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Anesthesia as Women's Work: The Historical Role of the Female Anesthetist

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Although the first modern anesthetics were developed and administered by men,⁶ surgeons soon began recruiting nurses, who were almost exclusively female, to provide anesthesia care for their patients.¹ A combination of social and economic factors contributed to the selection of women as anesthesia providers. Foremost, the lack of competitive compensation for anesthesia care precluded men from being anesthetists exclusively,² since men needed a well-compensated job in order to fulfill their societal obligation of being the family's financial breadwinner.³ Women were able to take lower-paying jobs, one of which was anesthesia. In addition, the anesthetist was considered secondary and subservient to the surgeon – the “Captain of the Ship.”¹

One fascinating concept that figured prominently into the early choice of women as anesthetists was that women have a natural ability that makes them superior anesthetists to men. Surgeons of the early twentieth century “recognized the importance of feminine qualities in the administration of anesthetics.”⁴ Nurse anesthesia historian Virginia Thatcher wrote in 1953 that the woman anesthetist “brought to her work a natural aptitude that made her superior to the man.”⁵ Dr. George Crile, early head and neck surgeon at the Cleveland Clinic, declared: “I do not think a man can ever have the finesse in the administration of an anesthetic that a woman has.”⁷ Other surgeons of the early 1900's

echoed similar sentiments, with one stating that the female anesthetist “has certain qualities that a man does not possess,”⁸ such as a “musical feminine voice.”⁹

Arguments for the anesthetic superiority of women to men focused on psychological and social skills rather than the more technical skills of anesthesia. Alice Magaw, the “Mother of Anesthesia,” was “deeply concerned with the psychological preparation of patients for surgery and used ‘suggestion’ to soothe her patients prior to surgery.” She refined a technique of psychological preparation designed to increase the safety of the anesthetic by requiring less intraoperative anesthesia.² Motherly qualities, such as a soft voice and gentle touch, were considered among the most valuable in a female anesthetist's arsenal.¹⁰

The dramatic change in American society's perception of gender roles that occurred in the twentieth century were echoed in the changing perceptions of women's roles in anesthesia. The social skills that help put patients at ease preoperatively are no longer considered uniquely feminine. Further, technological and pharmacologic advances have rendered “psychological preparation” less important to the everyday practice of anesthesia. The difficulty with which these dramatic changes in perception came about is evidenced by the conflict within the American Association of Nurse Anesthetists in the late 1940's on the issue of whether to accept male nurse anesthetists for membership.¹¹

In addition to women's natural anesthetic talents, the notion that women were the ideal anesthetists was also bolstered by the convergence of two complementary concepts – the prevailing social belief that women should be subservient to men and the “Captain of the Ship” concept, which was the status quo in the operating room. The male surgeon could be clearly in charge of all aspects of perioperative care as the female anesthetist carried out his wishes. “Certainly the perception was that the surgeon could more easily control the ‘nurse (woman) anesthetist’ than the ‘physician (male) anesthetist’.”¹² In 1896, British anesthetist Dr. Frederic Hewitt wrote, “Anesthesia was born a slave; and she has ever remained the faithful handmaid of her master Surgery.”¹³ His use of the feminine “she” and the word handmaid to refer to anesthesia reflects the perception that a subservient woman would make the best anesthetist.

While the social changes of the twentieth century have also abolished the notion that women are inferior or subservient to men, anesthesia's role as Surgery's “handmaid” continues to be a source of professional conflict today. Ira Gunn describes what happened when a *USA Today* reporter asked a male surgeon who was in charge in the operating room. “The surgeon stated that surgeons were in charge. When he asked a male anesthesiologist the

Continued on page 20

Anesthesia History Summer Meeting

Mayo Clinic, Rochester, MN
June 22-24, 2006

This three day meeting at the Mayo Clinic in Rochester, Minnesota, will present both the leading edge of research in the history of anesthesiology combined with an overview of the history of the Mayo Clinic, stressing the Clinic's role in the history of medicine in the United States. A method of using this scholarship to teach professionalism will be a centerpiece of the conference.

For more details, please visit our website at www.mayo.edu/cme/anesthesiology.html or call the CME registration office at 1-800-323-2688.

C. Ronald Stephen Annual Resident Essay Award

The Anesthesia History Association (AHA) sponsors an annual Resident Essay Contest with the prize presented at the ASA Annual Meeting.

Three typed copies of a 1,000-3,000 word essay written in English and related to the history of anesthesia, pain medicine or critical care should be submitted to:

William D. Hammonds, M.D., M.P.H.
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Director of Pain Outcomes Research
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The entrant must have written the essay either during his/her residency or within one year of completion of residency. Residents in any nation are eligible, but the essay MUST be submitted in English.

This award, which has a \$500.00 honorarium, will be presented at the AHA's annual dinner meeting to be held on October 16, 2006, in Chicago. This dinner is always held during the annual meeting of the American Society of Anesthesiologists. The second-place winner receives \$200.00 and the third-place winner receives \$100.00. The papers will be considered for publication in the *Bulletin of Anesthesia History*.

All entries must be received on or before September 1, 2006.

Letter to the Editor

A request for information:

The photo enclosed is that of a simple and practical device used in Japan for the purpose of inducing a state of concentrated distraction for the relief of tension and/or anxiety.

It was sold by street vendors or in small stores in Kyoto, Osaka, Sasebo or Hakata, cities where I was stationed during my tour of duty in the U.S. Army Medical Corp from 1953 to 1955 as an Army surgeon MOS 3150D.

Unfortunately I can't remember the oriental name of this device. Will appreciate any information about this device from readers of the Anesthesia History Association Bulletin.

Miguel Colon-Morales, M.D.
P.O. Box 364547
San Juan, PR 00936-4547



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The *Bulletin*, formerly indexed in Histline, is now indexed in several databases maintained by the U.S. National Library of Medicine as follows:

1. Monographs: Old citations to historical monographs (including books, audiovisuals, serials, book chapters, and meeting papers) are now in LOCATORplus (<http://locatorplus.gov>), NLM's web-based online public access catalog, where they may be searched separately from now on, along with newly created citations.

2. Journal Articles: Old citations to journals have been moved to PubMed (www.ncbi.nlm.nih.gov/PubMed), NLM's web-based retrieval system, where they may be searched separately along with newly created citations.

3. Integrated History Searches: NLM has online citations to both types of historical literature -- journal articles as well as monographs -- again accessible through a single search location, The Gateway (<http://gateway.nlm.nih.gov>).

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Women's Work. . . *Continued from Page 17*

same question, the anesthesiologist stated that anesthesiologists were in charge."¹² Even today's anesthesiologists continue the struggle for professional identity in a specialty originally conceived as the "handmaid of surgery."

In the modern practice of anesthesia, gender is no longer seen as a factor in the skill of an anesthetist. However, the obvious and important role of women in early anesthesia cannot be overstated. The excellent care that women anesthetists provided to their patients paved the way for further advancements in the sciences of surgery and anesthesia.¹³ Understanding the role of early female anesthetists also reveals the source of the professional conflict that exists among modern surgeons and anesthesiologists. In today's fast paced environment of rapid turnover and operating room efficiency, anesthesia care providers would serve their patients well to remember that a soft touch and "sweet words of comfort"⁹ were effective anxiolytics long before effective pharmacologic premedication was available.

