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## SUBSTANCE ABUSE HOTLINE

Contact the ASA Executive Office at (708) 825-5586 to obtain the addresses and telephone numbers for State Medical Society Programs and Services which assist impaired physicians.

The views expressed herein are those of the authors and do not necessarily represent or reflect the views, policies or actions of the American Society of Anesthesiologists.
Anesthesia Education and Research, 
Circa 1797

Near the turn of the 18th century, the art of "pneumatic medicine" became an important modality initially practiced for relief of pulmonary disorders, and shortly thereafter, it was expanded to a variety of non-pulmonary disorders. One of the medicinal gases was nitrous oxide whose use, in American medicine, was considered hazardous. An American physician, Lantham Mitchell, had experimented with nitrous oxide in dogs; apparently overdosed, the animals died, and Mitchell proclaimed nitrous oxide a poison. His eminent position in American medicine sounded the death knell for nitrous oxide.

Undaunted or perhaps unaware of the results across the Atlantic, a 17-year-old apprentice to J. Bingham Brolaise, surgeon of Penzance, undertook the production and the risk of subsequent inhalations of nitrous oxide. Each evening after his surgeon-employer retired for the night, Humphry Davy would slip into the dispensary to prepare and sample inhalations of nitrous oxide. With each passing evening, he realized not only that the gas was not lethal, but he also recognized its analgesic properties. Davy had to undergo removal of a wisdom tooth: "I experienced an extensive inflammation of the gums, accompanied with great pain... On the day when the inflammation was most troublesome, I breathed three large doses of nitrous oxide. The pain was diminished after the first three or four inspirations..."

Davy was carried away by his observations and subsequently increased the frequency of his inhalations until he was unable to carry out his routine functions as surgeon's apprentice. Chance brought Davy to the attention of Thomas Beddoes, founder of the Pneumatic Institute, and Humphry Davy was offered the position of Superintendent. Bingham Brolaise, wishing to terminate the apprentice prior to the expiration of his contracted term, elatedly composed a letter of reference to Dr. Beddoes. In the letter, he stated that he "was unwilling to stand in the way of so promising a youth who had every chance of gaining fame and fortune."

Humphry Davy's subsequent success is history.

Erwin Lear, M.D.
Editor
HCFA Responds to ASA Appeals
Adrienne C. Lang, Director
Office of Governmental Affairs

The Health Care Financing Administration (HCFA) has issued several sets of instructions to its Medicare carriers which, in ASA's view, have contradicted the intent of the final Medicare Fee Schedule (MFS) regulation. The areas of interest include: pain management services, specialized cardiac monitoring services and critical care services. ASA has been successful in having HCFA reverse each of these adverse decisions.

Pain Management Services

HCFA issued rebundling instructions seeking to prevent improper disaggregation of procedures within procedures. For example, the unbundling list for anesthesia codes indicated that one cannot bill for segments of the anesthetic service that are considered part of the base unit value, e.g., intubation, interpretation of noninvasive tests and blood replacement.

ASA told HCFA that inclusion of the epidural codes is consistent with HCFA's intent if such codes were used exclusively for an anesthetic procedure; i.e., if the anesthesiologist provides the surgical anesthetic via an epidural catheter, the insertion of the catheter is indeed contained in the base unit value.

However, this is not an accurate interpretation of the use of codes 62278 and 62279. In many instances, an epidural catheter is placed not for the surgical anesthetic, but for postoperative pain management. In these cases, it is a separate procedure and should be reimbursed.

HCFA’s carrier medical directors agreed, and the original policy has been revised. Codes 62278 and 62279 can now be billed on the same day of service as an anesthetic; of course, proper documentation and chart notes as to the postoperative pain management purpose of the catheter are necessary. HCFA further clarified that code 01996, daily visit code for management of epidural or subarachnoid drug administration, may be billed beginning the first postoperative day.

ASA has had many inquiries regarding HCFA’s position on pain management in relation to the surgical bundle. HCFA stated the following in the final MFS regulation:

Acute postsurgical pain management services are generally furnished by the surgeon. Under the fee schedule, these services by the surgeon are included in the surgeon’s global payment and are not separately billed. We recognize, however, that there are certain special situations when a patient’s acute postsurgical pain may be so severe as to require consultation or treatment by another specialist such as an anesthesiologist. Our policy for these situations will be to allow separate billing by the pain specialist if the service is documented as being medically necessary. This policy is consistent with our policy for other instances of concurrent care. If, however, we find that referral to a pain specialist becomes routine, we will direct carriers to reduce the global payment for the surgery accordingly.

Note that HCFA’s approach will be to reduce the surgeon’s payment, not to deny the pain management service. HCFA has asked ASA to assist with the resolution of this potential conflict with the surgical global payment.

Cardiac Monitoring

In the never-ending process of keeping an eye on HCFA, we found yet another unacceptable policy that was buried in a recent list of instructions to the Medicare carriers. The same document that corrected the epidural code situation contained a truly amazing statement, even by HCFA standards: "Do not pay separately for Swan-Ganz, central venous or arterial lines when they are an integral part of procedures such as open cardiac surgery."

ASA immediately delivered a harsh letter to HCFA. We stated that for the final MFS regulations to recognize the importance of these procedures and state they would be covered, and then for the carriers to remove coverage for the surgeries in which they are most often employed is a "Catch-22" of enormous consequence to cardiac anesthesiologists and their patients.

ASA explained that these are invasive procedures sometimes performed pre- or intraoperatively by anesthesiologists in order to place certain monitoring devices which provide vital data as to patient condition. In the proposed rule, HCFA correctly described these services as patient, not procedure, specific. For this reason, it is inappropriate to bundle these codes into base unit values assigned to any given anesthetic procedure. The insertion is a distinct surgical
procedure, entirely separate from the anesthetic service. (It is for insertion of the device, not interpretation of the data output, for which reimbursement is appropriate.)

HCFA acknowledges the relative skill, risk and complexity of these procedures by the assignment of values under the MFS. For example, code 93503, insertion of heart monitor, is valued at 5.43 units. Central venous pressure and arterial lines are valued in the 3.5 range. These are not inconsequential values, yet HCFA is now saying that the procedures have no value when provided by an anesthesiologist during cardiac surgery.

ASA's letter asserted that the history and practice of recognition of specialized monitors supports HCFA's original decision, i.e., separate coverage. HCFA accepted, by regulation, the uniform relative value guide (the ASA Relative Value Guide) in 1989 and again as part of the MFS. The ASA Relative Value Guide has never included these surgical services in the base unit values for any anesthetic. It is simply inaccurate to assert that their insertion is an integral part of the anesthesia codes because the base unit values have never bundled in separate surgical services that may be required. For example, the code for cardiac bypass, with pump, has been valued at 20 base units since before these monitors (or Medicare) even existed.

ASA is also aware that carrier history is an important part of the bundling issue, and carrier history supports ASA's position for separate recognition of nonanesthesia procedures provided by the anesthesiologist. A March, 1991 study by the General Accounting Office, "Need for Consistent National Payment Policy for Special Anesthesia Services," surveyed the Medicare carriers on a number of modifying circumstances. Of the 52 carriers, only eight did not recognize specialized monitoring procedures; 44 recognized Swan-Ganz catheters (10 allowed only Swan-Ganz); 34 allowed additional procedures. Unsubstantiated variations in payment among the carriers is no longer an issue as these codes are paid, not on historical anesthesia changes, but under the MFS.

ASA concluded that to rebundle these critical services represented an additional cut to anesthesia services, particularly cardiac anesthesia. Further, because the overwhelming majority of carriers previously paid these services, it is a significant cut under the supposedly budget-neutral fee schedule. Physician work, the exposure of the patient to risk and the physician to liability argue against inserting these devices gratis. ASA fears that, under the new nonpayment policy, Medicare patients will not have the benefit of heart monitors during cardiac surgery.

HCFA has told ASA that, after review of our appeal, it has reversed its decision regarding heart monitors during cardiac surgery. These specialized procedures will continue to be reimbursed. There are two caveats: if you bill a pulmonary artery catheter, you cannot bill a central venous pressure; and the multiplesurgery-on-the-same-day reductions will apply if more than one surgical code is billed.

