The Anesthesia Record

Quarter 1 2014

Case Study
Malignant Hyperthermia

The Joint Commission
Understanding Standards

38th Annual Conference
April 12th-15th

The Newsletter of the American Academy of Anesthesiologist Assistants

THE LEGISLATIVE UPDATE ISSUE

38TH AMERICAN ACADEMY OF ANESTHESIOLOGIST ASSISTANTS

Annual Conference

April 12-15, 2014

The Westin Hilton Head Island Resort & Spa
Hilton Head Island, SC

The Anesthesia Record
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Hilton Head 2014
This year's Annual Conference, to be held at the Westin Hilton Head Resort and Spa, has something for everyone

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Errors and Omissions
Apologies to Eva Leonard, AA-C and Ania Kaiser, MD of the Department of Anesthesiology, Children's Healthcare of Atlanta at Egleston, who were not properly credited as co-authors along with John Ng, AA-C of the article *Tetralogy of Fallot: Anesthetic Management of Congenital Heart Disease* which appeared in the fourth quarter 2013 newsletter.

Advocacy Starts at Home

By Saral Patel, AA-C

GREETINGS MEMBERS. Welcome to all our new members and a sincere thank you to all for renewing your 2014 AAAA Membership. It's your membership support that helps the AAAA reach our strategic goals. Over the past year, the AAAA has taken tactical steps for proactive change. The greatest being the partnership formed with Cornerstone Communications Group (CCG). Cornerstone Communications Group, under the leadership of Jet Toney, will prove to be a huge success for the AAAA. Even though CCG officially took over management services for the AAAA on January 1st, 2014, the AAAA has already benefited from their expertise and wisdom as they have streamlined meeting minutes development and overall meeting management. Cornerstone Communications Group has stepped in with a seamless transition of the website. Please visit our new easy to navigate website at www.anesthetist.org. I think you will be pleased as the website is skeuomorphic and a better representation of the organization. As a first line of communication for new members and prospective AAs, it is more elementary and intuitive. Toney, with multiple years of lobbyist experience, is also working closely with the Executive and the National Affairs Committees. This is an innovative approach to have the AAAA's Executive Director present at key ASA State Society meetings, ASA leadership meetings, and at exhibition events. The AAAA will flourish under Toney's guidance and the CCG team of support staff.

Of paramount importance for 2013 were advocacy issues. Advocacy starts at home with the growth of the AAAA Legislative Fund. The AAAA Legislative Fund raised over XXXX dollars since April 1, 2013. Personal giving is essential to cultivating resources in order for the AAAA to advocate for the AA profession. In 2014, the AAAA is anticipating legislative fund allocation requests from multiple states. Any AAAA member can request funds from the legislative fund and should visit www.anesthetist.org for details. Also, click on the Legislative Fund box on the left hand of the website to make your donation today. Cornerstone Communications Group has simplified the process of giving to allow donations to be given one time, or on a monthly or quarterly basis. Donations over $500 will earn recognition at the President's Club level. The AAAA Legislative Fund can also accept donations from corporations and groups.

During the past year, advocacy efforts were needed not only in the legislative arena, but also in dealing with AA practice issues. We received communications from AAs in multiple states dealing with payment discrepancies—Florida, Georgia, Texas, Vermont, Missouri and Washington, D.C., to name a few. The AAAA Board formed the AAAA Payment Task Force (PTF) to develop resources which will be accessible to AAAA members to best troubleshoot payment issues. The PTF is being led by Melanie Guthrie and includes both AAs and physicians working together to tackle this mounting problem. Strengthening the ties with the Centers for Medicare and Medicaid Services (CMS), AAAA has given support to CMS by providing a forum to reach out to providers to inform of upcoming CMS changes. AAAA has publicized the PQRS and ICD-10 deadlines in multiple venues and in return, the AAAA has been represented at CMS stakeholders' meetings. The AAAA has also been working with ASA staff to circumvent payment issues with private payers. If you or your group experience payment issues for AA services please contact the AAAA.

