UVM Anesthesia News

A Newsletter From The University of Vermont Department of Anesthesiology

Spring 2007

Volume 2 Issue 1

Chairman's Letter A welcome from Howard Schapiro MD, Chair of the UVM Department of Anesthesiology.

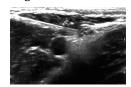
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Welcome!

Welcome to the second edition of the UVM Anesthesia News, the "yearly" newsletter of the University of Vermont Department of Anesthesiology. You remember the first edition, don't you? It featured eight pages of terrific articles by Shelagh Connor Shapiro, including the last interview of "Big John" Abajian. That newsletter was published in 1995.

1995? What happened? Let's just say it was a case of unfortunate timing - 1995 was the beginning of a few turbulent years for the UVM Department of Anesthesiology, and publishing a departmental newsletter became a low priority for a while. But much has changed since then.

Sadly and most importantly, some of the members of the 1995 UVM Anesthesia family are no longer with us. John Abajian. Bob Deane. Doug Howe. Howard "Jake" Jacobs. David Fukuda (page four). Probably others whose passing we haven't yet heard about. Each one is an irreplaceable loss.



Roy Bell, Tom Shinozaki, Michael Burfoot, and Peter Stern have retired from anesthesia practice since that last newsletter twelve years ago, though all four still live in the area and visit us from time to time. Ten 1995 attendings have moved on to professional challenges elsewhere, for various reasons. And Anesthesia Associates of Burlington, Inc. is no more.

Despite these losses, the UVM Department of Anesthesiology is stronger today than ever before. Larger too - thirty-eight anesthesiologists and twenty-two anesthetists, though the numbers seem to change daily. Our training programs are ultra-selective with twenty residents and three pain fellows from around the world. There are more ongoing anesthesia research projects than at any time in the department's history. We have new offices and OR's and we're busy - over 23,000 anesthetics were administered at UVM in 2006, and that number doesn't include a booming chronic pain clinic.

One of the things that hasn't changed since 1995 is the debt we owe to all the members of the UVM Anesthesia family, now about 400 strong, for all you've done to enrich our lives and make Burlington a better place to live and work. Thank you from all of us. I hope you enjoy this newsletter and (with a little luck) see another one in your mailbox in three months or so. No promises, but we'll try to do better this time around.

Joe Kreutz MD

CHAIRMAN'S LETTER

It is with great pleasure that I reintroduce to you today the UVM Anesthesia News. Some of you may remember that the first and only volume was published in 1995. So why a new issue now and what has happened over all of those years?

This current newsletter, to some extent, grows out of a recent effort to study the history of our department. It has been an amazing



journey which is not yet complete and it is our hope to share some of this history with you. Among the things that our research has

uncovered is that the next anesthesiologist to be hired at UVM will be the 100th attending since 1907, the true year of our department's birth. Additionally, there have been 61 nurse anesthetists or anesthesiology assistants who have delivered anesthesia care for our patients since 1928, and we have had the privilege of educating 270 residents since 1946. Some wonderful photographs of present and former members of the department have been discovered, and donations of notebooks have revealed anesthetics (including techniques and fees assessed to patients) delivered at the DeGoesbriand Hospital in the 1940s and '50s. A bulletin board in our new office space is now adorned with many snapshots of members of the department, both past and present, and large photographs of Betty Wells, John Dodds (more about Dr. Dodds in the next issue - Ed.), John Abajian, and John Mazuzan are displayed in our small conference room. A photo of Gino Dente is displayed outside our larger conference room, so named in honor of Gino and Carmen Dente for their donation to the Fletcher Allen Health Care Renaissance Building Campaign.

I remain inspired not only by the rich history of this department, but by my colleagues who work everyday to provide superb anesthesia care to our patients. In doing so, we continue to honor this rich history.

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Howard Schapiro MD

Ultrasound-Guided Blocks Replacing Traditional Techniques

The UVM Department of Anesthesiology has joined the growing international trend toward ultrasound-guided peripheral nerve blocks.