Critical Care Services
There are two new hospital visit codes for critical care services (99291, first hour and 99292, subsequent 30 minutes). Unfortunately, the description of the codes as contained in CPT-4 specifically bundled all attendant procedures into those codes. Therefore, when the fee schedule went into effect, it meant that even procedures such as the insertion of a pulmonary artery catheter would not be reimbursed separately when either critical care code was used — even though the fee schedule pays more for the bundled service.

ASA and the Society of Critical Care Medicine worked with HCFA and the CPT-4 Editorial Panel to achieve a redefinition of critical care codes. This effort was successful, and HCFA issued the following decision to the carriers:

Critical care is considered to be an evaluation and management service . . . we indicated that payment for several procedures such as endotracheal intubation and chest tube insertion were bundled into the payment for critical care. The relative value units assigned to the critical care codes were inconsistent with the extensive bundling described in the rule. Consequently, we have decided to revise our policy.

The following codes are bundled into critical care visits: 36000, 35410, 36415, 36600, 71010, 91055, 92933, 93561, 93562, 94656, 94657, 94760, 94761, 94762. No other procedures are bundled into the critical care codes and, therefore, other procedure codes would be paid separately.
Wood Library-Museum – Quo Vadit?  
“Whither Are You Going?”

Elliott V. Miller, M.D., President  
Wood Library-Museum of Anesthesiology Board of Trustees

In the first charter of the Wood Library-Museum of Anesthesiology (WLM) in 1952, the purpose for creating the corporation was “to collect, preserve and make available to doctors of medicine and to the lay public writings, publications, apparatus and other materials pertaining to the special medical field of anesthesiology.”

Times and needs changed. Began as a separate corporation in 1952, the WLM dissolved its charter in 1971 and became a section of the American Society of Anesthesiologists (ASA). Times and needs changed again. In 1987, the WLM returned to its corporate structure and added further purpose to that above: “to publish materials, promote scholarship, sponsor exhibits, lectures and forums pertaining to anesthesiology.”

This year, the WLM moved into beautiful, new quarters with the ASA Executive Office. The facilities are highly functional and will help to serve the ASA members better. The new headquarters building was dedicated August 15, 1992 in a gala celebration led by ASA President G.W.N. Eggers, Jr., M.D. Several hundred people attended and visited the library, museum and archives.

The WLM serves ASA members in many ways as it performs its corporate purposes. The Living History of Anesthesiology videotapes of interviews, lectures and programs are loaned frequently. Anesthesia societies in other countries have purchased these videotapes for the use of their members.

Paul M. Wood Fellowships for the serious scholar in the history of anesthesia have been very helpful. This year, there will be four scholars in residence at the WLM.

WLM also publishes one or two books, usually old classics, each year. A recent release was the book by C.E. Overton on Studies of Narcosis from the early 1900s that was translated from German. His work, with that of Hans Horst Meyer, formed the basis of the lipid solubility theory of anesthesia.

Apparatus and other materials have been exhibited at the ASA Annual Meetings and the 9th World Congress meeting in 1988 in Washington, D.C. Many thousands of people have seen items from the WLM collection exhibited at the Smithsonian Institution in Washington, D.C., the Museum of Science and Industry in Chicago and the Museum of the International College of Surgeons, also in Chicago.

Requests for information from ASA members are very frequent. We also receive requests from hospital committees, school children and many other people interested in our specialty and its history. Patrick Sim, Librarian, and Sally Graham, Assistant Librarian, have done innumerable bibliographic searches for our members and the general public.

The purpose of the WLM is to serve all members of ASA. A personal invitation is extended to each and every one of you to visit when you come to the Chicago area. The ASA Executive Office is only a 15-minute taxi ride from O’Hare International Airport. See history come alive! Your suggestions are welcome and needed to help us plan our way into the next century.
Cherish or Perish: The WLM Mission

B. Raymond Fink, M.D., Chairman
WLM Publications Committee

The latest book publication by the Wood Library-Museum of Anesthesiology (WLM) of English translations of anesthesia classics is *Researches Practical and Physiological on Etherization*, an innovative monograph by Nikolai Ivanovich Pirogoff (1810-1881), that includes his method of introducing the anesthetic per rectum. It was translated by B. Raymond Fink, M.D. from the original French work, *Recherches Pratiques et Physiologiques sur l'étherisation* (1847).

This translation is one in a series of notable titles in the history of anesthesia that the WLM is rendering newly accessible to the English-reading public. It is issued in softcover rather than hardcover in order to gauge whether the saving in cost significantly affects the tempo of sales.

Pirogoff was probably the first European physician, perhaps the only one anywhere, to write a book incorporating a reasoned discussion of the pros and cons of anesthesia from the viewpoint of the surgeon. Moreover, his was the first to include a supporting series of systematic experimental administrations to animals. John Snow's *On the Inhalation of the Vapour of Ether* (1847) was purely clinical; it merely noted in an appendix that earlier in 1847, he had observed in animals that the circulation of the blood continued after ether had arrested the respiration.

When Pirogoff received the censor's permission to publish in May, 1847, he was already established as the leading Russian surgeon of the time. He received his medical doctorate in 1832 at the age of 22, and he became Professor of Surgery at Dorpat University in 1835. He accepted the appointment of Professor at the Military Medico-Surgical Academy in St. Petersburg in 1841.

Pirogoff displays hesitancy in the face of perils unknown, judiciously blended with enthusiasm for deliverance from horrors unspeakable. The disciplined kindness of a highly trained surgeon permeates his book and gives it a unique flavor. Pirogoff was driven by the instinct of mercy, by an intense desire to lessen the dangers and smooth the course of a potentially risky and difficult-to-administer anodyne, and a thankfulness manifest in our own generation in the motto of the Colombian Society and the World Federation of Societies of Anaesthesiologists: *anesthesia ars deorum* ("anesthesia — the art of the gods") at once expressive of belief and disbelief and undying wonder. If the cry is modern, the sentiment is timeless, and as we read Pirogoff, we can feel it vibrate in the breast of a great humanitarian who founded the Russian equivalent of a military nursing service in the Crimean War at about the same time as Florence Nightingale (1823-1910) was striving to organize the same on the British side.

The professionally mature Pirogoff makes an interesting contrast to John Snow (1813-1858), for Snow was still a student in 1843 when he obtained the degree of Bachelor of Medicine, and in 1844 when he received his doctorate. As David A. F. Shephard, M.R., observes in a forthcoming biography, Snow doubtless was on the lookout for an innovative outlet for his boundless curiosity and determination when anesthesia burst upon Europe in late 1846.

Republication of Pirogoff's small masterpiece is in keeping with the dedication of our founder, Paul M. Wood, M.D., to intensify our appreciation of the
present through remembrance of the past. That same influence surely was at work when Vincent Collins, M.D. started the WLM reprint tradition in 1950 with Snow’s *On Chloroform and Other Anaesthetics* (1858), long before the WLM acquired a corporate individuality. The WLM has continued to persevere in this vein.

Thanks to the generosity of publisher Payne Thomas, it now holds the copyright of the two-volume *Foundations of Anesthesiology* (1965) by Albert Faulconer, Jr., M.D. and Thomas E. Keys, M.A., Sc.D., published in 1965. This wonderful work consists of strategic excerpts from seminal books and articles demonstrating the roots of anesthesiologic practice, leavened with authoritative comment and biographic sketches of the protagonists. Out of print for a number of years, it passionately communicates the ingenuity lavished by our predecessors on the scientific and technologic progress of our art. The WLM plans to issue a facsimile reproduction of it in the near future. Judging by the responses to a preliminary sounding, there exists a large, pent-up demand.

Complementary in a sense to Faulconer and Keys Foundations is the History of Anesthesiology Reprint Series that annually presents papers gathered by Leroy D. Vanders, M.D. on a topic selected by him. The latest of these, to appear in October, will deal with ambulatory anesthesia. The title, incidentally, illustrates the genius of the English language for ellipsis — “ambulatory anesthesia” is not a type of sleepwalking, but clearly stands for the mouthful “anesthesia for patients able to ambulate after surgery the same day.” Dr. Vanders’s choices illumine the surprisingly long pedigree of this subspecialty that was founded, if not baptized, by the peerless Ralph M. Waters, M.D. (1883-1979).

