hire surgeons, with the goal of teaching them that a well-trained general surgeon who has completed a trauma fellowship can cover a broad spectrum of emergencies. This new curriculum seems designed to entice surgical residents by trying to convince them that this specialty is not so bad, but a more persuasive argument could include many examples of fellowship-trained trauma surgeons with diversified and successful practices that combine trauma, nontrauma emergencies, and elective practice. Most neurosurgeons already follow this practice model, that is, maintain a busy elective practice while also taking call for all neurosurgical emergencies, both trauma and nontrauma.

A secondary aim of this new specialty, and one which is not stated as explicitly, is to open the door for non-neurosurgeons and other unqualified practitioners to perform neurosurgical procedures. The American Association of Neurological Surgeons, the Congress of Neurological Surgeons, and other groups within organized neurosurgery have vigorously opposed these proposals. Space does not permit a full listing of all of organized neurosurgery’s ongoing activities in this area, but they have been described in the AANS Bulletin and in Neurosurgery News, among other publications. This fall’s meetings of various medical societies will also feature discussions about these issues.

Greater involvement of neurosurgeons is needed to teach trauma surgeons basic neurological assessment and to explain the interaction between cerebral and systemic physiology in critically ill and injured patients. However, these educational efforts do not include the teaching of invasive procedures. This is a fundamental quality-of-care issue. Patients who require such interventions fare much better if they are expeditiously transported to a facility with definitive neurosurgery capability. Regionalization of emergency care is a concept that is gaining acceptance not only within the neurosurgical community, but throughout all of medicine as well.

We must always continue to try to improve the quality of care that we give our patients. In the case of neurosurgical emergencies, one area of improvement is better prehospital and interhospital coordination of resources. Our goal must be to get these critically ill and vulnerable patients to definitive neurosurgical care as soon as possible, and not to delay their care while inadequately trained and inexperienced individuals attempt to perform neurosurgical procedures.
A trauma system is defined as coordination of provision of trauma care by emergency 911 responders, ambulance and helicopter transport agencies, trauma centers, institutions providing post-acute transitional care to trauma patients (such as rehabilitation services), and healthcare agencies involved in decision-making for this provision of care. The primary goal of a well-developed trauma system is to rapidly get seriously injured patients to the institution with the proper resources to care for them, and secondarily to optimize outcomes after trauma by ensuring that appropriate and timely care throughout the gamut of care is available.

In March 2005, a congressional briefing was held to release the findings of a Harris Poll, The American Public's Views of and Support for Trauma Systems, conducted in November 2004. The poll found that:

- Most Americans are not aware that injury is the leading cause of death for children, youth, and adults under the age of 34.
- After hearing a description of a trauma center, Americans value them highly and appreciate the importance of having one within easy reach.
  - Almost all Americans feel it is extremely or very important to be treated at a trauma center in the event of a life-threatening injury.
  - Nearly nine in 10 Americans think it is extremely or very important for an ambulance to take them to a trauma center in the event of a life-threatening injury, even if it is not the closest hospital.
  - Nearly all Americans believe that if they had a serious or life-threatening injury, they would be taken to the hospital that is best equipped to handle their specific injury in less than one hour.
- A majority of Americans feel that having a trauma center nearby is as important as or more important than having a fire department or police department.
- After hearing a description of a trauma system, nearly all Americans recognize the importance of having a trauma system in place in their state.
- Large majorities feel that having a trauma system in place is as important as or more important than having state police or HAZMAT teams.
- About two in three Americans would be extremely or very concerned if they learned that the trauma system in their state did not meet recognized standards. (However, a 2002 survey of the status of trauma system development conducted by the Health Resources and Services Administration of the U.S. Department of Health and Human Services shows that only eight states have fully developed trauma systems, 12 states do not have the authority to designate trauma centers, and the rest are in varying stages of partial development.)
- Americans are willing to spend their own money to have trauma centers and systems in place in their states.
- Generally, Americans have high expectations of their states’ trauma centers and systems when it comes to handling natural disasters or terrorist attacks.

When detailed queries were made about what individuals would be willing to contribute to ensure such systems were in place, almost 80 percent of respondents were willing to pay 10 cents or more per year to have trauma centers and systems in their state and over 50 percent were willing to pay $25 or more.

Over half of respondents thought that trauma centers and systems in their state were prepared to handle large numbers of patients in the event of natural disaster or terrorist attack. (Notably, this survey was conducted prior to Hurricane Katrina.)