All attendings participated in one of two December 2006 block workshops, and with the purchase of two GE LogiQ ultrasound machines (at a cost of \$60000), the vast majority of brachial plexus, popliteal



fossa, and femoral nerve blocks at UVM are now performed with ultrasound guidance.

"There are a number of potential advantages of the technique" says Tim Dominick MD, who helped organize the workshops. "More accurate and time-efficient placement of peripheral nerve blocks, the ability to use less local anesthetic by depositing the anesthetic precisely at the target nerves, the ability to see and avoid vascular structures and correct intra-neural needle placement, the chance to teach real-time three-dimensional regional anesthesia anatomy, and improved patient comfort by minimizing the number of needle passes."

International Medicine Roundup

Continuing a long tradition of UVM Anesthesia volunteer medical care in the developing world, several department members traveled overseas in 2006 and early 2007.

In March 2006, Joe Kreutz MD traveled to Cao Lanh, Vietnam with Interplast for two weeks of adult and pediatric plastic surgery. The team performed over 100 procedures, with an unusually large number of primary cleft lip repairs (including a 45-year-old woman).



Lydia Grondin MD volunteered at the University Split Hospital, Split, Croatia, in October 2006. The goal of the trip was education and training of local providers in safe,

effective regional anesthesia for childbirth, especially spinals for cesarean section. John Gaydos AA traveled to the Sacre Coeur Hospital, Milot, Haiti, in November 2006 with a team of Fletcher Allen general surgeons and support personnel. It was John's third volunteer trip to Haiti.

Also in November 2006, Chris Viscomi MD participated in an International Volunteers in Urology mission to Maputo, Mozambique - see page three for details.

Finally, Joe Kreutz MD again traveled with Interplast in January 2007, this time to Addis Ababa, Ethiopia. It was his eighth volunteer medical trip since 1998 - details in a future issue.

Although no official tally exists, it's estimated that current members of the UVM Department of Anesthesiology have participated in over forty medical missions to the developing world in the last fifteen years, in all cases using personal vacation time for their efforts.

TEE Certification

Steve O'Donnell MD and Matt Walker MD successfully completed the difficult Examination of Special Competence in Perioperative Transesophageal Echocardiography (PTE-eXAM) of the National Board of Echocardiography in May 2006. They join department faculty Chris Greene MD, Mark Hamlin MD, and Guy Tousignant MD in this achievement.

Jim Rathmell MD Heads to Harvard & MGH

Jim Rathmell MD, UVM Anesthesia faculty member since 1992, left Burlington in September 2006 for a position as a Lecturer in Anaesthesiology at Harvard Medical School and director of the Pain Center at Massachusetts General Hospital in Boston, MA. During his years at UVM, Jim served many important roles including Anesthesia Residency Director and Associate Dean for Admissions of the UVM College of Medicine. In his position as director of the UVM Chronic Pain Clinic, Jim built the pain fellowship into an internationally recognized program attracting physicians from around the world. We wish Jim well in his new job at Harvard. His wisdom, experience, leadership, clinical skills, and sense of humor will be missed in Burlington.



Keith Leverenz MD flies his powered paraglider over Grand Isle







Volunteer Anesthesia in Mozambique and an Search for the Perfect Alpine Adventure

In November 2006, Chris Viscomi MD traveled to Maputo, Mozambique with International Volunteers in Urology, and then on to Tanzania for a guided ascent of Mount Kilimanjaro: An Interview.

Chris, why did you decide to go on this trip?