The book next in production will be the proceedings volume of the Third International Symposium on the History of Anaesthesia (title spelled as in the previous two of the series), held in Atlanta in March, 1992. It is being edited by C. Ronald Stephen, M.D., Lucien E. Morris, M.D. and B. Raymond Fink, M.D.

With the support and approval of the WLM Board of Trustees, the Publications Committee has been redefining its posture on scholarly publication. Essentially, it has a commitment to reproduce or translate works of recognized importance that have come down to us from the anesthesiologic past and to midwife meritorious historical studies that otherwise would not emerge in print. Selection is subject to the customary scholarly review by qualified, anonymous peers. Publication requires approval by the WLM Board of Trustees and, eventually, entails no small amount of editorial and redactorial effort by the Committee, all of it, of course, purely honorary.

According to the present rule, the WLM will not pay royalties, although this does not necessarily preclude a grant-in-aid in a particularly deserving case. All proceeds from sales thus accrue to the WLM and in practice go to support further titles. The WLM has a working understanding for joint publication with the Royal Society of Medicine Services of London, generally entailing
bulk purchase of a prearranged number of copies of a book produced by the
other.

The Publications Committee is now searching for a pithy motto or slogan,
perhaps borrowed from a literary classic, to epitomize its activities. Geoffrey
Chaucer (1328-1400), for instance, could supply: "Out of olde bokes... cometh all this newe science." William Shakespeare (1564-1616) has written:"The labour we delight in physics pain," which seems an uncannily apt
description of anesthesiologists. "The articulate audible voice of the past" is
culled from Thomas Carlyle (1795-1881).

Please send your comments or suggestions to: B. Raymond Fink, M.D.,
Chairman, WLM Publications Committee, University of Washington RN-10,
Seattle, Washington 98195; or fax to (206) 685-3079.

B. Raymond Fink, M.D. is Professor Emeritus of
Anesthesiology at the University of Washington,
Seattle, Washington.
The Whistleblower

M.T. Pepper Jenkins, M.D., Vice-President
Wood Library-Museum of Anesthesiology Board of Trustees

The prestigious New England Journal of Medicine, in its June 16, 1966 issue, included a special article, "Ethics and Clinical Research," by Henry K. Beecher, M.D. Ensuing immediately were loud cries of protest and criticisms of Dr. Beecher, particularly from some eminent physicians with important investigative credentials and also from administrative colleagues at Harvard Medical School, but these did not alter his expressed need for a new set of research ethics.

In a review of his article on ethics or a lack thereof in clinical research, Dr. Beecher has acquired posthumously an additional title: Whistleblower. As explored in the treatise, Strangers at the Bedside, David J. Rothman gives full credit to Dr. Beecher as the one individual who almost single-handedly brought about the changes in research ethics involving human experimentation. Rothman notes very early and repeatedly that Dr. Beecher’s "devastating indictment of research ethics helped inspire the movement to a new set of rules and a new set of players in medical decision-making." In the New England Journal of Medicine article, Dr. Beecher tried (not altogether successfully) to maintain a tone of detachment, as though this were a scientific paper like any other. "I want to be sure," he insisted, "that I have squeezed out of it all emotion, value judgments and so on." Even so, its publication created a furor both inside and outside the medical profession.

This special report in the New England Journal of Medicine capsized 22 articles from prestigious medical journals, recognized medical centers and honored physicians. Dr. Beecher presented to the editors of the New England Journal of Medicine fully annotated data on all of the articles, six of which had been published in the New England Journal of Medicine. There was agreement that the titles and authors would not be published, for as Dr. Beecher stated, "There is no intention of pointing to individuals, but rather I wish to call attention to widespread practices." For purposes of publication, Dr. Beecher had reduced his original 50 references to the 22 which were published.

The theses of his criticisms revolved around two major factors: there was no evidence that informed consent had been obtained, and the different areas
of experimentation had not been done for the benefit of the individual patient
or subject, but theoretically and hopefully for the benefit of patients in general.
In addition, in many instances, there were threats to the patients' continued
state of health and even to patients' lives.
This article by Dr. Beecher began a transformation in the conduct of experi-
mentation on humans and, in addition, on the practice of medicine at the bed-
side. This easily explains the provocative title of Rothman's book, indicating
that patient care today involves not only the medical profession, but also
lawyers, sociologists, moralists, administrators, institutional review boards and
society at large, all strangers at the bedside. To the discomfort and inconve-
nience of practicing physicians, the resultant expanded prerogatives of out-
siders have added difficulties and obstructions to the practice of medicine. It
has been noted, however, that in almost every instance, it has been physicians
who by their actions have invited the outsiders in.
Medical decision-making has become the province of a collection of
strangers, with judges, lawyers, ethicists and legislators joining doctors at their
patients' bedside. In this book, Rothman asks, "What prompted Beecher to
analyze the conduct of human experiments and to go public with his findings?"
and then he explained, "Anesthesiologists do have a reputation for being the
fifth column within medicine. Beecher belonged to the specialty that daily
watches colleagues perform in the operating room, and then discusses their rel-
ative strengths and weaknesses... The most important consideration, however,
was Beecher's commitment to good science, that is, to well-designed and
properly constructed research protocols. He was among the first to insist on
the need for controls in drug experiments, convinced that in no other way
could the investigator eliminate the placebo effect and accurately measure the
efficacy of a new drug."
As noted in the ASA NEWSLETTER, September, 1991, page 11, Dr. Beech-
er first addressed research ethics in the 1950s when very few others publicly
shared his concerns. It is no surprise that his 1966 article on ethics and clinical
research did galvanize the medical community. The surprise is that it did take
this long. As early as 1946, the American Medical Association (AMA) House
of Delegates, after reviewing the report of Dr. A. C. Ivy, an observer at the
Nuremberg War Crimes trials, reiterated its previously published support of
the principles of medical ethics concerning experimentations on human beings.
The AMA enunciated three requirements which must be satisfied: 1) the vol-
untary consent of the person on whom the experiment is to be confirmed; 2) the
danger of such experiment must be previously investigated by animal
experimentation; and 3) the experiment must be performed under proper medi-
cal protection and management.
Still the ethics of experimentation in humans did not receive the recognition
and respect accorded it today until after the expose in 1966 by an anesthesiolo-
gist, Henry K. Beecher, M.D., the Whistleblower.

References available upon request.)
A Portrait of History

George S. Bause, M.D., Curator and Trustee
Wood Library-Museum of Anesthesiology

A Royal British portrait of Sir Humphry Davy graces both the cover of this month’s ASA NEWSLETTER and the ground floor of ASA’s new headquarters building. A pioneer in recognizing the pain-relieving properties of laughing gas, Davy, unfortunately, failed to follow through in promoting nitrous oxide as an anesthetic agent.

This one-quarter of life-size portrait was ordered by Lady Davy in December, 1820 to commemorate Sir Humphry Davy’s election as President of the Royal Society. She commissioned Sir Thomas Lawrence, President of the Royal Academy, to capture Sir Humphry in oil. (Sir Thomas Lawrence is most widely known in America for having painted “Pinky” — a portrait frequently juxtaposed with Gainsborough’s “Blue Boy.”)

In Lawrence’s portrayal of Davy, the swirl of clouds and sky may represent Davy’s early investigations into therapeutic gases at Bristol’s Pneumatic Institute. By 21 years of age, Sir Humphry Davy had described the analgesic properties of laughing gas, observing: “As nitrous oxide in its extensive operation appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place.”

Beneath the painted horizon stretches the expanse of earthly elements, six of which were discovered by Davy. Through electrolysis of salt solutions, Davy isolated more chemical elements than any person before or since — sodium, potassium, calcium, barium, boron and strontium. In the portrait’s foreground (and to his contemporaries, in the forefront of the day’s inventions) is the lifesaving miner’s safety lamp designed by Davy. As painted by the admiring Lawrence, this later prototype of the Davy lamp was credited with preventing thousands of deaths by methane gas explosion in coal mines worldwide.