References

1. Bankert M. Watchful Care: A History of

America's Nurse Anesthetists. New York, NY: Continuum, 1989, p. 50.

2. Waugaman WR, Foster SD. CRNAs: an enviable legacy of patient safety. *Adv Prac Nurs Q* 1995;1(1):21-28.

3. Bankert M. History of nurse anesthesia. In: Waugaman WR, et al, eds. Principles and Practice of Nurse Anesthesia. Norwalk, CN: Appleton & Lange, 1992, p. 9.

4. Hunziker-Dean J. Voice and touch: Florence Henderson on the skills of an ether specialist. *AANA J* 1999 Jun;67(3):263-269.

5. Thatcher V. History of Anesthesia with Emphasis on the Nurse Specialist. Philadelphia, PA: Lippincott, 1953, p. 88.

6. Thatcher V. History of Anesthesia with Emphasis on the Nurse Specialist. Philadelphia, PA: Lippincott, 1953, pp. 3-13.

7. Crile GW. Greetings. *Bull Natl Assoc Nurse Anesth* 1936 Nov;4(4):182-184.

8. Philemon E. Truesdale quoted in Thatcher V. History of Anesthesia with Emphasis on the Nurse Specialist. Philadelphia, NY: Lippincott, 1953, p. 111.

9. Tendler MJ. Spinal anesthesia and the nurse anesthetist. *Bull Natl Assoc Nurse Anesth* 1939 Aug;7(3):141-146.

10. Bankert M. Watchful Care: A History of America's Nurse Anesthetists. New York, NY: Continuum, 1989, pp. 50-1.

11. Bankert M. History of nurse anesthesia. In: Waugaman WR, et al, eds. Principles and Practice of Nurse Anesthesia. Norwalk, CN: Appleton & Lange, 1992, p. 8.

12. Gunn IP. Professional identity and historical roots. *CRNA* 1999 Feb;10(1):41-47.

13. Hewitt FW. The past, present, and future of anaesthesia. *Practitioner* 1896;57:347-356.

The 2006 Paul M. Wood Fellows Named

The Board of Trustees of the Wood Library-Museum Announces the 2006-2007 Paul M. Wood Fellows:

J. Antonio Aldrete, M.D.

Anesthetic management of the wounded during the Mexican-American War from 1846-1848.

Adolph H. Giesecke, M.D.

Brief biographies of Doctors Robert Dodd, Robert Capps and Thomas K. Burnap

Rajesh P. Haridas, M.D.

A Survey of Oropharyngeal Airways used in Anesthesiology

Christine Lan Mai, M.D.

Phases of Anesthesia: An animated overview of the early history of anesthesia

Dr. Mai was named the 2006 Rod Calverley Fellow, awarded to one resident or fellow in training in honor of Dr. Calverley who dedicated much of his life to medical education.

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The C. Ronald Stephen Resident Essay Award

by *Doris K. Cope, M.D.*
President, Anesthesia History Association
Professor, Anesthesiology
University of Pittsburgh School of
Medicine

The Anesthesia History Association (AHA) strongly encourages academic study in the history of anesthesiology, pain medicine and critical care by presenting a yearly award to residents and fellows in training through an essay competition. This award, in recognition of the life time achievements of C. Ronald Stephen through leadership roles in the AHA, Wood Library-Museum, the *Bulletin of Anesthesia History* has exhibiting constant, kind and gentle mentoring, will be named in his honor. The support of each successive generation of medical historians is among the most important of the missions of the Anesthesia History Association.

Family and friends are creating an endowment for this award to become perpetual. The total endowment goal is \$15,000 which will directly provide the prize money for the competitors. Other administrative overhead costs are absorbed by the AHA. To date, we have received \$4,875.

Gifts will be tax exempt upon completion of the renewal process for AHA non-profit tax status which is anticipated in the next 90 days. Any gifts will be held until that status is completed so donors can receive appropriate tax credits.

Please send your designated gift towards this endowment to the Anesthesia History Association, 200 Delafield Road, Suite 2070, Pittsburgh, PA 15215.

The relatively small investment in our trainees now will pay huge rewards in the future!



C. Ronald Stephen Festive 90th Birthday Gala

Dr. Ron Stephen was honored at his home at the Brookings Park Retirement Place in Chesterfield, MO, on March 18, 2006, by his family with a Birthday celebration where he was presented with a magnificently decorated cake adorned with his invention, the Duke Model M Inhaler for Trichloroethylene, created by Ramona Bause and transported by her husband, George Bause (shown on right), and son, Evan, by plane from Cleveland, OH, with Doris K. Cope (left) who announced the naming of the AHA Resident Essay Award for Ron on this occasion.

Thank you to Dr. George Bause and his son, Evan, who photographed the celebration.

Induction Rooms

by Merlin D. Larson, M.D.

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and

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University of Istanbul, Turkey

Running head: Induction Rooms

A conspicuous failure in our present anesthesia practice is the lack of induction or block rooms. Although such rooms are routine in some countries, they are not common in the United States. This room would be adjacent to the operating rooms and provide space for placing peripheral nerve and neuraxial catheters. It is now becoming clear that properly conducted regional anesthesia provides long-term benefits to the patient but the pressure to “get the case started” or “keep it simple” places undue pressure on the anesthesiologist and adds stress to the normal work day.

When one reviews the origin of our specialty, it seems that this room was there from the beginning but somehow was eliminated from hospital architecture sometime between the origin of the hospital concept and the 21st century. It certainly was not developed in America after the successful demonstration of ether anesthesia in 1846 or during the early development of regional anesthesia.

The idea of hospitals arose in the Byzantine Empire and was perpetuated and improved as the Turks conquered Asia Minor. One of the first hospitals was built in the Roman city of Caesarea in the 4th century. When the eastern portion of Byzantine Empire fell to the Seljuk Turks, Caesarea grew

in importance because of its strategic position on the Silk Road and its name was changed to Kayseri. Kayseri is now a city of 600,000 people and is renowned as the principle entry port to Cappadocia, a popular tourist destination in central Turkey. Although it is commonly known that the scientific principles of observation and documentation begun by the Greek and Roman physicians were kept alive by Islamic scholars, it is less well known that the advancement of the “hospital concept” is considered one of the great achievements of medieval Islamic society. They also developed an extensive pharmacopoeia based upon herbalism and elementary chemistry

and improved methods of anesthesia begun by the Greeks and by physicians in the Indian sub-continent.^{1,2}

Kayseri is of special importance because of its medical center hospital built in the year 1206. This was an institution of learning and healing, much like our University Medical Centers today. Some medical historians label it as one of the first medical institutions dedicated to research and teaching. Remarkably this hospital is intact today and has been transformed into a museum, The History of Gevher Nesibe Medical Museum, and a tour of this facility gives us a glimpse into the treatment of the surgical patient in the Middle Ages of