> It's your membership support that helps the AAAA reach our strategic goals

The 38th Annual AAAA Meeting will be held from Saturday, April 12th-Tuesday, April 15th at The Westin Hilton Head, South Carolina. If you haven't registered yet, please visit www.anesthetist.org to register. This year's highlights will be Dr. John Abenstein, ASA President-elect, delivering the keynote address on Saturday, April 12th at 12:00. The 2014 Honor Awards will be presented to Barry Hunt, AA-C, Dr. Jay Epstein, Peter Kaluszyk AA-C, and Gholam Meah, AA-C on Saturday, April 12th at the Annual Business Meeting. Barry Hunt will be receiving the Distinguished Service by an AAAA Member Award. It is awarded for exceptional contributions to the AAAA and the AA profession from within the organization. Barry has been active in the AAAA for nearly 10 years serving the organization as Treasurer for 3 consecutive terms. His volunteerism and dedication to profession has made him a role model to many students and fellow AAs.

Dr. Jay Epstein will be awarded the Meritorious Commitment by a Physician Award. Dr. Epstein was selected for his exceptional contributions to the AA profession within the past four to five years. Hiring one of the first AAs in Florida, Dr. Epstein has championed AA efforts for almost a decade. As President of the Florida Society of Anesthesiologists, Dr. Epstein has worked side by side with the AAAA and the FAAA on AA practice issues.

Pete Kaluszyk and Gholam Meah are both being awarded the AAAA's Distinguished Service in Education by AAAA members. Both have demonstrated excellence in preceptorship and made exceptional contributions to the AA profession. Pete and Gholam were both selected by the AAAA Education Committee for their commitment to educating the future of the profession. Together they both represent over 60 years of excellent mentorship.

Hope to see you all in sunny Hilton Head! Safe travels

Representing AAs at the 67th Annual PostGraduate Assembly in Anesthesiology

NEW YORK CONFERENCE PROVIDED EDUCATIONAL AND NETWORKING OPPORTUNITIES

By Claire Chandler, AA-C
Immediate Past President

EACH DECEMBER, THE AAAA HOSTS A COMPLIMENTARY BOOTH, graciously provided at no cost to our organization by the New York State Society of Anesthesiologists (NYSSA), at the PostGraduate Assembly in Anesthesiology (PGA) Conference in New York.

The PGA is the annual meeting of the NYSSA and is one of the largest annual gatherings for anesthesiologists worldwide. This meeting offers a multitude of CMEs in a variety of formats and is highly respected within the anesthesia community. It is also an excellent opportunity for the AAAA to support our mission of advancing the AA profession and promoting the anesthesia care team, as well as a unique occasion to achieve our strategic initiative to become a pillar in the perioperative community.

While in attendance, AAAA leadership educated anesthesiologists from across the country, exhibitors from various industries, and other care team providers who visited our booth about AA education and practice. In addition, our leadership delegation, which consisted of President Saral Patel, Director Bill Paulsen, New York resident Gregg Mastropolo, myself, and our executive director Jet Toney, had multiple opportunities to advance our legislative efforts in New York. Anesthesiologist Assistant representatives met with the AAAA's New York lobbyists from Weingarten Reid & McNally, LLC, representatives from the Greater New York Hospital Association, the NYSSA Executive Committee and key ASA leadership to promote bill S.2945 which would provide for the licensing and regulate the practice of AAs in the state of New York.

Delegation of AAAA, NYSSA, and ASA leadership

While legislation for AAs does not happen overnight or without opposition, the collaborative efforts demonstrated in New York create an ideal opportunity for potential success through open communication and long term dedication. Your continued membership and legislative fund donations will allow the AAAA to continue to foster our relationships with pertinent New York associations and institutions and educate New York lawmakers and anesthesiologists about our profession and the value of the anesthesia care team.

If you need CMEs or are interested in visiting New York next December, consider attending the PGA in 2014 and please drop by the AAAA booth and say hello!