Lady Davy presented this portrait to John, her brother-in-law, who had distinguished himself as Medical Inspector-General of the Army by popularizing the use of hydrometry and thermometry as well as by defining the source of gases resulting in spontaneous pneumothorax. As editor of Sir Humphry’s
works, Dr. John Davy prized the one-quarter-size portrait of his older brother, especially once Lady Davy had donated a larger three-quarter version to the Royal Society.

The mutual respect shared by Sir Thomas Lawrence and Sir Humphry Davy mirrored the striking parallels in their lives. Both of these geniuses had sprung from the lower classes and had shifted from Bristol, at some point, to London. Each man was nearly entirely self-taught, and each rose at an early age to the presidency of his respective Royal organization. Both men were knighted by the Prince-Regent, soon-to-be George IV.

Indeed, on July 19, 1821, the President of the Royal Academy, Sir Thomas Lawrence, paraded ceremonially down the aisle of Westminster Abbey, abreast of Lawrence, now six months after posing for regency portraiture, marched Lawrence's alter ego, Sir Humphry Davy, the President of the Royal Society. Each of these giants was to perish childless, yet Davy, through his discoveries and Lawrence through his portraits each left a vast legacy to mankind.

Author's Footnote:
The Davy lamp facilitated mine exploration by several of Davy's great-nephews in the coal-mining regions of Pennsylvania. In Lahaska, Pennsylvania, near the artists' haven of New Hope on December 18, 1982, I recovered Lawrence's portrait of Davy from a Richards family estate sale on my paternal grandmother's side. The oil now hangs in the "Pennsylvania and the Germans" section of the Wood Library-Museum of Anesthesiology. Beginning with this portrait, a perimeter timeline of anesthesia gas machines wraps counterclockwise around the WLM gallery. My wife, Ramona, and I are proud to have donated this portrait of my great-great-great-uncle, Sir Humphry Davy, to the WLM on behalf of our sons, Colin Davy and Evan Blake Bauso.
The Wood Library-Museum: 
A Fellow’s Perspective

David A.E. Shephard, M.B.

In the fall of 1991, I spent two weeks as a Research Fellow at the Wood Library-Museum of Anesthesiology (WLM). Aside from being able to conduct some specific research, I had the opportunity of learning about this unique resource center, which has so much to offer to anyone with a serious interest in the history of anesthesia and allied fields.

I was not disappointed in my visit. The mini-sabbatical that I spent in the library was a most satisfying experience. It not only gave me the chance to sit back and review what two great physicians, John Snow and Claude Bernard, had done for anesthesia (and how, albeit unknowingly, they had made it possible for us, so many years later, to practice “stress-free” anesthesia), but it also regenerated my interest in other aspects of the history of our specialty.

Two weeks is too short a period to justify comments in detail about the role and operation of the WLM, but it was long enough for me to form impressions that have remained with me. Four are particularly strong: the very small area assigned to the center, the volume and variety of the resource material, the pleasures of browsing and the hospitality shown me by the staff, headed by Librarian Patrick Sim. I may have to revise the first of these impressions, for no doubt the new building into which the WLM has just moved provides space that takes into account its special needs, and I look forward to my next visit with this in mind.

My first day was spent in orienting and familiarizing myself with the library’s large core collection. It was good to see such classics as the works of Thomas Beddoes and Sir Humphry Davy, and to handle them and to refresh my memory of the path they had laid down for us to follow. Among the many early anesthesia texts, it was interesting to see John Foster Brewster Flagg’s 1851 text, published as early as 1847 and broader in content than James Robinson’s monograph of 1847, but much less comprehensive than John Snow’s of 1858.

The library’s holdings of journals and varied files were equally impressive. I noted with particular interest the useful collection of material relating to the history of Canadian anesthesia and the influence on it of anesthesia in
the United States from 1915 to 1940 — the subject of research for which I have been fortunate enough to receive a second Fellowship. (I had not known until I visited the WLM that the award of one Fellowship does not rule out the chances for the later award of a second.)

The focus of my research on this occasion was the medical literature of the latter half of the 19th century, with particular reference to the influence of Snow and Bernard. I readily found material that supplemented the material I had worked on previously, but I also came across material that was evidently unique and that had somehow come into the WLM’s possession. One example is a remarkable collection of clippings from English medical journals of the 1850s, annotated diligently by a physician with a special interest in tracing the story of Snow’s use of amylene. This example of serendipity in research revealed a path to be explored later.

My research went well, though time was all too short. I had much to review among the textbooks and journals that Patrick Sim had steered me toward, and I had little time to accomplish much else. I spent less time, for example, than I would have liked examining the museum’s artifacts. I did, however, visit the John Crerar Medical Library at the University of Chicago, which has a large collection of older anesthesiology texts — and which is fortunately placed near the university’s excellent bookstore and several secondhand bookstores. Nine working days regrettably left me little time for informal discussions with the library staff and with another Fellow in residence, Douglas R. Bacon, M.D. I did, however, enjoy the opportunity of visiting Chicago at the end of the day, finding that it had a great deal to offer me and my wife.

My experience at the WLM was, then, a rewarding one; I am certain that other Fellows have found the same, too. But, before concluding, I have to sound a distress call. The only disturbing experience I had was to witness the decay that has affected some of the library’s significant material. It was sad, for example, to attempt to read Flagg’s text, which was falling to pieces before my very eyes.

A project is under way to restore the library’s documents, and I saw examples of separates that had been restored and preserved. But much more needs to be done, and it is to be hoped that the new building is equipped with a temperature- and humidity-controlled room in which fragile material will be housed. It is to be hoped, also, that funds will continue to be made available to continue the ongoing process of conservation.

The Wood Library-Museum of Anesthesiology is so important to the history and culture of anesthesiology that no effort must be spared to ensure that it will remain the unique and valuable resource center that it has become. It was a privilege for me to have worked there and, as a Fellow who has experienced the uniqueness and value of the WLM, I intend to recognize this privilege by supporting it in turn.
Raison d'Être

Franklin B. McKechnie, M.D., Trustee
Wood Library-Museum of Anesthesiology

As a good dinner is enhanced by a bottle of fine wine, or a house helped to become a home by the addition of good paintings, or a lovely lady appears more beautiful by the addition of a diamond necklace, so is the American Society of Anesthesiologists given substance by having the Wood Library-Museum. For it is here that we find our heritage, our background, our beginnings, and it is from them that we learn how we arrived to where we are today.

Wrapped between the covers of our rare books are the descriptions of the hundreds of small steps taken by many anesthesiologists through the years that, bit by bit, brought us to the techniques and agents that we use today. These steps slowly helped to expand the broad base of surgical procedures so that, nowadays, it is a rarity to classify a patient as inoperable because anesthesia cannot be administered safely.

In 1935, it was said that the heart would never be approached surgically — it was considered “far too delicate an organ.” And yet now, 60 years later, we not only approach it, but we transplant it. Indeed, a miracle. Much of the knowledge that permitted this advent is found in the library’s volumes and the museum’s equipment.

Thus, the library is a memorial to the pioneers in our specialty, those willing to take a chance, to try new things, to invent ways to show “it could be done.” But even more, it is a memorial to the thousands of patients that these doctors anesthetized. They were the ones who truly took the risk. Who was the first to allow a tube to be pushed between the delicate edges of the vocal cords, or allowed an arrow poison to be given intravenously, or a needle pushed into the spinal canal? These, and a thousand other “small steps,” are recorded in our library, and they are what makes the Society what it is.

The library is not just a memorial; it is a base for education, from which better agents, better techniques and greater safety will evolve in the future. It is a place to study, a place to think and a place to dream.

Like the fine wine, the pictures and the necklace, the library is not a necessity, but it does tell us who we are, what we are and from where we have come. We should be justly filled with pride because of it.
Art Holdings at the WLM:
Riding the Cayman

Selma H. Calmes, M.D., Trustee
Wood Library-Museum of Anesthesiology

The Wood Library-Museum of Anesthesiology (WLM) is developing into a scholarly institution under the leadership of WLM Board President Elliott V. Miller, M.D. An inventory of fine art holdings was completed recently, another step along the way to developing the library.