Despite these public perceptions, the development of organized trauma systems in the United States is in its relative infancy. While trauma center development and verification procedures have evolved over the past three decades, trauma systems development has followed on the heels of the establishment of centers in which trauma care would be provided. The Trauma Care Systems Planning and Development Act (PL 101-590) was passed by Congress in 1990 and called for a model plan for trauma systems. The Health Resources and Services Administration, the HRSA, published a model trauma system planning document in 1992, and the American College of Surgeons Committee on Trauma, the ACS-COT, followed up with the development of the Trauma Systems Consultation Committee and accompanying documents, all available on the ACS Web site. HRSA later conducted a “state of the union” assessment after the events of Sept. 11, 2001, the results of which are detailed in “A 2002 National Assessment of State Trauma System Development, Emergency Medical Services Resources, and Disaster Readiness for Mass Casualty Events.”

A major finding of this study was that inadequate funding for trauma care impacted recruitment and retention of trauma care providers, most notably physicians and nurses.

The ACS-COT Consultation Program for Trauma Systems offers an evaluative service to states or regions in various stages of...
trauma systems development, and can be customized according to local needs. The cost of the evaluation averages around $35,000, and some areas evaluated thus far have obtained grants or state funding to cover the costs. This program is not a verification program, and there is no pass or fail; it is designed to aid systems development for the agencies involved in the delivery of trauma care for the region under study. Preconsultation assessments are done by the sponsoring agency, and these are made available to the site reviewers, which include physicians involved in trauma care delivery, trauma coordinators, state emergency medical services or trauma systems administrators, and occasionally trauma systems consultants with extensive experience in this field. The site reviewers then meet with a variety of stakeholders on-site (visiting multiple locales if necessary) over a period of a few days, and conduct a thorough assessment on-site that is shared with the stakeholders prior to the end of the review. A detailed written document is completed largely on-site, based upon the ACS-COT document entitled Consultation for Trauma Systems, and the final version is sent to the sponsoring agency shortly thereafter.

Several neurosurgeon members of the ACS-COT are also members of the Trauma Systems Consultation Committee. Given that provision of emergency neurosurgical care is a critical issue in many regions of the country, and that more effective and organized regionalization of care has been proposed as a potential solution to this crisis, trauma systems consultation may be a key resource in the evolution of regional programs. If members are interested in whether a consultation has been conducted or is being planned for their regions, or want to know more about how to request a consultation, more information is available from Michelle Weilgosz, Trauma Systems Coordinator at the ACS, at (312) 202-5340.

References:

American College of Surgeons Committee on Trauma Consultation Program for Trauma Systems Fact Sheet, available at www.facs.org.


For member convenience, the section has made the transition to online membership application management, now the preferred method of application. This allows prompt response to applicants and assists the section and organizational staff with tracking membership in a more efficient manner. Paper applications will still be accepted, and members can contact the AANS office for instructions on how to obtain them if online communication is not an option or if you are a member of the CNS but not the AANS. Questions may be directed to Sandra Meyer with AANS/CNS Section Services at sjm@aans.org or (888) 566-2267.

To apply online, go to the section Web site at www.neurosurgery.org/sections/section.aspx?Section=TR, click on “Application for Membership” on the left menu, and follow the instructions, which will guide you to the “My AANS” section of the AANS Web site. If you are already logged onto “My AANS,” you may click on “Member Applications” on the left menu, and then “Create a New Application.” You may also use this section of the Web site to check on the status of applications that have already been initiated by clicking on “My Applications.” As you go through the application process, the membership fee can be paid online via credit card. Remember, membership is free for residents.

We hope that you find this process convenient and easy, and please recommend membership to your colleagues!
Neurotrauma and Critical Care Highlights: 2006 CNS Annual Meeting

These neurotrauma and critical care programs take place during the 2006 CNS Annual Meeting, Oct. 7–12 in Chicago.

Saturday, October 7, 2006

Practical Course
8:00 AM–5:00 PM
New Course
PC09 Comprehensive Management of the Pediatric Trauma Patient
Faculty: Douglas L. Brockmeyer, Michael D. Partington, Mark R. Proctor, Tord Alden

Sunday, October 8, 2006

Practical Courses
8:00 AM–5:00 PM
PC14 Traumatic Brain Injury
Co-directors: Raj K. Narayan, Geoffrey T. Manley, Lori Anne Shutter
Faculty: Shelly D. Timmons, Dominic P. Esposito, Guy Rosenthal, Michael G. Fehlings, David Okonkwo, Anthony Marmarou, William M. Coplin