Welcome New Members

Joshua Addison, AA-S
Jason Allen, AA-C
Aaron Amador, AA-S
Whitney Ankrum, AA-S
Patrick Ashiru, AA-S
Jeremy Bass, AA-S
Brock Blankenship, AA-C
Brad Bugher, AA-C
Ashley Burgamy, AA-S
Caitlin Burley, AA-C
Tyra Campbell, AA-S
Anthony Carden, AA-S
Daniel Chen, AA-S
Sara Clark, AA-C
Thomas Cole, AA-C
Lois Connolly, MD
Nancy Corder, AA-S
Tia Covington, AA-S
Mansour Dagher, AA-C
Morgan Dawson, AA-C
Matt DeBurger, AA-S
Stephanie Denham, AA-S
Ross DeVoe, AA-C
Mark Dooley, AA-C
Megan Dowdy Mueller, AA-C
Michael Duffy, MD
Matthew Duncan, AA-S
Adesuwa Ebhotemen, AA-S
Brent Fairbanks, AA-C
Nicholas Frank, AA-C
Logan Geiger, AA-S
Robert Genest, AA-C
Brittney George, AA-S
Emily Gutschenritter, AA-S
Michelle Harp, AA-S
Kaley Harvey, AA-C
Taylor Hennessey, AA-S
Andrea Horsford, AA-C
Joseph Howard, AA-S
Stephen Hunt, AA-S
Anna Janulewicz, AA-C
Kirt Jensen, AA-C
Ansley Johnson, AA-S
Thomas Kennelly, AA-S
Scott Kercheivlle, MD
Patricia Kipper, AA-S
Jessica Koury, AA-C
John Le, AA-C
Christopher Leung, AA-S
Lena Mark, AA-C
Maggie McCulloch, AA-S
Lauren McLeod, AA-S
Rebecca McMurtry, AA-C
Bradley Mooney, AA-S
Robert Morgan, MD, MBA
Stephanie Murray, AA-S
Juveria Nayeem, AA-S
Jennifer Nguyen, AA-S
Lillian Paige Gobach Baker, AA-S
Chad Patete, AA-S
Adam Petersen, AA-C
Jeremy Polk, AA-S
Stephanie Raimondi, AA-C
Gregory Reid, AA-S
Nathaniel Renaud, AA-C
Joseph Riescher, AA-S
Michael Roberts, MD
Lauren Rocha, AA-S
John Roman, AA-C
Iyad Saleh, AA-C
Rebecca Santillan, AA-S
Stephen Schreiner, AA-S
Courtney Schroeder, AA-S
Ashkan Sharifi, AA-S
Brianne Shropshire, AA-S
Lija Siltumens, AA-S
Gregg Snider, AA-S
Jennifer Stever, AA-C
William Summerford, AA-C
S. Coco Tjen, AA-C
Tyler Twardoski, AA-S
James Valanty, AA-C
Thomas Verdone, MD
Andrew Wallingford, AA-S
Elizabeth Walterscheid, AA-S
Helen Wang, AA-S
Seth Widmer, AA-C
Sarah Wolfe, AA-S
Peter Wolfenberger, AA-S
Paul Yost, MD
Pin Yue, AA-C
Xiao Zhu, AA-S

The State of AA Legislation

A Review of 2013 Legislative Efforts and a Look at What's to Come in the Year Ahead

By Ellen Allinger, AA-C
National Affairs Committee Chair

The following is a synopsis of AA legislation that occurred in 2013 and the status of 2014 AA legislation as of February 3, 2014. Note that the AAAA funds both its own lobbyists as well as largely helping to fund lobbyists employed by various AA state academies. Because lobbyists are critical to supporting AA legislation, please consider making a donation directly to the AAAA's Legislative Fund. Donations can be made online at www.anesthetist.org. Thank you.

2013 REVIEW OF AA LEGISLATION

INDIANA

With the full support of the Indiana Society of Anesthesiologists and the AAAA, SB273, which would require the medical licensing of AAs, was introduced. In addition to this provision, the bill also contained provisions providing licensure of dieticians and certification of music therapists. The bill would have also allowed a CRNA to administer anesthesia for a podiatrist if specified conditions are met. (Current law allows a CRNA to administer anesthesia under the direction of and in the immediate presence of a physician.)

Despite passage of the bill by both the House and Senate, Governor Mike Pence exercised the right to veto this bill. The Governor's office did reach out to the AAAA's lobbyist to say that the Governor's office was supportive of the AA profession but that the Governor had concerns about some of the other professions contained in the bill.

KENTUCKY

Concurrent AA licensing bills SB126 and HB428 were introduced into the KY state legislature and referred to committees. Bill language was revised significantly from the previous year. At the request of the Senate bill's sponsor, Senator Denton, several meetings occurred between the Kentucky Academy of Anesthesiologist Assistants, Kentucky Association of Nurse Anesthetists (KANA), and AAAA National Affairs Committee leadership -- these meetings proved non-productive and KANA expressed significant concerns about supervision and education of AAs.

Both SB126 and HB428 were not referred out of committee during the 2013 session.