The stimulus for the inventory was the acquisition in 1989 and 1990 of two oil portraits of historic importance—a portrait of Sir Humphry Davy by Sir Thomas Lawrence, donated by Board member George S. Bause, M.D. (see page 10), and purchase of a portrait of James Robinson, the London dentist who was the first to use ether in 1846 in England. The need to conserve and insure these paintings led the WLM Board to realize that we should investigate what art pieces we had.

The inventory of fine art revealed that our holdings are relatively small in number and are nearly all images of people or buildings related to the discovery of anesthesia. Information about items has been entered into a Fine Art Template in the Museum Objects Data Entry System (MODES) database, which is the software used for the equipment catalog. The new inventory will allow us to keep better track of our items. As the WLM becomes better known, we will receive requests for loan of items. We also will have better records for insurance purposes. Another step in the inventory will be photographic copying of each item for archival purposes and for possible future reproduction. This project is now under way.

Another part of the inventory process is to find material documenting the items. This need was an opportunity to investigate an engraving that had intrigued me for some time. I would like to use it as an example of some of the WLM's fine art treasures.

In 1989, the family of K. Garth Huston, M.D. (a past President of the WLM Board) donated an engraving of a man riding an alligator (see illustration 1). Using the inscription, “Mr. Wateron Mounted on the Cayman While Living,” as a clue and the resources of the WLM for references, I found an interesting story about the picture.

The engraving depicts an experience that occurred during Charles Water-
ton’s third trip to South America. Waterton (1782-1865) is important to anesthesia because, on his first trip to South America, he documented the production of curare by the Mausi Indians and brought curare back to Europe. He later proved that curare worked on large animals as well as small ones (there was a debate on that issue at the time) and demonstrated that animals can recover from curare’s effects if ventilation is provided.

In the early 19th century, English adventurers were exploring the world. Many were naturalists seeking specimens of new and unusual plant and animal species; some of these specimens still grace the British museums’ shelves today. Charles Waterton spent most of his life on naturalist adventures. He was extremely eccentric and energetic and demonstrated a profound interest in nature from childhood. At age 80, he was still climbing trees barefoot, seeking birds’ nests or using the treetop as a quiet place to read.

His first opportunity to go abroad was when he was sent to manage family property in Demerara, Guyana in 1804. His first voyage as a naturalist was in 1812 to collect a quantity of the strongest wourali, a crude preparation of curare. His second voyage was in 1816; a third began in 1828. These are recorded in Waterton’s Wanderings in South America. The first of five editions was published in 1825. The book was extremely popular with the public, which was eager to learn about exotic lands.

His third voyage in 1828 was probably due to his love of the country: “Giana [Guyana] still whispered in my ear and seemed to invite me once more to wander through her distant forests.” He intended to collect specimens, especially to capture a cayman (alligator) to dissect and then take to Europe for display. This latter goal proved very difficult. He hired Indians who promised to deliver a cayman, using a shark’s hook and live bait. The caymen removed the bait and evaded the hook five consecutive nights. Waterton then hired new Indians, who constructed a new hook designed so the barbs would stick into the cayman’s stomach the more it pulled against the rope. The hook was positioned in an appropriate place on the river bank (see illustration 2).

“About half past five in the morning, the Indians stole off silently to take a look at the bait. On arriving at the place he set up a tremendous shout. We all jumped out of our hammocks, and ran to him . . . We found a cayman, ten feet and a half long, fast to the end of the rope. Nothing now remained to do, but to get him out of the water without injuring his scales . . . we mustered strong . . .

Illustration 1
"I informed the Indians that it was my intention to draw him quietly out of the water, and then secure him." The men were unhappy about this, needless to say, and proposed arrows or guns. Waterton refused, stating he had come to get a perfect specimen. Waterton paced the sand, seeking a solution. Finally it came: "I took it [the canoe's mast] out of the canoe, and wrapped the sail around the end of it ... I could force it down the cayman's throat, should he come open-mouthed at me."

The Indians were then convinced to pull the rope. "The people pulled the cayman to the surface; he plunged furiously as soon as he arrived in these upper regions, and immediately went below [when] ... they slackened their rope. They pulled again, and out he came.

"By this time the cayman was within two yards of me. I saw he was in a state of fear and perturbation; I instantly dropped the mast, sprang up, and jumped on his back, turning half round as I vaulted, so that I gained my seat with my face in a right position ... He began to plunge furiously and lashed the sand with his long and powerful tail. I was out of reach of the strokes of it, by being near his head. He continued to plunge and strike, and made my seat very uncomfortable. It must have been a fine sight for an unoccupied spectator ... The people roared in triumph ... it was the first and last time I was ever on a cayman's back.

"I now managed to tie up his jaws ... He was finally converted to the canoe and then to the place where we had suspended our hammocks. There I cut his throat; and after breakfast was over, commenced the dissection."2

The story of riding the cayman made some naturalists of the time angry. They thought the alligator was abused. Others doubted the event took place. The public loved the story, however. For the second edition of Waterton's Wanderings, in 1828, a colored plate by Robert Cruikshank showed Waterton riding the cayman.3 (Note: The WLM copy of the second edition does not have this plate, for unknown reasons.) This colored plate apparently is the engraving we have; it is probably a copy of a painting of the event done by a longtime Waterton friend, Captain Edward Jones. Probably the painting was done first. Our print lists "Capt. Edw. Jones" above Cruikshank's name. Several versions of the engraving exist.

The stuffed cayman and the hook and rope used to catch it were at the top of the main staircase in Waterton's home. Captain Jones' painting of the cayman ride was near by. These items fit the general house decor; stuffed speci-
Within a year, John Lundy at the Mayo Clinic and Ralph Waters at the University of Wisconsin were using thiopental. Its rapid onset of action and short duration of central nervous system depression soon led to its widespread use for induction of anesthesia and, initially, as an intravenous anesthetic used alone.

A product of 25 years of pharmaceutical research by nonanesthetists, thiopental introduced concepts and practices destined to change forever the practice of anesthesia.

Synthetic local anesthetics, introduced about the same time as barbiturates, had a substantially more immediate but equally profound effect on the practice of anesthesia. Alfred Einhorn, another German chemist, not only synthesized for the first time atropine but, after synthesizing more than 100 compounds related to cocaine, developed procaine (Novocain) in 1905. This was the first clinically effective local anesthetic devoid of the toxicity and side effects of cocaine, a naturally occurring local anesthetic introduced into clinical practice in 1884 by ophthalmologist Carl Koller.

Procaine was immediately recognized by the German surgeon Heinrich Frederick Wieland Braun, and he popularized it with almost evangelical fervor for spinal anesthesia, nerve blocks and infiltration anesthesia. Equally effective as a promoter of regional anesthesia with procaine was another German surgeon, August Bier; one of his many accomplishments was the introduction of what is known today as the Bier block.

Together, Braun and Bier made regional anesthesia recognized throughout Europe as an effective, safe and widely used alternative to the only other anesthetics then available: ether and chloroform. It was Rudolph Matas, a New Orleans surgeon of considerable international stature, who, at about the same time, did likewise for popularization of regional anesthesia in North America. Again, nonanesthetists were responsible for changing the course of anesthesia by developing concepts and practices still in use today.

For all of the first years of anesthesia and well into the 1895-1940 era, ether and chloroform, along with their problems, were the only inhalation anesthetics potent enough to produce surgical levels of anesthesia. In the mid-1920s, George Lucas and Velyn Henderson, pharmacologists at the University of Toronto, started their studies of the anesthetic potency of cyclopropane, a compound initially synthesized in 1802 by the Polish chemist, August Freund. Their 1929 article on the use of cyclopropane as an anesthetic was the primary factor leading to the rapid acceptance of this agent by contemporary leaders in anesthesia, including William Neff in San Francisco, Emery Ravenstine in New York and Ralph Waters in Madison, Wisconsin. Indeed, cyclopropane soon became the champagne of inhalation anesthetics, the first to compete with and, in some areas, replace chloroform and ether.

The significance of the introduction of cyclopropane on the development of anesthesia is difficult to appreciate for a modern anesthesiologist who is likely to regard cyclopropane simply as yet another rather quaint paleoanesthetic that can readily be ignored as being irrelevant; not so. Cyclopropane was not irrel-
event to the development of anesthesia for two reasons.