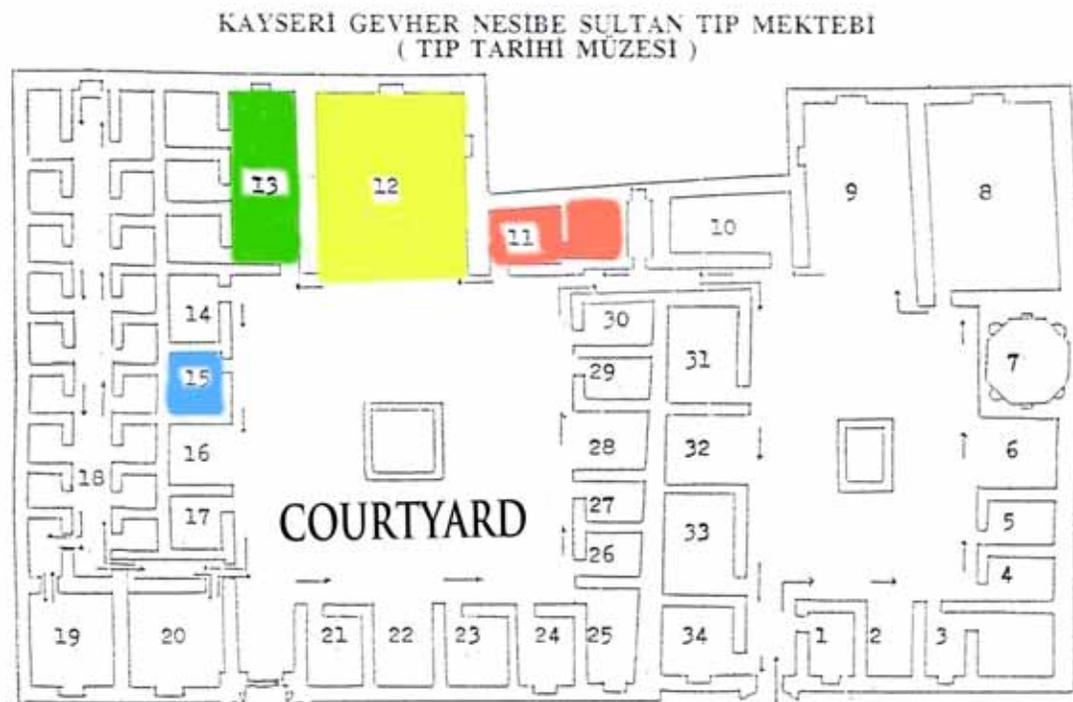


Figure 1: Floor plan of the Gevher Nesibe Hospital. The induction room is #12, operating room #13, History of Medicine room #15, and History of Pharmacy and Medicine Preparations Room #11. Copied from the museum brochure, 2005.



Asia Minor.

The hospital was named Gevher Nesibe after the Seljuk princess, Gevher Nesibe, who conceived and willed the institution on her deathbed. Scholarly medical treatments at Gevher Nesibe were based upon the study of the great Greek, Roman, and Islamic physicians. A plaque in the entrance to the hospital shows images of Hippocrates (460 – 370 BCE), Galen (130 – 200 CE), and Avicenna (980-1037 CE). Although the Seljuks were brutal conquerors, once the society stabilized in the early 13th century, physicians of all religious faiths were allowed to practice in a secular society. Consequently, Jewish, Christian, and Muslim physicians worked cooperatively in the hospital.

The plan of this hospital is shown in Figure 1. The operating room was illuminated by a hole in the ceiling (Fig. 2), similar to the hallway (Fig. 4) that separated the patient's rooms. One room next to the operating room was devoted entirely to the study of the History of Medicine. Presumably there was no lack of reading material. The Hippocratic Corpus is 30 volumes. Galen wrote nearly 200 books on medicine (seven books on the pulse alone) and Avicenna's Canon, a book that Osler called "the most famous medical textbook ever written" is more than 1 million words. The history room is small, approximately 8 X 8 feet, and strategically placed next to the operating room. Galen's work would be a useful reference for the surgeons because much of his work was on treatment of the wounds of the Roman gladiators. His observations were made in the Roman city of Pergamon, about 800 miles east of Kayseri, and written nearly 1000 years before the

Figure 2: Looking directly upward in the operating room shows the hole in the ceiling that acted much like a spotlight on the center of the room. At mid-day the light fell directly onto the operative site so most operations were performed at that time. At other times, lighting was provided by candles and oil lamps. Kayseri has little rainfall during most of the year. Photograph by the author, 2005.

founding of the Gevher Nesibe Hospital. Prominent physicians who practiced at Gevher Nesibe included Ebubekir, Gazanferi, and Seyit Samit.

Of special interest is the large anesthesia induction room next to the small operating room (Fig 3). They presumably did not use the term "anesthesia induction" but rather something like "soporific induction" room. The idea for this room seems obvious when one considers the slow-onset drugs that were used during this preparatory period before the operation was begun. The anesthetic potion described by the Greek physician Dioscorides (40-90 CE) in the 1st century consisted of mandragora (Mandrake) and wine, but Avicenna and others improved the formula. By the 13th century it consisted of multiple ingredients, including opium, henbane, mandragora, hyoscyamus, mulberry juice, lettuce seeds, lapathum seeds, and climbing ivy.¹ The drugs were administered orally, by inhalation or through the skin (ointments). The History of Pharmacy and Medicine Preparation room is conveniently located next to the induction room.



Figure 3: The anesthesia induction room, shown here, is the largest room in the hospital. Photograph by the author, 2005.

It seems clear that the combination of opium, scopolamine, mandragora and other additives, given properly, would produce a somewhat tranquil patient who might struggle during a short operation but might not remember much of the struggle. The key phrase is *given properly*, because the drugs are lethal if given carelessly. If we give these physicians due credit it seems possible that with adequate induction time and skilled anesthetists, oral and possibly inhalation administration of these drugs would produce a suitable anesthetic. A recent assessment of this anesthetic concoction concluded that it was indeed efficacious but the correct formulation and method of administration was gradually lost through time for reasons that are not known.^{3,4}



Figure 4: Hallway between the patient's rooms was illuminated by holes in the ceiling; electric lights are turned on when visitors arrive to tour the museum. Gevher Nesibe willed that patients would not have to pay for treatments given at the hospital, as was the custom in many of the hospitals built by the Caliphs. Photograph by the author, 2005.

In Europe between the 16th and the 18th centuries, there was almost no effectual attempt to control pain during surgery. Mandragora and henbane mixtures had passed into the realm of witchcraft, and the Church strictly prohibited their use. Physicians in Europe and America knew about these drugs in the early 19th century, but they were not skilled in their use. The personal accounts from those patients who survived operations described terrifying

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pain and there appeared to be no concerted effort to control it. Mesmerism was essentially worthless and alcohol/opium appeared to be mostly self-administered. The account of surgery by Ms. Fanny Burney who had her breast removed in 1811 by the celebrated surgeon Dominique J. Larrey (1766-1842) is typical. The procedure was performed in her home and required not only the surgeon and his assistant, but also six strong men who were in attendance to hold her steady while the operation ensued.⁵

Luckily, American physicians discovered the magic of inhalation vapors, but the idea of an induction room remained in the dustbin of history. It is true that holding a mask on a patient while waiting for the operating room to become available does seem cumbersome. But the rapid development of regional anesthesia in the early 20th century might have been a good time to realize the benefit of this 800-year-old idea. Recent articles have promoted the use of special rooms for the placement of regional blocks⁶⁻⁹ so perhaps we will eventually re-establish this old custom that seems to have been there from the very origins of our specialty.