MICHIGAN

After collaboration between the Michigan Society of Anesthesiologists (MSA) and AAAA to re-draft a formerly written MI AA licensing bill, SB439 was introduced on June 19th into the legislative session where it was referred to the Committee on Health Policy. Since that time, no movement has occurred on the bill. Both the Michigan Academy of Anesthesiologist Assistants and the MSA are supportive of this bill. However, after the introduction of SB439, the MSA has been forced to refocus its attention and energy on other bills in the MI state legislature.

The Michigan legislative session is a two-year session which does not end until December 31, 2014.

NEW MEXICO

Two bills affecting the AA profession were introduced for the 60-day legislative session. SB6, supported primarily by the New Mexico Academy of Anesthesiologist Assistants and their lobbyist, sought to remove the requirements that AAs must be employees of a university in New Mexico with a medical school and that anesthesiologists who supervise AAs must be employed by a department of anesthesiology of a medical school in New Mexico. After its introduction, the bill was referred to the Senate Public Affairs Committee where testimony was heard on the bill on Jan. 31st, 2013. During the meeting, the bill was tabled and therefore action postponed indefinitely.

The second bill, HB416, supported by the University of New Mexico Health Sciences Center, sought to remove the requirement that an anesthesiologist supervise an AA student one-on-one and be continuously present in the operating room if the AA student was providing the anesthesia. Instead, substitute language would allow an AA student to be supervised by an anesthesiologist, a licensed AA, or a 2nd, 3rd, or 4th-year anesthesiologist resident.

After passing the House by a large margin and unanimously passing the Senate, HB416 was signed into law by Governor Susana Martinez on April 2nd and went into effect on July 1st, 2013.

NEW YORK

In Jan 2013, the AAAA retained the lobbying services of Weingarten Reid & McNally, LLC to support the NY S.2945/A.6646 bills for the licensure of anesthesiologist assistants. In collaboration with the AAAA, the New York State Society of Anesthesiologists (NYSSA) hosted the first AA Hill Day in Albany on April 23rd. Four AA delegates, two with direct ties to NY, and two NYSSA physicians participated in visits with ten influential contacts within the NY Assembly and Senate, including representatives from the office of the bill sponsors. Additional meetings were conducted with Directors of both the Senate Heath Committee and Higher Education Committee and the legislative aide for the Chair of the Assembly Higher Education Committee. Potential co-sponsors of the AA bill were identified. AAAA/NYSSA delegates also met with the Deputy Commissioner from the NY Office of Professions. Generally, reception of the bill was positive. It was noted that having a multidisciplinary team of advocates including mid-level providers and physicians was unique and beneficial.

In May, two AA delegates returned to Albany to lobby key members of the Senate and the Assembly Higher Education committee and seek additional co-sponsors for the bill. Three potential Senate co-sponsors and two potential Assembly co-sponsors were identified, including the majority leader from the Assembly.

The AAAA has identified a number of AAs with direct ties to NY State and has requested that these individuals reach out to their district representatives and Higher Education committee members for support of S.2945/A.6646. In addition, AAAA representatives staffed a booth for the 2013 PGA meeting in order to establish AA representation amongst NYSSA members and PGA attendees.

The New York legislative session is a two-year session. The current AA bill will be active through 2014.

OREGON

SB630 for an AA Practice Act was introduced by the Oregon Society of Anesthesiologists on February 21st and referred to the Health Care and Human Services Committee. A committee hearing, attended by Claire Chandler, was held on April 1st, but no vote was held on the bill. The bill died in committee at the end of the session.

TEXAS

AA licensing bill SB1787 was introduced by Senator Carlos Uresti and was referred to the Health & Human Services Committee. Additionally, a companion bill, HR2397, was introduced by Representative John Zerwas, an anesthesiologist and then ASA president, and was referred to the Public Health Committee. Both SB1787 and HR2397 failed to be reported out of committee.

The Texas Academy of Anesthesiologist Assistants, along with the Texas Society of Anesthesiologists, has been very engaged in the AA licensing effort and has diligently been gathering supporting documentation and coalition support.

Kentucky's legislative session runs from January through April. The AA licensing revision bill was reassigned. Any interested AAAA members should reach out to Kentucky Legislators.