First, unlike ether, anesthetic concentrations of cyclopropane produced marked respiratory depression so pronounced that respirations had to be artificially assisted or controlled if CO₂ retention was to be avoided. If hypercarbia was not prevented, cyclopropane was associated with serious and even fatal cardiac arrhythmias, especially ventricular fibrillation.

Second, cyclopropane was expensive and explosive. These two attributes, combined with the need for artificial ventilation, meant that it had to be given using a closed anesthesia circuit. And here, to the rescue, came a nonanesthesiologist, Dennis E. Jackson.

Dr. Jackson, born in 1878, held an M.D. degree as well as a Ph.D. degree in physiology and pharmacology. A professor of pharmacology at the University of Cincinnati, he became involved in work on CO₂ absorption in animals that led to his development of a practical canister filled with soda-lime to absorb CO₂. It was this ability to absorb CO₂ that, in turn, led to development of closed systems in anesthesia. It was a system of Dr. Jackson’s design that Ralph Waters at the University of Wisconsin used and popularized in a to-and-fro mode. The same principle was later used by Brian Sword, M.D. of New Haven, Connecticut, to develop the even more popular closed-circle system, a system still in wide use today throughout the world.

The cyclopropane that Lucas and Henderson introduced also resulted in the development of anesthesia circuits that still form the basis of much of today’s clinical practice. Equally important, cyclopropane introduced anesthesiologists to the niceties and necessities of controlled ventilation. This, in turn, contributed to the reputation of anesthesiologists as physiologists of the operating room. Their knowledge and expertise in respiratory physiology then led to anesthesiologists becoming pioneers in the development of intensive care units and intensive care medicine, especially respiratory care.

Without the lessons in artificial ventilation learned with cyclopropane, how well would the apnea produced by curare have been managed when it was introduced a decade later? Cyclopropane set the stage for management of depressed respiration and apnea. Cyclopropane modernized anesthesia.

The fact that cyclopropane could be and often was associated with cardiac arrhythmias up to and including ventricular fibrillation also had another effect on the development of anesthesia. The danger of arrhythmias led to a new and important innovation: continuous intraoperative monitoring of the heart rate and rhythm by EKGs. The EKG machines used originally were direct writers; cathode ray oscilloscopes were not then clinically available.

The use of EKGs in the operating room and the recovery room soon made anesthesiologists not only experts in artificial pulmonary ventilation, but it made anesthesiologists the ones who introduced the concept of and need for continuous monitoring of heart function, thereby becoming experts in rapid recognition and diagnosis of acute onset of potentially lethal arrhythmias. Anesthesiologists were the ones who developed many of the basic techniques of intensive care, due in considerable part to experience gained in the handling of a contemporaneously new and important inhalation anesthetic, the introduc-
tion of which was based on contributions made by nonanesthetists.

The final events in the 1895-1940 era that irrevocably changed the way anesthesia was and is practiced center on contributions made in the late 1930s that eventually led to the introduction in 1942 of the first neuromuscular relaxant, tubocurarine.

The nonanesthetists involved in the story of curare extend back to Claude Bernard in the 1860s and beyond. In the 20th century, however, one of the important nonanesthetists was Richard Gill, who was a well-to-do but not rich American. He had a ranch in the jungle of Ecuador where he and his wife, Ruth, spent a great deal of their time in the 1930s.

At his ranch, Gill undertook a study of how the natives in the surrounding jungle made a substance extracted from various vegetable materials that they used effectively in war to kill their enemies and in peace to assure a copious supply of meat from jungle animals. Gill defined the various sources of this poison, woorara, and various methods for its preparation and storage. He eventually realized that the woorara stored in bamboo tubes was the most predictable and most reliably lethal form.

To see how rough, exciting and dangerous living was when isolated as the only white couple in the remote areas of the Ecuadorean jungle in the 1930s, one should read Gill’s book titled *White Water and Black Magic*.

In any event, Gill brought back to the states enough of the tube form of curare for pharmacologists and scientists to study. Among the latter was Harold King, an English chemist. He enters our story because it was King who identified, for the first time, the specific, active substance in Gill’s curare. King christened it d-tubocurarine in deference to its source. It was King’s work that eventually made possible the synthesis of d-tubocurarine, a drug first used clinically by A. E. Bennet, a psychiatrist who found it to be effectively moderate therapeutically induced electroconvulsive seizures.

**How and when d-tubocurarine was introduced into anesthesia is another story, but central to its introduction was the fact that the pharmaceutical company, E. R. Squibb, was the major recipient of the curare that Gill was bringing back from Ecuador in amounts adequate to produce a preparation, Intocurin, suitable for pharmacologic and, ultimately, clinical studies.**

Enter here the one for whom the annual eponymous Wood Library-Museum lecture is named — Lewis H. Wright. Trained by Ravenstine in anesthesia but never a practicing anesthesiologist, Dr. Wright was an employee of E. R. Squibb. It was Dr. Wright who was able to convince a few pioneer anesthesiologists to try this new adjunct to anesthesia.

Anesthesia has never been the same since.

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*This article was adapted from the Lewis H. Wright Memorial Lecture of the same title delivered at the ASA Annual Meeting on October 17, 1989 in New Orleans, Louisiana.*
From Henry Street to Northwest Highway

Erwin Lear, M.D.

In the August issue of the ASA NEWSLETTER, Harry H. Bird, M.D. described the successful completion of his charge as ASA adapts to its new home. Another milestone has been achieved in the history of our Society, and perhaps it would be useful to reflect on our roots, especially for our younger generation of members.

If one looks at the great seal of ASA, designed by Paul M. Wood, M.D., there are two dates listed: "Founded 1905" and "Incorporated New York 1936." As of this day, ASA remains a New York state corporation despite its Park Ridge location. To unravel this paradox, one must go back in time to the turn of the century and in place to Brooklyn, New York.

Down on Henry Street, in the Polhemus Building of the medical school of the Long Island College Hospital, Adolph F. Erdmann, M.D. gathered eight physician colleagues who specialized in the administration of anesthesia because "these men ought to get together..." Thus, on October 6, 1905, the Long Island Society of Anesthetists came into being. The meetings were a mixture of business and scientific information.

Over the next few years, the membership increased as interest grew in the specialty and, thus, the organization moved across the East River. By 1911, with 23 members, it underwent a change in name to the New York Society of Anesthetists; the President was still Dr. Erdmann. The following year, however, James T. Gwäthmey, M.D. was elected President, and a new constitution charged the Society with the responsibility of advancing the art and science of anesthesia. The dues were increased from $1 per year to the munificent sum of $3 per year. By 1915, membership extended beyond the immediate region. The country then entered World War I, and a number of anesthesiologists volunteered as specialists. Among them were James T. Gwäthmey, M.D. and Arthur E. Guedel, M.D. who served overseas and were instrumental in the organization of training in anesthesia and resuscitation.

Despite significant progress in the number and quality of its scientific endeavors, which included a certification process in response to many national requests, the New York Society was still looked upon as a local rather than a national organization. This impeded efforts to obtain recognition by the American Medical Association (AMA) for section designation. Finally, in February, 1936, after urging by Dr. Wood and with membership requests from as far as California, the New York Society of Anesthetists changed both its constitution and its name to The American Society of Anesthesiologists.

On December 10, 1936, the new Society accepted incorporation, the articles of incorporation having been signed by a Justice of the Supreme Court of the State of New York and accepted by the Secretary of State. The ASA Board of Directors became the governing body. The dues were increased to $6; membership had risen to 487 physicians. Responding to a need for a communications vehicle, Kenneth McCarthy, M.D. instituted a monthly newsletter in 1938. The following year, the ASA Committee on Publications recommended that a formal scientific journal be promulgated. By July, 1940, Dr. Wood and Henry Richter, M.D. had guided the newly created, bimonthly journal, Anesthesiology, to its 800-plus readers.

In April, 1945, the American Society of Anesthesiologists officially changed its name to the American Society of Anesthesiologists at the suggestion of Dr. Wood to reflect more appropriately the educational and scientific nature of the Society on behalf of its physician membership.

While the history of the Wood Library-Museum of Anesthesiology and the scientific journal, Anesthesiology, are all intertwined with the New York phase of ASA, they are beyond the scope of the current dissertation.

