

Society of Neurosurgical Anesthesia and Critical Care Newsletter

1996 ANNUAL MEETING

The 24th Annual Meeting of the Society of Neurosurgical Anesthesia and Critical Care (SNACC) was held in New Orleans, Louisiana, on October 18, 1996. Members of the Society are grateful to Arthur Lam, (Seattle) who planned an extensive and innovative program with assistance from members of the SNACC Board of Directors.

Shortly after the start of the meeting, Richard Traystman, (Baltimore) delivered several remarks eulogizing the late Robert McPherson. Dr. McPherson had been Professor of Anesthesia at the Johns Hopkins University Medical School and a frequent contributor to SNACC meetings. Drs. Traystman and McPherson were co-investigators on many projects of clinical significance to neuroanesthesiologists. Dr. Traystman then proceeded to discuss "Nitric Oxide and the Cerebral Circulation." Nitric oxide serves as a neurotransmitter in the regulation of the cerebral vasculature, and has a potential role in the regulation of the cerebral circulation in many disease states. Verna Baughman, (Chicago) followed Dr. Traystman's remarks with a discussion of "The Clinical Relevance of Nitric Oxide." Dr. Baughman covered a wide range of topics including the interaction of nitric oxide and estrogen receptors, and the potential uses of nitric oxide to discourage the aging process.

Several submissions were highlighted for oral abstract presentation in a session moderated by Karen Domino, (Seattle). William Hoffman, et al (Chicago) utilized a fiberoptic tissue sensor to measure brain tissue pO_2 , pCO_2 , and pH changes during AVM resection. They concluded that tissue hypoxia is present in AVM patients under baseline conditions. Increases in tissue blood flow are seen during AVM resection when tissue perfusion pressure is restored and this is associated with tissue hyperoxygenation and CO_2 clearance. Also in patients undergoing AVM resection, Shailendra Joshi, et al (New York) compared the effects of intraarterial verapamil and

sodium nitroprusside on cerebral blood flow. They demonstrated that sodium nitroprusside even in doses capable of affecting mean arterial pressure, does not affect vascular resistance in the normal brain.

Frank Hänel, et al (Munich, Germany) compared the effects of sevoflurane and isoflurane on cerebral blood flow autoregulation in pigs. In this model isoflurane is a more potent cerebral vasodilator compared to sevoflurane. Sulpicio Soriano et al. (Boston) determined that inactivation of intracellular adhesion molecule 1 (ICAM-1) minimizes necrosis but not apoptosis after temporary middle cerebral artery occlusion.

Michael Todd et al (Iowa) presented results of a multicenter pilot trial of hypothermia during aneurysm surgery. One hundred eleven consenting patients were assigned either to a normothermic (36.5° C) or a hypothermic (33.5° C) group during surgery. Postoperatively, there were no significant intergroup differences in either World Federation of Neurosurgeons or National Institute of Health stroke scores. However, at 24 hours only two hypothermic patients remained tracheally intubated while nine normothermic patients were still intubated. The authors felt that the study was too small to detect differences in neurologic outcome, but demonstrated the feasibility of carrying out a randomized, prospective and blinded trial of the efficacy of intraoperative hypothermia.

A new feature of the 1996 meeting included workshops. Evoked potentials and EEG monitoring were discussed and hands-on participation from registrants was elicited by Mark Bloom, Michael Mahla, Tod Sloan, and James Rogers. A transcranial doppler workshop was offered by Arthur Lam with assistance from Christian Werner, Basil Matta, Neil MacLennan, Natalia Plyuschcheva, and Elizabeth Visco.

A particularly popular offering at the meeting this year was an Update on Clinical Trials. Steven Allen (Houston) discussed "Systemic Hypothermia for

Head Injury." Patients continue to be enrolled in this trial and Dr. Allen noted several of the practical difficulties including the institution of hypothermia within the stated time of the protocol. Clark Haley, Jr. (Charlottesville) discussed the use of Tirilazad for both subarachnoid hemorrhage and head trauma patients. A cooperative study in Europe, Australia, and New Zealand demonstrated that patients receiving 6 mg/kg/day of Tirilazad had reduced mortality and a greater frequency of good recovery on the Glasgow outcome scale three months after subarachnoid hemorrhage. Interestingly, the benefits of treatment with Tirilazad were predominantly shown in men rather than in women, because of a difference in drug metabolism and differences in plasma levels between genders. Ross Bullock (Richmond) discussed the role of the excitotoxic amino acid transmitters glutamate and aspartate which are agents likely to promote brain damage after ischemic injury. He particularly discussed the role of dizocilpine maleate as a possible therapeutic agent in patients with brain injury as well as other agents currently under development.

A lively walk around poster discussion session, consisting of 11 groups in which abstracts were presented and discussed, followed the general session on clinical trials. Using this format, 97 abstracts were presented and the authors and participants benefited from a challenging discussion of their results with neuroanesthesia colleagues.