Mainly because it was a teaching trip, training local practitioners how to do surgical procedures, epidural and spinal anesthesia, and caudal analgesia. It was also a part of the world I'd never been to. What kinds of surgery did you do in Maputo? Hypospadius repairs in young boys and vesicovaginal fistula repairs in teenage girls, about forty cases in all. In sub-Saharan Africa, when a girl has her first menses she gets married off, so a lot of these girls are having their first baby at age twelve or thirteen. Their pelvis isn't large enough to accommodate a fetal head, so the labors are very prolonged. Many of the babies are stillborn, and a common sequela is that a very large fistula develops between the girl's bladder and upper vagina. A lot of the girls go on to die of kidney infection, and the survivors are considered unclean and are thrown out of the house by their husband. Their families won't take them back, they're socially ostracized it's a horrible lot in life for a young girl.

Any difficult moments for you or the team?

There were a few. They do have some marginally trained practitioners. I remember one child who went into laryngospasm and became quite cyanotic and bradycardic. Luckily there were no bad outcomes.

How was the Kilimanjaro ascent?

That was a lot of fun. We spent six days on the mountain, in seven different ecosystems. It was a steady climb except for the last day, which was very steep. We summited around seven in



the morning at almost 20,000 feet with beautiful views of the glacier and dawn over the Serengeti Plain. It was surprisingly cold at the summit ridge, two degrees Fahrenheit - a lot of my water bottles froze, even though they were deep inside my pack.

The Never-Ending Bier Block

The first of a series of reviews of ongoing UVM Department of Anesthesiology research projects.

Todd Murphy MD, a UVM CA-3 anesthesia resident, is an Air Force veteran twice decorated in combat, a man accustomed to overcoming obstacles. Obviously flying an F-16 in Afghanistan is orders of magnitude more difficult than conducting a clinical study, but both can be challenging at times.

In a research project begun in 2004 by former resident Sonny Ivie, Todd and his faculty advisors David Adams MD and Chris Viscomi MD have been researching the analgesic effect of adding clonidine to Bier blocks. In a randomized, double-blinded study, four different dosages of clonidine up to one microgram/kilogram (with a fifth control group) are added to the standard 0.5% Lidocaine block, and patient pain scores and any adverse effects are recorded in the PACU. Despite the fact that large numbers of Bier blocks are done every week at UVM, reaching their goal of fifty study patients has been difficult.

"There's a lot of attrition" says Todd. "The exclusion criteria are fairly extensive. For example, anyone taking Tylenol #3 or other opiates is excluded automatically. And there are age requirements - any patient over age sixty-five is ineligible to be enrolled in the study." Todd expects to complete his research by the end of February.

The number of research projects being done by UVM Anesthesia residents is steadily increasing, according to David. "The RRC for anesthesiology has clearly stated its desire to see more scholarly activity from departmental faculty as a whole, and in particular research activity that involves resident trainees." We look forward to the publication of Todd's study.

Tax-deductible contributions to the UVM Anesthesia Research & Development Fund are welcome and should be directed to Howard Schapiro MD, Chair - UVM Department of Anesthesiology (address on page four).

Pouring Ether at Mary Fletcher and Fanny Allen Hospitals

Since August 2005, Joe Kreutz MD has been researching the history of anesthesia at UVM. This report, part 1 of a series, covers 1814 to 1906.

The history of anesthesia at UVM begins in 1814 when Dr. John N. Pomeroy (the son of the Dr. John Pomeroy, a founder of the UVM College of Medicine) demonstrated the effects of nitrous oxide during a public lecture in Burlington. After his student "volunteer" refused to participate at the last minute, Pomeroy inhaled the gas himself and, in a bizarre scene, became excited and "with an exhibition of muscular power unguided by reason, grasped the timid student who had well-nigh made the lecture a failure, and forced him under the seats". 1 By the time Mary Fletcher Hospital opened in 1879, the medical use of anesthetic agents was already well established at UVM's Pomeroy Hall, where relatively minor procedures were performed using open drop ether and chloroform techniques.



The availability of inpatient beds at Mary Fletcher and Fanny Allen Hospital (opened in 1894) changed everything. After a slow start - forty-

seven operations were performed at MFH in 1879 the number and complexity of surgical procedures at UVM rapidly increased.2 Ether became the anesthesia standard, with nitrous gaining favor and chloroform use decreasing. Cocaine began to be used for local anesthesia in the 1880s. Nurses, medical students, and interns administered all the anesthetics - as elsewhere around the U.S., anesthesia was considered too menial a duty for a practicing physician. That too would change at UVM - in 1907.