For a more detailed history of organized anesthesia, the reader is referred to: Betcher AM, Cilberti BJ, Wood PM et al. The jubilee year of organized anesthesia. Anesthesiology 1956; 17:226-264.

Erwin Lear, M.D. is Director of the Department of Anesthesiology at Beth Israel Medical Center and Professor of Anesthesiology at Mt. Sinai Medical Center, New York, New York.
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ACOG Committee Opinion — Anesthesia for Emergency Deliveries

David H. Chestnut, M.D., Chairman
Committee on Obstetrical Anesthesia

Earlier this year, the American College of Obstetricians and Gynecologists (ACOG) Committee on Obstetrics: Maternal and Fetal Medicine published a committee opinion, Anesthesia for Emergency Deliveries. This statement does not represent official ASA policy, and it is published below for information purposes. However, the statement is sympathetic to the concerns of anesthesiologists, and it provides useful recommendations which should improve the quality of obstetric anesthesia care in the United States.

Sheila E. Cohen, M.D., previous chair of the ASA Committee on Obstetrical Anesthesia, represented ASA interests during the preparation of this document. Mieczyslaw Finster, M.D. and David H. Chestnut, M.D. joined Dr. Cohen at ACOG headquarters during the presentation of ASA concerns, and the entire ASA Committee on Obstetrical Anesthesia reviewed drafts of the statement during its preparation.

The ASA Committee on Obstetrical Anesthesia believes that this document represents a good example of how two specialty societies can work together to improve patient care.

Anesthesia for Emergency Deliveries

Failed intubation and pulmonary aspiration of gastric contents continue to be leading causes of maternal morbidity and mortality from anesthesia. The risk of these complications can be reduced by careful antepartum assessment to identify patients at risk, greater use of regional anesthesia when possible, and appropriate selection and preparation of patients who require general anesthesia for delivery.

Antepartum Risk Assessment

The obstetric care team should be alert to the presence of risk factors that place the parturient at increased risk for complications from emergency general or regional anesthesia. These factors include, but are not limited to, marked obesity, severe facial and neck edema, extremely short stature, a short neck, difficulty opening the mouth, a small mandible, protuberant teeth, arthritis of the neck, anatomic abnormalities of the face or mouth, a large thyroid, asthma, serious medical or obstetric complications, and a history of problems with anesthetics.

When such risk factors are identified, a physician who is credentialed to provide general and regional anesthesia should be consulted in the antepartum period to allow for joint development of a plan of management including optimal location for delivery. Strategies thereby can be developed to minimize the need for emergency induction of general anesthesia in women for whom this would be especially hazardous. For those patients at risk, consideration should be given to the planned placement in early labor of an intravenous line and an epidural or spinal catheter, with confirmation that the catheter is functional. If a patient at unusual risk of complications from anesthesia is identified (e.g., prior failed intubation), strong consideration should be given to antepartum referral of the patient to allow for delivery at a hospital which can manage such anesthesia on a 24-hour basis.

Emergency Anesthesia

The need for expeditious abdominal delivery cannot always be anticipated. When preparing for the rapid initiation of anesthesia, the maternal as well as the fetal status must be considered. Oral nonparticulate antacids should be administered immediately prior to the induction of general or major regional anesthesia to decrease the mother's risk of developing aspiration pneumonitis.

Although there are some situations in which general anesthesia is preferable to regional anesthesia, the risk of general anesthesia must be weighed against the benefit for those patients who have a greater potential for complications. Examples of circumstances in which a rapid induction of general anesthesia may be indicated include prolapsed umbilical cord with severe fetal bradycardia and active hemorrhage in a hemodynamically unstable mother.

In some cases, a nonreassuring fetal heart rate pattern is diagnosed as "fetal distress," and delivery is performed immediately. The term "fetal distress" is imprecise, nonspecific, and has little positive predictive value. The severity of the fetal heart rate abnormality should be considered when the urgency of the delivery and the type of anesthesia to be administered are determined.

Cesarean deliveries that are performed for a nonreassuring fetal heart rate pattern do not necessarily preclude the use of regional anesthesia.

Update on AMA Policy Regarding HIV Infections

John S. Hattot, M.D., Delegate
and James P. Arens, M.D., Alternate Delegate
American Medical Association Section Council

Attitudes and official policies regarding human immunodeficiency virus (HIV) infections continue to evolve as a reflection of changing attitudes by the profession and the public toward this infection. Your ASA delegates to the American Medical Association (AMA) believe it is important to publicize the current statements of policy that are reconsidered at both the interim and annual sessions of the AMA House of Delegates. The following statements are capsules of these policies concerning various aspects of this disease:

1. Physicians should be allowed, without explicit informed consent and as indicated by their medical judgment, to perform diagnostic testing for determination of HIV status of patients suspected of having HIV infection.

2. General consent for treatment of patients in the hospital should be accepted as adequate consent for the performance of HIV testing.

3. Denial of care within the expertise of the individual physician on the basis of a patient's HIV status is a violation of medical ethics.

4. Those infected with the acquired immunodeficiency syndrome (AIDS) virus should be treated in the same manner as other infectious and contagious diseases currently identified as public health hazards, and all precautions to prevent the spread of the AIDS virus from patient to physician or other health care worker and from physician or other health care worker to the patient should be treated in the same manner as any other communicable or contagious disease consistent with good medical practice.

5. AMA supports AIDS health education in the United States in an intensive and broad-based spectrum. Pre-test counseling must be conducted for patients receiving routine HIV testing. Post-test information in the form of a simple verbal or written report and interpretation must be given for negative results. Pre-test and post-test counseling must be conducted for patients when HIV is the focus of the medical attention or when a history of high risk behavior is present; full post-test counseling is always required when test results are positive. (Physicians must be aware that most states have enacted laws requiring informed consent before HIV testing and, therefore, AMA policy may be in conflict with any given state statute.)

6. Any HIV-infected physician should disclose his/her sero status to a state public health official or local review committee. The review committee may recommend to the appropriate authority restrictions upon the physician's practice if it believes there is a significant risk to patients' welfare. The review committee is also responsible for monitoring adherence to the universal precautions and must also monitor the physician's clinical competency. Those who do not abide by imposed restrictions should be reported to appropriate authorities such as the state licensure board.

7. Any physician who performs patient care procedures that pose a significant risk of transmission of HIV infection should voluntarily determine his/her sero status at intervals appropriate to risk.

8. AMA remains opposed to mandatory testing.

9. AMA remains opposed to HIV testing as a condition of medical staff privileges.

10. AMA will continue the dialogue with liability insurance companies to monitor issues surrounding liability coverage for HIV-infected physicians and will establish guidelines for any collection or use of HIV sero status data by professional liability carriers. Sero status information should be treated with strict privacy and nondisclosure assurances.

11. Employees of the health care system who might be at risk of contacts with infected blood or other body fluids must be afforded all available and practical protection to assure a low level of personal risk of occupational infection. Universal precautions and all other applicable infection control measures, including the new Occupational Safety and Health Administration (OSHA) regulations, must be understood and consistently used to safeguard the health of all personnel.

12. AMA will continue to enhance its campaign to educate patients on the extremely small risks of iatrogenic HIV infection. Public education should include information about the route of transmission, the effectiveness of universal precautions and the efforts of organized medicine to ensure that patient risk remains immeasurably small.

13. AMA reaffirms its previous policy that when the scientific basis for patient protection policy decisions is unclear, physicians must err on the side of protecting patients.

The above policy statements are not a complete recitation of all AMA policies, but only those thought to be of interest to our specialty.
Keyword Program Search New for 1992

Stephen J. Thomas, M.D., Chairman
Committee on Annual Meeting Review

Keyword Program Search (KPS) has been developed for the ASA Annual Meeting scheduled in New Orleans, Louisiana from October 17-21, 1992. KPS is a computerized database that will enable meeting registrants to select keywords and subjects of interest via on-site computer terminals. The Keyword Program Search for the ASA Annual Meeting in New Orleans is supported through a grant from Ortho Biotech.

Custom-Designed Keywords
Annual Meeting participants select the keywords that best describe their specific area of interest in anesthesiology. Then a computer search of a database containing scientific presentations scheduled for this year’s ASA Annual Meeting is performed.