The afternoon concluded with a debate on intraoperative cerebral protection moderated by Adrian Gelb (London, Ontario). Christopher Thompson (Sydney, Australia) presented a defense of intraoperative cerebral protection, particularly when therapeutic modalities are guided by intensive neurologic monitoring. Michael Todd (Iowa) argued that a dearth of outcome data prevents the use of many of suggested neuroprotective therapies. Members of the Society of Neurosurgical Anesthesia and Critical Care took the opportunity to congratulate Dr. Todd on his recent selection as editor-in-chief of the journal *Anesthesiology*.

Following the formal education presentations, a business meeting was conducted.

SNACC would like to thank the following exhibitors for support of the annual meeting: Abbott Laboratories, Aspect Medical System, Axon Systems, Inc., DWL, Electronic Systems, Inc., Dynamic Engineering, Glaxo Wellcome, Lippincott-Raven Pub-

lishers, Moberg Medical Inc., Mosby-Williams & Wilkins, Multigon Industries, Inc., Neuroguard, Inc., Nicolet Biomedical Inc./EME, W.B. Saunders Publishing Company.

YOUNG INVESTIGATOR AWARD

John Guy of the Department of Anesthesiology, Duke University, was awarded the Young Investigator Award for his presentation "A Comparative Study of Remifentanyl HCL and Fentanyl in Patients Undergoing Craniotomy for Supratentorial Space Occupying Lesions." Dr. Guy and his co-investigators (B. Hindman, K.Z. Baker, C.O. Borel, M. Maktabi, N. Ostapkovich, V. Yancy, M.M. Todd, P. Mack-Fogarty, J. Kirchner, M.D. Sokoll, W.L. Young, A. McAllister, C. Roland, and D.S. Warner) compared the perioperative pharmacodynamic profiles of remifentanyl and fentanyl during elective supratentorial craniotomy for space occupying lesions. Intracranial pressure and cerebral perfusion pressure were similar with fentanyl and remifentanyl. Median time to extubation also was similar, but seven fentanyl patients required naloxone while no remifentanyl patients required naloxone. Postoperative blood pressure was higher in the remifentanyl than the fentanyl group.

The members of SNACC gratefully acknowledge support of the Society's educational mission this year through a generous and unrestricted grant from Pharmacia Upjohn.

DINNER SYMPOSIUM

A dinner symposium on the "Use of Narcotics as Anesthetic Components during Neurosurgical Procedures" was presented on Thursday night, October 17, 1996. The dinner symposium was open to all registrants for the annual SNACC meeting. Christian Werner (Munich, Germany), David Warner (Durham) and Peter Glass (Durham) discussed controversial aspects of the use of narcotics in neurosurgical patients and provided the audience with new information about Remifentanyl, a short acting narcotic which has recently been introduced into practice. Members of the Society of Neurosurgical Anesthesia and Critical Care wish to express appreciation to Glaxo-Wellcome for an unrestricted educational grant that funded the symposium and provided support for the educational mission of the Society.

1996 BREAKFAST PANEL

SNACC sponsored a Breakfast Panel on the "Management of Head Injury: Current Concepts" at the annual meeting of the American Society of Anesthesiologists on October 22, 1996. The panel was planned and moderated by Christian Werner (Munich, Germany) and extremely well attended. Basil Matta (Cambridge, UK) addressed the issue of whether anesthetic technique makes a difference, while John Drummond (San Diego) discussed controversies in perioperative management of patients with traumatic brain injury. Donald Prough, M.D. (Galveston) provided insights on the issue of whether monitoring of head injured patients improves outcome. Members of SNACC would like to thank Dr. Werner for his efforts in organizing this panel.

OFFICERS OF THE SOCIETY OF NEUROSURGICAL ANESTHESIA AND CRITICAL CARE

The close of the annual meeting in New Orleans represented the retirement of Dr. David Warner from the SNACC Board of Directors. Dr. Warner, as the immediate past president of SNACC, shep-

herded the organization through a difficult time related to alterations in Society management. His leadership allowed the organization not only to survive, but to thrive during the challenging times. Members of the Society are grateful to Dr. Warner for his many efforts on our behalf.

Officers elected at the Business Meeting of the 24th Annual Meeting of SNACC are as follows: Past President, Adrian Gelb, M.D., Department of Anesthesia, University of Western Ontario; President, William Young, M.D., Columbia Presbyterian Medical Center; President Elect, Arthur Lam, Department of Anesthesia, University of Washington; Vice President, Patricia Petrozza, Department of Anesthesia, Bowman Gray School of Medicine; Secretary-Treasurer, Jeffrey Kirsch, Department of Anesthesia, Johns Hopkins Medical School.

David Warner will continue to serve as delegate to the House of Delegates of the American Society of Anesthesiologists. Patricia Petrozza will serve as the alternate delegate. For information concerning membership, contact the SNACC Headquarters Office at 1910 Byrd Ave., Suite 10, P.O. Box 11086, Richmond, Virginia 23230-1086. Telephone: (804) 673-9037, FAX: (804) 282-0090. E-mail: 75112.2053@compuserve.com.