Next issue: John Hazen Dodds.

- 1. Grinnell AP: History of the Medical Department of the University of Vermont, 1880.
- 2. 1st Annual Report Mary Fletcher Hospital, 1880.

Alumni News

We and your fellow UVM Anesthesia alumni are eager to hear from you! Please write us or just stop by our new offices next time you're in the area. And if you prefer an electronic pdf version of this newsletter (and to help us reduce printing and mailing costs), send us your email address. Thanks!



In Memoriam

David Fukuda MD, one of the first anesthesia residents at UVM, died August 7th, 2006 from causes incident to age. He attended medical school at Kyushu University in Fukuoka, Japan, and was the eighth generation of physicians in his family. As a third year medical student he helped care for victims of the 1945 atomic bombing of Nagasaki, an experience that deeply affected him. David arrived in Burlington in 1951 as a GARIOA scholar (a program detailed in an article in Anesthesiology, Nov. 2005, by Shigemasa Ikeda MD, UVM Anesthesia resident class of 1972). His resident stipend was fifty dollars per month, used mostly for the purchase of textbooks. David moved back to Japan after his residency and helped start an Anesthesia Section at Okayama University, then returned to Vermont in 1955 for additional training. In October 1957, after serving as a Clinical Instructor at UVM for one year, he established an anesthesia practice in Barre, VT, where he worked until his retirement in 1988. That year David wrote of his residency: "There was lots of time for humor and good fellowship. In the winter we did skiing and snow-shoeing or tobogganing the hospital hill under the cold winter moon. During the warm days hikes and picnics and learning how to drive my old Model T. So it was not all work and no play. We all enjoyed the beautiful environment we had. I felt it was a good two years and enough to come back to when the opportunity came." David is survived by his daughter Mariko (a teacher in Los Angeles) and sons Keiji (chief of the Global Influenza Program at the WHO) and Chris (a urologist in Burlington).

Upcoming Events



12th Annual Vermont Perspectives in Anesthesia

March 7 - 11, 2007, Stoweflake Resort, Stowe VT

Clinical updates of a variety of topics relevant to current clinical anesthesia practice, including perioperative glucose management, obstructive sleep apnea and outpatient surgery, acupuncture, new guidelines for adult and pediatric ACLS, and out-of-OR anesthesia. Includes specialized workshops for hands-on experience with ultrasound-guided peripheral nerve blocks, difficult airway management, and a state-of-the-art anesthesia simulator.

Johns' Fund Lectureship - "Anesthesia Information Systems and Doing the Right Thing Right"

Michael O'Reilley MD, MS, Associate Professor of Anesthesia, U of Michigan March 10, 2007, 4:30PM, Stoweflake Resort, Stowe VT

Once again, the UVM Department of Anesthesia's annual Johns' Fund Lectureship will be held in concurrence with the conference. The lectureship is held in honor of John Abajian MD and John Mazuzan MD, distinguished former chairmen of the department from 1939 to 1995. Registration for the conference is not required to attend the lecture and cocktail reception.

Tax-deductible contributions to The Johns' Fund are welcome and should be directed to Howard Schapiro MD, Chair - UVM Department of Anesthesiology, Fletcher Allen Health Care, 111 Colchester Avenue, Burlington, VT 05401.

4th Annual Northern New England Critical Care Conference

October 18 - 20, 2007, Stoweflake Resort, Stowe, VT - details in the next issue

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UVM Anesthesia News is published quarterly by the University of Vermont Department of Anesthesiology and is distributed to graduates of the anesthesiology residency program, department employees, and members of the medical community. Comments, updates, suggestions, and other feedback are encouraged and should be addressed to the editor at:

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The UVM Medical Campus

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