References

- Garrison F: *The History of Medicine*. New York, Saunders and Co, 1929.
- Major R: *A History of Medicine*, 2 Vol. Springfield, C C Thomas, 1954.
- Juvin P, Desmots JM. The ancestors of inhalational anesthesia: the Soporific Sponges (XIth-XVIIth centuries): how a universally recommended medical technique was abruptly discarded. *Anesthesiology* 2000;93:265-9.
- Holzman RS. The legacy of Atropos, the fate who cut the thread of life. *Anesthesiology* 1998;89:241-9.
- Burney F: *Selected Letters and Journals*, Joyce Hemlow (ed) Edition, Oxford University Press, 1986.
- Tucker MS, Nielsen KC, Steele SM. Nerve block induction rooms—physical plant setup, monitoring equipment, block cart, and resuscitation cart. *Int Anesthesiol Clin* 2005;43:55-68.
- Torkki PM, Marjamaa RA, Torkki MI, Kallio PE, Kirvela OA. Use of anesthesia induction rooms can increase the number of urgent orthopedic cases completed within 7 hours. *Anesthesiology* 2005;103:401-5.
- Hanss R, Buttgerit B, Tonner PH, Bein B, Schleppers A, Steinfath M, Scholz J, Bauer M, Dalens B. Overlapping induction of anesthesia: an analysis of benefits and costs More on regional anesthesia induction rooms. *Anesthesiology* 2005;103:391-400.
- Dalens B. More on regional anesthesia induction rooms. *Can J Anaesth* 2004;51:741.

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Careers in Anesthesiology IX Three Pioneer British Anaesthetists

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Anthony Edridge

Sir Robert Reynolds Macintosh

Keith Sykes

Sir Geoffrey Organe

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CAREERS IX features three pioneer British knights who helped to shape 20th century anesthesiology in the U.K. The story of selftrained Sir Ivan Magill illustrates clinical expertise acquired out of surgical necessity. His professionalism is expressed in a deft but unhurried manner, displaying a quiet confidence. Sir Robert Macintosh's story provides inspirational reading and touches upon his study of anesthetic mortality, which encountered enormous obstacles at the time but that can now be seen as a precursor to patient safety initiatives seen in the mid-1980s. Sir Geoffrey Organe was a key founding member of the WFSA, which he used to implement his lofty goals of establishing standards of anesthesia care and education in the developing world. Interspersed in these stories are fascinating accounts of self-experimentation — often to the detriment of the researchers — as they passionately endeavored to establish anesthesiology during and after World War II. This volume certainly adds to the rich tapestry of stories in the CAREERS series.

Careers in Anesthesiology, Volume IX. Park Ridge, IL: WLM, 2005. \$30 ISBN 1-889595-09-8.

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The American Society of Anesthesiologists: A Century of Challenges and Progress

Douglas R. Bacon, M.D., M.A.

Kathryn E. McGoldrick, M.D.

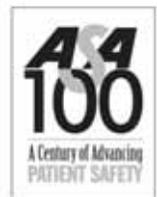
Mark J. Lema, M.D., Ph.D.

Editors

The history of ASA as told by the people who helped to shape it! Based upon the rich and extensive archives housed in the Wood Library-Museum, 21 authors tell their stories either as past participants or thoughtful historians, re-enacting complicated historical issues and events in a present-day context. A clear departure from traditional history, this book may be read with ease and pleasure as individual essays or in its entirety, from its founding by an obscure group of nine in Long Island to the ultimate realization of a vibrant organization a century later. Readers will realize that the struggles and challenges, unique in different eras of the past, were the building blocks of success that spanned an entire century. This volume celebrates the centennial of an important professional organization by witnessing the pioneers' struggles to achieve what benefits all in American medicine today.

The American Society of Anesthesiologists: A Century of Challenges and Progress. Park Ridge, IL: WLM, 2005. \$55/Hardcover. ISBN 1-889595-15-2.

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The Ether Monument: An Enduring Restoration

by *Rafael Ortega, M.D.*

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Boston University School of Medicine
Department of Anesthesiology
and*

*Lauren Kelly, M.A.
Medical Student
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Most Anesthesia history aficionados know of the monument that stands in the Boston Public Garden to commemorate the first public demonstration of ether anesthesia at the Massachusetts General Hospital in 1846. However, it is probably safe to say, that there are some in our specialty who are unaware of its existence. On the day of the Ether Monument's dedication, Nathaniel B. Shurtleff, then Mayor of Boston, promised that it "shall be watched with care and protected from injury...[and] long remain unimpaired by time."¹ Unfortunately, the monument has experienced periods of considerable neglect and the lack of regular maintenance has taken its toll.

Today, the Ether Monument's granite and marble are showing their age.

The lion head fountains at the base of the monument no longer spout water into the surrounding basin because the fountain pump and water line have been broken for years.² The empty "Bethesda pool,"¹ which symbolizes a place of healing, is frequently filled with litter and stagnant water.³ The Good Samaritan atop the monument has suffered the partial loss of a finger and a damaged foot. Moreover, the surrounding trees contribute to a yearly buildup of gypsum which smudges the appearance of the marble and granite.⁴ The monument must also contend with graffiti and acid rain.

Historically, there have been various restoration efforts to refurbish the monument. Private citizens, public foundations and professional organizations alike have raised money and contributed for the renovation of the Ether Monument over the years.⁵ Unfortunately, it has become increasingly clear that past restoration efforts, while commendable, have only been palliative treatments to periodic crises. Outdoor statues and monuments require regular, professional and systematic care.

Thankfully, the stars seem to finally be aligned for a complete, enduring restoration of the Monument and a serious effort is currently underway. The City of Boston has allocated approximately \$250,000 for



The Ether Monument

its renovation and is committed to reengineering the fountains, reconditioning the granite and marble surfaces, and adding lighting for night viewing. Additionally, the Solomon Fund, the Massachusetts Society of Anesthesiologists, the Friends of the Public Garden and Anesthesia Associates of Massachusetts are dedicating significant resources for the restoration and continuing upkeep of the Ether Monument.

Experts agree that equally important to the restoration is the establishment of an endowment that will assure the continuing maintenance of the Ether Monument. Multiple well-coordinated efforts are underway to raise public awareness and attract contributions, including the production of an illustrated coffee-table style book. A walking tour to the Ether Monument will take place on Saturday, May 20th, 2006, to

coincide with a ground-breaking ceremony for the restoration. A rededication is being planned for the restoration's completion at the end of this summer. High ranking municipal officials and representatives of the anesthesia community will attend and media coverage is assured. After all, a successful partnership between the City of Boston and the private sector is a newsworthy event when it is for the sake of saving an important public symbol.

It is tremendously important to get the word out that the Ether Monument is being completely restored and that an endowment is being created to assure its long term maintenance. In addition to what has already been planned, there are still many details being worked out. For example, a website capable of accepting credit card donations for the endowment is being designed. In the meantime, if anyone has any questions or ideas on how to help, feel free to write: rortega@bu.edu.

References

1. Boston (Massachusetts). Proceedings at the Dedication of the Ether Monument. City Document No.101. City of Boston, 1868, pp5-13.
2. Slack D. Mayor's Splashy Goal: Working Fountains. Metro/Region section of *Boston Globe*. Pg. A1. April 22, 2004.
3. Lee, Henry, Personal letter. 2 January 2006.
4. Craine C: Ether Monument/The Good Samaritan Treatment Report, Watertown, MA, Daedalus, Inc., 2000.
5. Conlay LA, Ryan JF. Monument to a momentous event. *ASA Newsletter* 1996:60.