Complete Program
The personal KPS program integrates any combination of unrelated keywords into a complete program that coordinates an individual’s interests in one handy source. This program provides a listing of relevant presentations without the necessity of reading the entire Annual Meeting Program to locate specific areas of interest.

Easy-to-Read Schedule
The presentations contained in an individualized KPS program are arranged in chronological order. Each presentation listing includes the title of the presentation, the authors and their institutions, as well as the date, time and site of the presentation.

To receive a KPS program at the ASA Annual Meeting:
- Pick up a KPS program order form and Keyword List in the ASA Registration area.
- Complete the KPS order form and present it to KPS program personnel.
- A personal KPS program will be prepared while you wait or for pickup later at your convenience.

Accreditation for Pain Management Offered

Stephen J. Prezynski, M.D., Chairman
Residency Review Committee for Anesthesiology

On June 9, 1992, the Accreditation Council for Graduate Medical Education (ACGME) accepted and approved the Special Requirements for Pain Management, as submitted by the Residency Review Committee for Anesthesiology. This is effective as of July 1, 1992 and allows the Residency Review Committee for Anesthesiology to begin accrediting anesthesia core programs that have the desire and capability to train candidates in pain management.

At present, this means that anesthesiology is the only specialty that has both certification and accreditation in pain management. All ASA members who are seeking certification in pain management are urged to do so through the American Board of Anesthesiology (ABA) as this is the only pathway to an ACGME-recognized certificate in this discipline.

To receive a copy of the Special Requirements for Pain Management, directors of fully accredited anesthesiology core programs should contact: Judith Armbruster, Ph.D., ACGME, Office of the Secretary, 515 North State Street, Chicago, Illinois 60610.

Application forms for pain management programs will be ready in late October and can be obtained by calling (312) 464-4645 or writing to the ACGME at the above address.
Calling All Candidates

Ronald L. Harter, M.D., Alternate Delegate
ASA Resident Component

Those of us who are currently pursuing residency training are acutely aware of the substantial commitments required to attain the skills necessary, both clinically and academically, in order to become competent anesthesiologists. These commitments, essential as they may be, often cause residents to be somewhat lacking in the acquisition of skills that will prove to be increasingly essential as we prepare to enter practice.

The ability to obtain an understanding of pertinent current and pending legislation, to assess its effect on clinical practice and to effectively communicate the impact of those items to others are all extremely valuable tools. The ASA Resident Component House of Delegates meeting, to be held Saturday, October 17, 1992 at the ASA Annual Meeting in New Orleans, provides the perfect opportunity for anesthesiology residents to develop these skills.

The ASA Resident Component was formed nearly four years ago, providing anesthesiology residents with the opportunity to become initiated to issues of concern to physicians in general and to anesthesiologists in particular within the politically charged, constantly changing arena of organized medicine. I would like to take this opportunity to encourage all anesthesiology residents to become involved with the Resident Component through the following mechanisms.

The ASA Resident Component Governing Council is now seeking applications for the positions of Chairman-Elect, Alternate Delegate and Secretary. The Chairman-Elect and Alternate Delegate positions are each two-year positions because they advance to the positions of Chairman and Delegate, respectively, after one year. Thus, only those residents with at least 18 months of their residency remaining at the time of the ASA Resident Component House of Delegates are eligible to seek these offices. The office of Secretary may be pursued by any anesthesiology resident with at least six months of residency remaining at the time of the ASA Resident Component House of Delegates.

Although previous experience in organized medicine, either through American Medical Association (AMA) Medical Student Section or Resident Physician Section involvement, or with one’s state or local anesthesiology society may be beneficial in pursuing these offices, it is by no means a necessity to have such experience.

Yet another means of gaining insight into the process of organized medicine includes proposing one or more resolutions to the ASA Resident Component House of Delegates. A resolution may address virtually any issue of concern to anesthesiology residents. It will then be discussed and debated at the Resident Component House of Delegates. Resolutions of a broader scope could potentially be submitted from the Resident Component House of Delegates to the ASA House of Delegates and, subsequently, on to the AMA House of Delegates or to the AMA Resident House of Delegates.

Any resident interested in running for Chairman-Elect, Alternate Delegate or Secretary, as well as any resident considering the submission of a resolution to the ASA Resident Component House of Delegates, should submit a request for information as soon as possible to the ASA Executive Office, 520 N. Northwest Highway, Park Ridge, Illinois 60068-2573 to the attention of Ronald Bruns.

I encourage my fellow residents to take advantage of a tremendous opportunity to become involved with the ASA Resident Component and to attain the valuable experience that comes from involvement in organized medicine.

Ronald L. Harter, M.D. is a third-year anesthesiology resident at Georgetown University Hospital, Washington D.C.
Resident Scholars Program Enters Fourth Year

In 1989, the Foundation for Anesthesia Education and Research (FAER) received an educational grant from Burroughs Wellcome Company to support a Resident Scholars Program in anesthesiology.

The program is now entering its fourth year. Its intent is to encourage resident participation in the educational, scientific and political affairs of ASA by active attendance at the ASA Annual Meeting.

To accomplish this, a grant in the amount of $1,000 will be awarded to each participating program to help defray the cost of sending one resident to the meeting. Up to 32 grants will be offered each year so that, over a five-year period, funding will be provided for one resident from each accredited anesthesiology program in the United States.

In addition to the broad variety of scheduled activities during the ASA Annual Meeting, several special events are planned to permit interaction among resident scholars and between the residents and the ASA leadership. Programs are selected each year on a random basis except that an effort is made to provide broad geographic distribution.

The residents nominated by their programs for 1992 are:

Zubair B. Ali, M.D., Maimonides Medical Center, Brooklyn, New York
Glenn W. Alper, M.D., University of California-Los Angeles, California
Daniel Applefield, M.D., Henry Ford Hospital, Detroit, Michigan
Ben H. Boedeker, M.D., Walter Reed Army Medical Center, Washington, D.C.
Edward J. Broccoli, M.D., Columbia University, New York, New York
John Caldwell, M.D., University Health Center, Pittsburgh, Pennsylvania
Oscar Fernandez, M.D., University of California-San Francisco, California
Dora Franzoni, M.D., Geisinger Medical Center, Danville, Pennsylvania
Elizabeth Gamble, M.D., SUNY, Syracuse, New York
Michael A. Garcia, M.D., U.S. Naval Hospital, Bethesda, Maryland
Cameron A. Gerard, M.D., USC Medical Center, Los Angeles, California
Luisa Guerra, M.D., UMDNJ-Robert Wood Johnson, New Brunswick, New Jersey
Nathaniel Holloway, M.D., Drew Medical Center, Los Angeles, California
William M. Klein, M.D., University of California-Davis, California
Darren T. Koch, M.D., Hackensack Medical Center, Hackensack, New Jersey
Elizabeth Lee, M.D., University of Maryland, Baltimore, Maryland
John P. Martucci, M.D., Foster McGaw/Loyola Medical Center, Maywood, Illinois
Bryan S. McCarthy, M.D., A. Einstein Medical Center, Philadelphia, Pennsylvania
Suresh Pinnamaneni, M.D., Methodist Hospital, Brooklyn, New York
Edward T. Riley, M.D., Stanford University, Palo Alto, California
Deborah Roskowski, M.D., St. Joseph’s Hospital and Medical Center, Paterson, New Jersey
Brent Samter, M.D., St. Vincent’s Hospital and Medical Center, New York, New York
Victoria J. Simpson, M.D., Children’s Hospital, Denver, Colorado
Michael P. Smith, M.D., Cleveland Clinic Foundation, Cleveland, Ohio
Monica Stokes, M.D., Children’s Hospital, Boston, Massachusetts
Vincent Stonebraker, M.D., Allegheny General Hospital, Pittsburgh, Pennsylvania
David G. Sutcliffe, M.D., Beth Israel Hospital, Boston, Massachusetts
Paolo Trubiano, M.D., St. Luke’s Hospital, New York, New York
Peter A. Vieira, M.D., Baystate Medical Center, Springfield, Massachusetts
Kenneth A. Winger, M.D., U.S. Naval Hospital, San Diego, California
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