UTAH

The Utah Society of Anesthesiologists introduced HB109, sponsored by Representative Brad Dee, which would allow AA practice by licensing. The USA worked closely with the NAC leadership and ASA staff to re- craft the language and strategy for the bill. Despite significant lobbying efforts to get this bill passed, including the hiring of an AAAA lobbyist, there was considerable opposition from the Speaker of the House, Becky Lockhart. Despite getting a member of her leadership team, Majority Leader Brad Dee, to sponsor the legislation, the Speaker, who is a nurse, continued to express deep concern with the allowance of licensure for AAs. The bill was introduced on the House floor for final consideration, but in an effort to maintain some collegiality among the leadership team, Rep. Dee agreed, in a meeting with the Speaker, to not pursue the bill further during this session. With that agreement, further progress of HB109 ended.

Because of the ongoing position of the Speaker, it is anticipated that the next time that AA licensure legislation will be in 2015.

2014 AA LEGISLATION

INDIANA

The AAAA has continued to retain the services of Barnes and Thornberg for the 2014 legislative session. A new bill, SB244 (The Governor's Healthcare Portal bill), was introduced by the Governor's office and seeks to allow any health care professional that is able to receive payment for services by CMS (Center for Medicaid and Medicare Services) but is currently not licensed or otherwise regulated in Indiana to practice in the state. Although AAs would be one of the professions to benefit from this bill, NAC leadership was greatly concerned about the lack of oversight of the AA profession that assures patient safety, such as regulation by the state board of medicine. The bill received testimony in committee on January 22nd. Because of many concerns by the legislators on the language in the bill, the author of the bill with agreement from the Governor's staff decided to reduce the original provisions to a study of the Portal bill's concept by the Indiana Professional Licensing Agency and a report back to the legislature.

Meanwhile, the AAAA's lobbyist, Heather Willey, had worked hard on amendment language that was agreeable to both the involved AAAA leadership and with Mr. Adam Berry, Policy Director at the Governor's Office, that would allow for AA licensing and oversight by the Indiana state medical board. The author of SB244, Senator Pat Miller, found a home for this amendment in SB233, a bill to license pharmacy technicians. The author of that bill, Senator Pat Grooms, allowed Senator Miller to place the amendment onto his bill. The amendment passed by a vote of 9 to 3 and SB233, as amended, was passed unanimously out of committee. The bill was anticipated to have its second and third readings on the floor of the Senate during the first week of February.

KENTUCKY

The Kentucky Academy of Anesthesiologist Assistants (KAAA) has secured a lobbyist utilizing AAAA Legislative Funds for 2014 AA licensure legislation. The KAAA supported AA licensing revision bill, SB 94, was introduced January 23rd and subsequently assigned to the Senate Licensing, Occupations and Administrative Regulations Committee. As of Feb. 3rd, the committee does not have a meeting date scheduled. An AAAA alert went out on Tuesday, Jan 28th, asking all AAAA members with ties and interest in KY to contact legislators.

The KY state legislature is in session for 2014 from Jan. 7th through April 15th (est.).

MICHIGAN:

The MSA leadership indicates that, while supportive of AA legislation, the MSA has other issues that take precedence and there will not be any focus of time or energy on the current AA licensing bill, SB 439, which currently sits in the Committee on Health Policy. The MAAA continues to support AA licensing efforts.

NEW YORK

The New York lobbying firm of Reid, McNally and Savage has been retained to continue the lobbying effort for SB2945. AAAA leaders Saral Patel, Claire Chandler, Gregg Mastropolo, Bill Paulsen and AAAA Executive Director Jet Toney attended the December 2013 NYSSA sponsored PGA meeting. During this time, Saral, Claire and Jet met with the Greater New York Hospital Association in regard to the pending AA bill.

The legislative session for the NY legislature extends throughout 2014 and ends in on January 7, 2015.

NEW MEXICO

As with all even-numbered years in the NM legislative session, this year's legislative session is a short-session of only 30 days and only financial bills may be filed. This does not allow for any AA legislation to be filed in 2014.

TEXAS

There is no 2014 legislative session in Texas.

Plans are Underway for Annual Meeting in Hilton Head

HIGHLIGHTS INCLUDE RENOWNED SPEAKERS AND EDUCATIONAL WORKSHOPS

By Daniel Mesaros, AA-C, MS
Annual Meeting Committee Chair

WHY DO YOU ATTEND THE ANNUAL MEETING? Whether it's to learn what's new in anesthesia, connect with friends and colleagues, enjoy a family vacation, or fulfill your CME requirements, this year's meeting has something for you. The 2014 meeting in sunny Hilton Head, South Carolina presents strong, innovative faculty featuring physicians nationally recognized for their achievements in the field of anesthesia. Be sure to attend the presentation by Dr. Hannenberg detailing the Implications of the Surgical Home and definitely don't miss Jeopardy! Additionally, members can participate in educator training sessions, problem based learning discussions, and even ultrasound guided regional workshops. Most importantly, arrive early on Saturday for the membership Kickoff Breakfast and business meeting. We are striving to provide members with the most educational and entertaining meeting in 2014!