Causalgia: An Unknown Contribution

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Introduction

In 1956 Erich Trostdorf, a German neurologist, reported his observations on 196 cases of causalgia (Complex Regional Pain Syndrome I) he had treated during WW2.¹ In 1959 his pupil Bräss added details on some of Trostdorf's patients he had met fourteen years later.² Trostdorf's is one of the largest series reported after WW2. His book, *Die Kausalgie*,¹ includes detailed clinical observations, patients' photographs, the results of various treatments, and a review of over 500 previously published works on causalgia. Trostdorf, however, has largely been ignored, even in Germany. His book was never reprinted nor translated into English.

Biography of Erich Trostdorf (1908-1981)

Erich Trostdorf was born in Ringleben, a village near Erfurt, in Eastern Germany. He studied medicine at the University of Göttingen from 1928 through 1934 and obtained his M.D. degree in 1936 after defending his thesis on "Birth traumas in babies born at the University of Göttingen Hospital."

Dr. Trostdorf started his specialization in neurology in Göttingen in March 1938. In August 1939 he was drafted in the Wehrmacht as a captain and served as a military neurologist in France and in the Soviet Union. He was in Stalingrad during the fateful December of 1942 but shortly before the Russians captured the town, his former chairman, Professor Ewald, recalled him to Göttingen to head the military section of nerve injuries at the University hospital.

Dr. Trostdorf remained in the Göttingen department of neurology after his demobilization in late 1945. In March of 1954 he defended his habilitation thesis "Ueber Kausalgie" (on Causalgia) and was promoted to professor of neurology. His book "Die Kausalgie," an expansion of his thesis, was published in Stuttgart in 1956.¹

In 1958 Dr. Trostdorf moved to Hanover

Acknowledgement: The author thanks Dr. H. Trostdorf, of Hanover, for providing a copy of his father's book, his biographical data and his photograph. The author also thanks the firm Thieme, of Stuttgart, for allowing him to use the material of Prof. Trostdorf's book.



Fig. 1. Erich Trostdorf

where he became chief of the neurology section at the city hospital. In 1964 he was appointed professor and chairman of the newly created Hanover School of Medicine. He became professor emeritus in 1976, retired in 1978, and died in Hanover in 1981. (Figure 1)

Trostdorf's Observations on Causalgia

Etiology

From 1942 through 1945 Trostdorf saw 1,561 patients with nerve injuries. Twelve percent of them (196) developed causalgia. Of those 196 patients, 187 were young soldiers who had sustained gun shot wounds or had been injured by shell splinters. The large majority of them had a normal psychological profile before their injury. All developed severe emotional disturbances after being wounded but these disappeared after their convalescence. None became addicted despite receiving large amounts of opiates during their treatment. Trostdorf found no racial, social, or educational differences in his patients; 80% of his severe causalgias occurred in tall, thin young men.

In most patients the nerve fibers had been crushed by the shock wave of a high velocity missile passing through the neighboring tissues. There was no direct nerve trauma nor anatomical or complete physiological interruption. Trostdorf never saw a causalgia occur after neurectomy or limb amputation. Most patients showed

some sensory deficit but motor defects were rare. There was a definite and consistent inverse relation between the degree of neurological deficit and the intensity and duration of the causalgia.

Most causalgias followed an injury to a distal segment of a peripheral nerve with a rich autonomic component. most commonly involved were: the median and tibial nerves and the tibial component of the sciatic nerve.

Symptoms

1. Severe burning pain was the dominant symptom. Trostdorf described two components in that pain:
 - a) An even, constant, moderate to severe burning limited to the area of sensory deficit. Trostdorf called it "basal pain."
 - b) Sudden, explosive, excruciating exacerbations of that "basal" burning pain which extended



Fig. 2. Patient with "reflex pain"

to the whole distal part of the limb, then to the whole limb, or even to all four extremities. Trostdorf called those exacerbations "reflex pain." That "reflex pain" was caused by touch-

ing or rubbing the denervated area, by scratching the sole or the palm of the injured limb, or by various sensory stimuli: loud noises, bright lights, spicy or sour foodstuffs, as well as by unpleasant emotional events or situations. Avoidance of those bouts of "reflex pain" soon came to dominate the patient's behavior. He shunned people and busy places and protoected his limb from any contact. (Figure 2)

2. A second, consistent, typical symptom was what Trostdorf called "hygromania"; the patient constantly tried to soothe his burning pain with cold water or any other available liquid, including saliva or, even, urine. The patient kept his burning limb under a tap or in a basin of cold water for hours or wrapped it in a wet glove, sock, or rag. (Figure 2)
3. Emotional changes: the patient's life became centered around his pain: he stayed near a source of cold water, and lived in a protective "cocoon" against any stimulus which may exacerbate his pain. He made incessant requests for narcotics.
4. Autonomic changes: the skin of the injured extremity became either red and hot or cold and livid. There was no passage from one stage to the other, as has often been described by other observers.^{3,4} Sweating was decreased or absent, as shown by Minor's sympathetic test (starch-iodine mixture turning brown in the presence of perspiration). Many patients showed systemic symptoms interpreted by Trostdorf as signs of sympathetic hyperactivity: anorexia, constipation, urinary difficulties, insomnia, muscle cramps, papillary changes. Many of those symptoms, of course, may have been caused by the large doses of opiates taken by the patients.
5. Trophic changes: the injured limb soon developed a thin, shiny, dry and hairless skin, brittle nails, loss of subcutaneous fat, stiff joints and atrophied muscles. Half of the patients radiographed by Trostdorf showed a mixture of bone loss and

bone proliferation in the injured limb, a typical picture that Trostdorf called "Sudeck's Syndrome," quite different from an osteoporosis of disuse.

All autonomic and trophic changes disappeared once the causalgia had subsided.

The Course of the Disease

Nearly 60% of Trostdorf's patients showed their first symptoms of causalgia within 24 hours of their injury; another 38 did so over the next two weeks. The shorter the latency period, the more severe were the symptoms.

Trostdorf followed many of his patients for up to twelve years and thus could observe the disease's natural course in patients in whom the treatments had failed: the pain reached its peak intensity within two to four weeks, persisted unchanged for about two years, then slowly subsided to complete relief or to a level of mild, tolerable discomfort. The "basal pain" subsided first, the "reflex" response to emotional stimuli was the last to disappear. The non-causalgic, neuralgic pain due to sensory fibers damage persisted unchanged.

Pathogenesis

Trostdorf's clinical observations, his patients' response to various treatments, and his review of over five hundred publications on causalgia led him to believe that the disease had a major thalamic component. Noxious stimuli would travel to the optic thalamic nuclei where they would be amplified and would receive an emotional component. They then would reach the sensory cortex to be interpreted as excruciating pain. Efferent thalamic impulses would travel through the mid-brain to the spinal sympathetic nuclei to produce sympathetic hyperactivity: vasoconstriction, tissue ischemia and atrophy, anhidrosis, and ischemic burning pain.

Treatment

Trostdorf did not follow a rigorous protocol of treatment, probably because some of his patients were treated by other physicians and because the best treatment for causalgia was still debated in Germany at the time. He simply listed the measures used on his patients and their results:

1. He saw no improvement (and occasionally aggravation) of the symptoms in 51 patients who underwent limb amputation, neuroectomy, lobotomy, or cordotomy. A phantom causalgia pain

generally followed those operations.