8:00 AM–12:00 PM
PC20 Adult and Pediatric Spinal Trauma Surgery
Co-directors: Dachling Pang, Ashwini Dayal Sharan
Faculty: Douglas I. Brockmeyer, Christopher I. Shaffrey, James Harrop, R. John Hurlbert, Eric M. Massicotte

1:00–5:00 PM
PC27 Neurosurgical Critical Care
Director: E. Sander Connolly Jr.
Faculty: Owen Samuels, David Palestrant, Andrew Mark Naidech, William M. Coplin, Vivek A. Rao, Chad Miller

1:00–5:00 PM
PC32 Neurosurgery: 2006 Literature in Review
Co-directors: Peter M. Black, Issam A. Awad
Monday, October 9, 2006

General Scientific Session I
Neurosurgery in Review, 2006: Essential Knowledge Every Neurosurgeon Should Possess
7:24–7:36 AM
Trauma, Neurotrauma, and Critical Care
Moderator: Geoffrey T. Manley

Section Session
2:00–5:54 PM
Neurosurgical Forum and Select Abstract Session: Section on Neurotrauma and Critical Care
Synthes Award for Resident Research on Spinal Cord & Spinal Column Injury
Synthes Award for Resident Research on Craniofacial Injury
Scientific Abstracts

Tuesday, October 10, 2006

General Scientific Session II
The Application of New Techniques and Technologies: When Does the Data Justify Widespread Application?
7:12–7:24 AM
Cerebral Oximetry in the Head Injured Patient: Is It Time for Widespread Application?
Moderator: P. David Adelson

Luncheon Seminar
12:30–2:00 PM
T30 Traumatic Brain Injury: Lessons Learned and Future Directions
Moderator: P. David Adelson
Faculty: Geoffrey T. Manley, John Douglas Pickard, Andreas Unterberg, Alex B. Valadka

Section Session
4:00–5:30 PM
Interactive Session: Section on Neurotrauma and Critical Care I
Moderators: Geoffrey T. Manley, Jamie Sue Ullman

Wednesday, October 11, 2006

Luncheon Seminar
12:30–2:00 PM
W37 Spine Trauma and Spinal Cord Injury: Advances in Medical and Surgical Management
Moderator: Christopher I. Shaffrey
Faculty: Douglas I. Brockmeyer, Barab A. Green, Scott Shapiro, Andreas Weidner

W41 Practical Management of Peripheral Nerve and Brachial Plexus Injury
Moderator: David G. Kline
Faculty: Allan J. Belzberg, Allan H. Friedman, Thomas Kretschmer, Eric I. Zager

W52 Sports Neurosurgery
Moderator: Joseph C. Maroon
Faculty: George R. Cybulski, Arthur L. Day, Stanley A. Herring

Section Session—Honored Guest
2:00–3:30 PM
Section on Neurotrauma and Critical Care II
Moderator: Guy L. Clifton
Second Annual Integra Lecture: Clinical Neurotrauma Research in Europe: Lessons and Examples
Moderator: Franco Servadei
Opportunities: The Promise of Neurotrauma Research—Raj K. Narayan
Challenges: Barriers to Clinician Participation in Clinical Research—M. Ross Bullock
Open Discussion with Panel: Setting Research Priorities, Overcoming Obstacles to Research, Funding, the Evaluation and Introduction of New Technologies

Thursday, October 12, 2006

General Scientific Session IV—Don’t Miss This Opportunity!
On Surgery and Society: The Growing Challenge of Neurotrauma Care in America
7:15–7:35 AM
Roundtable Discussion Co-Sponsored by the American College of Surgeons
Moderator: Edward R. Laws, Past President, ACS
Faculty: Donald D. Trunkey, James R. Bean, David B. Hoyt, Alex B. Valadka, Andreas Unterberg, A. Brent Eastman
ThinkFirst Update
David Cavanaugh, MD

The ThinkFirst National Injury Prevention Foundation is making progress in its efforts to overcome recent financial and management problems. With the help of its new executive director, Eileen Widmer, and a dedicated board of directors, its corporate status in Illinois has been reestablished, the annual audit is near completion, the move to a new office has been accomplished, and new funding sources are being investigated.

Ms. Widmer and I recently met with the president and CEO of the Christopher Reeve Foundation in New Jersey to discuss future partnerships. The directors’ conference and international training held in San Francisco in April was a success, with sponsorships and registration fees allowing payment of all conference expenses and generating a small profit.

The support of ThinkFirst by the AANS/CNS Section on Neurotrauma and Critical Care is deeply appreciated. ThinkFirst plans to collaborate with the Trauma Section to obtain industry funding for a new annual ThinkFirst Award that honors the best paper in injury prevention.