2. Peripheral nerve blocks or tissue infiltration with procaine or spraying of the painful area with ethyl chloride only gave transient relief.
3. Trostdorf felt that causalgic patients should receive generous doses of opiates, although he recognized that they provided insufficient relief. He found no serious side-effects nor addiction.
4. Ninety-six patients received 30 to 40 units of regular insulin for four to five consecutive mornings while fasting. The injections were repeated at two to three week intervals over a period of four to five months. Twenty patients with mild causalgia showed definite improvement, 47 patients with a more severe form of the disease showed no improvement and the results were equivocal in 27 others. Trostdorf assumed (wrongly) that the hypoglycemia thus produced would depress the sympathetic nervous system.
5. A sympathetic blockade was tried in 129 patients and produced the most encouraging results:
 - a) Eighty-two patients received an average of twelve consecutive procaine blocks of the stellate ganglion for the arm or of the L₂₋₄ lumbar sympathetic chain for the leg: eight patients with mild causalgia had complete and permanent relief; the symptoms eventually recurred in the 74 other patients.
 - b) Twenty-six patients underwent an alcohol block of the stellate ganglion or of the L₂₋₄ lumbar ganglia: seven were permanently cured; ten showed significant relief; nine patients with severe causalgia derived no benefit.
 - c) Surgical ganglionectomy in 21 patients produced twelve permanent and five transient cures; there were four failures.

Causalgia. . . *Continued from Page 27*

Bräss' Contribution

In 1959 Bräss reported his observations on 25 patients seen by Trostdorf fourteen years before.² Of the fourteen patients who had undergone a surgical sympathectomy, thirteen had been pain free since their operation. The other eleven non-operated patients had seen their causalgia subside after a period of two years. All those patients had received large amounts of opiates during their disease. None had become addicted. All 25 patients had become high-achievers.

Conclusions

Trostdorf and Bräss were able to follow a vast number (196) of causalgic patients for up to fourteen years and to observe the results of a gamut of treatments, an opportunity denied to their U.S. colleagues: Mayfield, Shumacker, Baker and Rasmussen.^{3,4} While those U.S. authors seemed to have read only the American and British works, Trostdorf's review of the literature was worldwide.

It is unclear why Trostdorf's work has been ignored. That his book was written in German and never translated and that it

was published at the time of a U.S. and British predominance in medicine may be a partial explanation. Moreover, many of Trostdorf's findings and conclusions greatly differed from those of his U.S. colleagues, e.g.:

1. His high incidence of causalgias (12% vs. the 2-4% of the U.S. authors).
2. The normal psychological profile of his patients before and after their disease, the lack of narcotic addiction and of suicides, and the high achievements of his patients, once the disease had subsided.
3. The "hygromania" as a consistent and dominant symptom.
4. The disease's spontaneous cure within two years and the reversal of the autonomic and trophic changes.
5. The relatively good response to insulin in the mild cases.
6. The thalamus' important role in

the disease's pathogenesis.

All the above points contradict what was published in the U.S. after WW2 and what continues to be accepted by present day neurologists. At the same time Trostdorf's extensive observations and review of the literature is difficult to dismiss. It seems that his work would deserve re-evaluation by modern causalgia specialists.

References

1. Trostdorf E. Die Kausalgie. Ein Beitrag zur Frage der Schmerzen bei peripheren Nervenverletzungen. Stuttgart, Thieme Verlag, 1956.
2. Bräss M. Ueber den lagfristigen Verlauf der behandelten Kasalgie. *Wehrdienst Gesundheit* 1959;1:637-652.
3. Mayfield FH. Causalgia. Springfield, IL, CC Thomas, 1951.
4. Shumacker HB, Jr, Spiegel JJ, Upjohn RH. Causalgia. *S.G.O.* 1948;86:452-460.

YEAR 2008 LAUREATE OF THE HISTORY OF ANESTHESIA

Doris K. Cope, M.D., Chairman
www.asahq.org/wlm/

Nominations are invited for the person to be named the fourth Wood Library-Museum Laureate of the History of Anesthesia in the year 2008. Deadline for receipt of nominations is July 1, 2007.

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The Laureate Program is international. Nominations are sought by physicians, not just anesthesiologists, as well as medical historians from the international history community.

Additional information may be obtained by contacting the WLM Laureate Committee at the Wood Library-Museum, 520 N. Northwest Highway, Park Ridge, Illinois 60068-2573. Please see the WLM website - www.asahq.org/wlm/ - for more information.

The Book Corner

by Peter L. McDermott, M.D., Ph.D.

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Past President, ASA, 1993

Thousand Oaks, California

Careers in Anesthesiology: Three Pioneer British Anaesthetists – Sir Ivan Whiteside Magill by Anthony Edridge, Sir Robert Reynolds Macintosh by Keith Sykes, and Sir Geoffrey Organe by Stanley Feldman. Editors(B. Raymond Fink), Donald Caton and Kathryn McGoldrick. Guest Editor John S. Zorab. Introduction by T. Cecil Gray. Volume IX, Pp. 99. \$30.00

The previous volumes in this “careers” series were autobiographical reflections by noted anesthesiologists on the personal and professional high points of their lives. Autobiographies are the never-successful attempts to have the last word on one’s life. Auto-embalming or self-canonization is a messy business. This tiny 99 page addition to the aforesaid autobiographies, despite the editors’ reference to them as “autobiographical panoramas,” are neither auto nor are they biographies, they are personal reminiscences by friends and colleagues. Their value lies not in the comprehensiveness of the authors’ memorials, nor in the objectivity and balance of their contributions, but in the preservation of their affectionate respect for their pioneering colleagues in the creation of the specialty of anesthesiology, or anaesthesia, in Britain.

These three lives, totaling 271 years, were engaged with many of the accomplishments essential to the creation of a medical specialty. It is difficult to recapture a time when anesthesia as a medical specialty did not exist, was not defined, had few agents and techniques, little or no equipment to facilitate its administration. These men carved a professional medical specialty out of what might have remained a mere technical hospital service.

Ivan Magill, 1888-1986, was born in Ireland, served in World War I, and was responsible for innovations in airway instrumentation – catheters, forceps, vaporizing equipment, and portable devices for out patient anesthesia. His visits to North America to consult with Waters, Lundy, and Gillespie served to strengthen the growth of the specialty on both sides of the Atlantic. His powerful boxer’s physique was probably a quiet advantage in his dealings with surgeons to put anesthesia on an equal foot-

ing with other medical specialties. He created programs in physician education, research, certification, and scholarly publications. Brief as is this recollection by Edridge, and as hungry as the reader might be for more, this man of few words who liked to fish is brought to life.

Robert MacIntosh, 1897-1989, was born in New Zealand and raised in Argentina. He served in the Royal Flying Corps in World War I, was shot down, and was held as prisoner of war making several unsuccessful attempts at escape. After the war he studied medicine, and over the next decade or so, wandered into the practice of anesthetics. His desire to put anesthetic practice on a more professional basis led him to visit Ralph Waters at Madison. This experience made him appreciate the need for, and the difficulties attendant upon, establishing a research program in anesthesia. In 1936 he was able to persuade the industrialist William Morris, aka Lord Nuffield, to include anesthesia among the endowed chairs he was establishing at the new Oxford medical school. His subsequent work with physicists studying altitude and underwater pressure phenomena, advances in equipment (his laryngoscope, for example), and more precise, sophisticated vaporizers led to a wealth of publications and an increased sensitivity to the issue of safety in anesthesia.

Geoffrey Organe, 1908-1989, was born in India of missionary parents. He received his medical degree in England in 1933. His first years in general practice gave way to full-time anesthetic administration and an association with Ivan Magill at Westminster hospital in London. He assisted the professionalization of the specialty by promoting the specialty certification process and organizational development: he was active in establishing the World Federation of Societies of Anesthesia (WFSA). His work with intravenous anesthetic agents, muscle relaxants, and ganglionic blockers helped put anesthesia research on a firm footing.

The life commitment of these three British champions to our specialty, the connections between the development of the specialty on both sides of the “pond,” and

the remarkable parallels with the history of ASA in its 2005 Centennial publication enrich our understanding of how we got to where we are.

Parenthetically, who knew that the *British Journal of Anaesthesia* was founded by the American H. M. Cohen, M.D.?

From the Literature

by A.J. Wright, M.L.S.

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Note: I have examined most of the items listed in this column. Books can be listed in this column more than once as new reviews appear. Older articles are included as I work through a large backlog of materials. Some listings are not directly related to anesthesia, pain or critical care; I interpret those categories very broadly. Some will concern individuals important in the history of the specialty [i.e., Harvey Cushing or William Halsted] who also achieved in other areas or widely-used equipment such as the stethoscope. I also include career profiles of living individuals. Non-English materials are so indicated. Columns for the past several years are available as "Recent Articles on Anesthesia History" on the Anesthesia History Association website at www.anes.uab.edu/anesthesia_history_association.htm. I urge readers to send me any citations, especially those not in English, that I may otherwise miss!

Books

Bacon DR, McGoldrick KE, Lema MJ, eds. *The American Society of Anesthesiologists: A Century of Challenges and Progress*. Wood Library-Museum, 2005. 226pp. Illus. [rev. Hall GM. *Br J Anaesth* 96: 542-543, 2006]

Bliss M. *Harvey Cushing: A Life in Surgery*. Oxford University Press, 2005. 591pp. [rev. Clarfield AM. *NEJM* 354: 534-535, 2006]

Burke KG. *From Research Lab to Routine Procedure: A Case Study of the Swan-Ganz Catheter, 1965-1980*. PhD dissertation, University of Pennsylvania, 2001.

Carr DB, Loeser JD, Morris DB, eds. *Narrative, Pain and Suffering*. Seattle: IASP Press, 2005. 362pp. [proceedings of a 2003 conference; rev. Noble TW. *Br J Anaesth* 96: 274, 2006]

Caton D, McGoldrick KE, eds. *Careers in Anesthesiology: Autobiographical Memoirs*. Vol. 8. Park Ridge, Ill.: Wood Library-Museum, 2004. 273pp. [includes A. A. Spence, Julien F. Biebuyck, Richard J. Kitz, John W. Severinghaus; rev. Curry TB. *Anesthesiology* 104: 389, 2006; Turner K. *Can J Anesth* 53: 215, 2006; Calmes SH. *Bull Hist Med* 80:197-198, 2006]

Finger S. *Doctor Franklin's Medicine*. University of Pennsylvania Press, 2005. 288pp. [includes Franklin's role investigating Franz Mesmer's animal magnetism; rev. Erlen J. *JAMA* 295:1314-1315, 2006;

Arsenault K. *Library Journal* 131(1):144, January 2006]

Hirshfeld A. *The Electric Life of Michael Faraday*. Walker, 2006. 272pp. [rev. Dominy MF. *Library Journal* 131(2):102, February 1, 2006]

John C. Liebeskind *History of Pain Collection*, Darling Biomedical Library, UCLA. Pain Oral History Project. Volume 1, 2005 [CD-ROM; selection of oral histories conducted between 1993-1996; more information: www.library.ucla.edu/biomed/his/pain.html]

Karch SB. *A History of Cocaine: The Mystery of Coca Java and the Kew Plant*. London: Royal Society of Medicine Press, 2003. 224pp. [rev. Courtwright DT. *Bull Hist Med* 80:183-184, 2006]

Klein RL, Kendrick A. *The History of Anesthesia in Oregon*. Portland: Oregon Trail Publishing, 2004. 336 pp. [17 chapters, references, appendix, index]

Merskey H, Loeser JD, Dubner R, eds. *The Paths of Pain 1975-2005*. Seattle: IASP Press, 2005. 549 pp.

Morris LE, Schroeder ME, Warner ME, eds. *A Celebration of 75 Years Honoring Ralph Milton Waters, M.D. Mentor to a Profession. Proceedings of the Ralph M. Waters Symposium on Professionalism in Anesthesiology*. Madison, Wisconsin, 2002. Wood Library-Museum of Anesthesiology, 2004. 260 pp. [rev. Bailey RJ. *Anaesth Intens Care* 34:129-131, 2006]

Ortega R, Leroy D, Vandam, MD: *An Anesthesia Journey*. Boston: Anesthesia Associates of Massachusetts, 2004 [DVD; rev. McGoldrick KE. *Surv Anesthesiol* 50:3, 2006]

Stratmann L. *Chloroform: The Quest for Oblivion*. Sutton Publishing, 2003. 256 pp. [rev. Daniels A. *The Telegraph* (London) September 28, 2003]

Zorab JSM, ed. *Pioneer British Anaesthetists [Careers in Anesthesiology series, volume IX]*. Wood Library-Museum, 2005. 99 pp. [rev. Biebuyck JF. *Anesth Analg* 102:977-978, 2006]

Articles and Book Chapters

AHA announces 2004 David M. Little Prize Winners. *ASA Newsletter* 69(2):13, February 2005

AHA Resident Essay Contest winners honored. *ASA Newsletter* 69(2):13, Febru-

ary 2005

Albin MS. From there to modernity: a millennium of progress in a century. *ASA Newsletter* 69(10):5-7, 11, October 2005 [6 refs.]

Arnold WP III. 2005 art exhibit a 'centennial celebration.' *ASA Newsletter* 69(7):29, July 2005 [1 illus.]

Bacon DR. White Knight: ASRA, ASA, and the formation of the ABA. *Reg Anesth Pain Med* 31(1):66-70, January-February 2006 [3 illus., 10 refs.]

Bacon DR. Who we are at 100—reflections of a historian. *ASA Newsletter* 69(10):1, 4, October 2005 [2 refs.]

Bacon DR. What does it mean to be an academic anesthesiologist? *ASA Newsletter* 68(11):1-2, November 2004 [4 refs.]

Bacon DR. These are the good old days. *ASA Newsletter* 68(12):1, 10, December 2004

Ball C, Westhorpe R. Muscle relaxants—decamethonium. *Anaesth Intensive Care* 33(6):709, December 2005 [1 illus., 6 refs.]

Ball C, Westhorpe R. Muscle relaxants—suxamethonium and THA. *Anaesth Intensive Care* 34(1):3, February 2006 [1 illus., 5 refs.]

Bastron RD. Albert Heirycy Miller: Anesthesiology pioneer. *ASA Newsletter* 69(10):16-18, October 2005 [5 illus.]

Bause GS, Erickson JC III. Freud, Erdmann and Einstein: heroes of 1905, ASA's founding year. *ASA Newsletter* 69(10):12-15, October 2005 [21 illus.]

Bridenbaugh PO. Pain medicine and regional anesthesia: inseparable roles? *Reg Anesth Pain Med* 31(1):79-81, January-February 2006 [9 refs.]

Calmes SH. Then and now: the women of ASA. *ASA Newsletter* 69(10):8-11, October 2005 [3 illus., 3 graphs, 1 table]

Canale DJ. S. Weir Mitchell's prose and poetry on the American Civil War. *J Hist Neurosci* 13(1):7-21, March 2004 [1 illus., numerous references]

Canale DJ. Civil war medicine from the perspective of S. Weir Mitchell's "The case of George Dedlow". *J Hist Neurosci* 11(1):11-18, March 2002 [2 illus., numerous references]

Chast F. L'opium dans l'art et la littérature. *Arts et Biologie* 39:17-30, December 2001 [illus., some color]

Connor H. Military anaesthesia, 1846-

1856. *Anaesthesia*. 61(3):296-297; author reply 297, March 2006 [letters; 12 refs.]

Cope DK. History as a subspecialty of anesthesiology. *ASA Newsletter* 69(10):36-37, October 2005

Dearmont D. Automatic Writing: A History from Mesmer to Breton (Andre Breton, Pierre Janet, Frederic Myers, Franz Anton Mesmer, France). PhD dissertation, University of Washington, 2004

Donaldson IM. Mesmer's 1780 proposal for a controlled trial to test his method of treatment using "animal magnetism". *J R Soc Med* 98(12):572-575, December 2005 [1 illus., 15 notes, 5 refs.]

Douglas E. Mary E. Botsford, MD: first California anesthesiologist was innovative, female MD. *Anesthesiology News* 32(2): 59-60, February 2006 [1 illus.; describes work of Dr. Selma H. Calmes on Dr. Botsford]

Froese AB. Gravity, the belly, and the diaphragm: you can't ignore physics. *Anesthesiology* 104(1):193-196, January 2006 [Classic Papers Revisted series; 2 illus., 14 refs.]

Gedeon A. Science and Technology in Medicine: An Illustrated Account Based on Ninety-Nine Landmark Publications from Five Centuries. Springer, 2006. 580 pp. [Includes Wren, Hales, Blak, Priestley, Lavoisier, Davy, Snow, Trendelenberg, Riva-Rocci, Einthoven]

Herr HW. Franklin, Lavoisier, and Mesmer: origin of the controlled clinical trial. *Urol Oncol* 23(5):346-351, September-October 2005 [3 illus., 9 refs.]

Hirschmann JV. Benjamin Franklin and medicine. *Ann Intern Med* 143(11):830-834, December 6, 2005 [45 refs.; includes Franklin's investigation of mesmerism]

Jacob M. Historians with pain. Perspectives [American Historical Society] 43(8):16-17, November 2005 [profiles the Interdisciplinary Pain Project at UCLA]

Johnstone RE. On the frontlines: Army anesthesiologists serve the country. *ASA Newsletter* 67(10):17-19, October 2003 [3 illus., 1 table]

Kalliardou E, Tsiotou AG, Velegrakis D, Avgerinopoulou A, Poulakou E, Papadimitriou L. Historical aspects of inhalation anesthesia in children: ether and chloroform. *Paediatr Anaesth*. 16(1):3-10, January 2006 [7 illus., 30 refs.]

Kravetz RE. Hypodermic syringe. *Am J Gastroenterol* 100(12):2614, December 2005 [1 illus.]

Krier C, Standl T, Goerig M. Prof. Dr. med. Dr. h. c. Jochen Schulte am

Esch: A Visionary of Our Specialty Celebrates his 65th Birthday. *Anesthesiol Intensivmed Notfallmed Schmerzther* 39(10):583-844, October 2004 [German]

Lee MR. Curare: the South American arrow poison. *J R Coll Physicians Edinb* 35(1):83-92, February 2005 [8 illus., 34 refs.]

Lightman B, ed. The Dictionary of Nineteenth-Century British Scientists. Bristol: Thoemmes, 2004. 4 vols. [Includes Davy, Roget, Snow]

Mandabach MG, Wright AJ. The American society of regional anesthesia: a concise history of the original group-its birth, growth, and eventual dissolution. *Reg Anesth Pain Med* 31(1):53-65, January-February 2006 [17 illus., 32 refs.]

Matsuki A. A brief history of biographical Seishu Hanaoka. *Nippon Ishigaku Zasshi* 51(3):355-384, September 2005 [Japanese]

Mills B. Poe, Fuller and the Mesmeric Arts: Transition States in the American Renaissance. Columbia: University of Missouri Press, 2006. 202pp. [Index, bibliographical references]

Neal JM. 30 plus years—an anniversary celebration of ASRA and regional anesthesia and pain medicine. *Reg Anesth Pain Med* 31(1):4-5, January-February 2006 [4 refs.]

Nuland SB. Doctors: The History of Scientific Medicine Revealed Through Biography. Chantilly, VA: Teaching Co., 2005 [6 hours; color VHS or DVD; includes book and transcript; William Morton included]

Ozturk S. An early description of painful neuropathy in Hittite tablets. *Arch Neurol* 63(2):296, February 2006 [6 refs.]

Peter B. Gassner's exorcism—not Mesmer's magnetism—is the real predecessor of modern hypnosis. *Int J Clin Exp Hypn* 53(1):1-12, January 2005 [20 refs.]

Ptaszynski AE, Horlocker TT, Bacon DR, Rowlingson JC. Alon P. Winnie, L. Donald Bridenbaugh, Jr., Harold Carron, P. Prithvi Raj, and Jordan Katz: founding fathers of the American Society of Regional Anesthesia. *Reg Anesth Pain Med* 31(1):71-78, January-February 2006 [6 illus., 34 refs.]

Ruetsch YA, Boni T, Borgeat A. From cocaine to ropivacaine: the history of local anesthetic drugs. *Curr Top Med Chem* 1(3):175-182, August 2001 [10 chemical structures, 2 tables, 97 refs.]

Shampo MA, Kyle RA. Medicine and Stamps. Volume 3. Rochester, MN: Mayo Clinic Proceedings, 2004 [compilation of stamp vignettes appearing in the Proceedings from 1985 to 2003; includes Apgar, Cushing, Griffith, Morton, Simpson]

Shrestha BM, Rana NB. Training and development of anesthesia in Nepal - 1985 to 2005. *Can J Anaesth* 53(4):339-343, April 2006 [5 refs.]

Vassallo SA. Lewis H. Wright Memorial Lecture. *ASA Newsletter* 69(7):7-8, July 2005 [1 portrait of Dr. Douglas R. Bacon]

Warner ME. Preservation of the WLM Living History Collection and educational films. *ASA Newsletter* 69(10):19, October 2005 [3 illus.]

Willis M. Mesmerists, Monsters, and Machines: Science Fiction and the Cultures of Science in the Nineteenth Century. Kent State University Press, 2006. 280 pp.

Wright L, Waisel D, Bacon D. The Anlet: anesthesiology's response to the needs of the Armed Forces in World War II. *Anesthesiology* 104(1):179-182, January 2006 [21 refs.]

Bulletin of Anesthesia History

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