Problem Based Learning Discussions and Education-Focused Workshops

This year, the Education Committee has developed two education-focused workshops to be held at the AAAA's Annual Meeting, both on Saturday. The first will cover the Behavioral Interview and will increase our appreciation of how much an individual's behaviors leads to academic and professional success. The second workshop is about the Hidden Curriculum and will uncover how students learn a tremendous amount from peripheral encounters that can either enhance or encumber their academic and clinical aptitude. The workshops are aimed at clinical preceptors and faculty. Space is limited and registration is required. The workshops will be lead by Gary Jones, Gina Scarboro, Katie Monroe & Shane Angus.

PBLDs are sessions of problem-oriented discussions based on medically challenging cases. The facilitator(s) who author the case report will guide the participants through the discussion in a small group where exchange of problem-solving strategies and techniques is encouraged among the limited number of discussants. Registrants will receive 1-2 pages of case material several weeks in advance in order to allow for preparatory time so that all participants can contribute to and benefit from the discussion.

There will be two PBLD sessions offered. The pediatric session is on Saturday, April 12th, at 3:30 p.m. The adult session is scheduled for Sunday, April 13th, at 2:00 p.m. Each session is limited to a maximum number of 20 participants. Pre-registration is required. Both fellows and students are welcome to participate.

2014 Pediatric PBLD Topic:
A 12 year-old patient with single ventricle physiology undergoes a posterior spinal fusion with instrumentation and experiences excessive blood loss intra-operatively.
Moderators: John Ng, AA-C; Katie Monroe, AA-C.
Children's Healthcare of Atlanta at Egleston, Atlanta, GA.
Learning Objectives:
1. Describe the pathophysiology of hypoplastic left heart syndrome.
2. Summarize the anatomical and physiological changes that occur after stage one Norwood, Glenn, and Fontan procedures and explain their clinical significance.
3. Develop an anesthetic plan for patients with existing Glenn and Fontan anastomoses who present for non-cardiac surgery.

The Morbidly Obese Parturient with Eclampsia and Fetal Demise
At the conclusion of this course the participants will be able to:
1. Differentiate between eclampsia and preeclampsia in the parturient.
2. Outline the cardiovascular changes that occur with pregnancy.
3. Explain how eclampsia impacts ICP and how to treat seizures in the patient undergoing anesthesia care.

Student News

Sheridan National Allied Health Scholarship Winner

MARYA WILLIAMSON OF NOVA SOUTHEASTERN UNIVERSITY WINS THE PRESTIGIOUS SCHOLARSHIP FOR 2014

CONGRATULATIONS TO MARYA WILLIAMSON, winner of the 2014 Sheridan National Allied Health Scholarship for Anesthesiologist Assistant Students. The $5,000 scholarship recognizes student anesthesiologist assistants, enrolled in a nationally accredited anesthesiology program, for exemplary clinical and leadership skills. Williamson will graduate from Nova Southeastern University College of Health Care Sciences Master of Science in Anesthesia in August 2014. Williamson is a student member of the American Society of Anesthesiologists, the American Academy of Anesthesiologists and the Florida Society of Anesthesiologists. She was also an independent author and presenter of the academic poster "Effect of Anesthetic Technique on Neurological Outcomes of Ischemic Stroke Patients," at the 2013 American Academy of Anesthesiologist Assistants Conference in Orlando, Fla.

"I am honored and humbled to receive the Sheridan National Allied Health scholarship," expressed Williamson. "I set out on this journey aspiring to offer quality clinical care and become a source of comfort to patients at a point in their lives when they feel extremely vulnerable: as they enter surgery. I respect and hold dear the trust that patients put into our hands, and I want to give 100% to my patients 100% of the time. With Sheridan's support, I feel one step closer to achieving this goal."

The National Allied Health Scholarship is made possible by the Education Outreach Program (EOP) at Sheridan Healthcare, Inc. Established in 1953, Sheridan's anesthesiology division is the leading anesthesia provider in the country, with more than 2,100 anesthesia providers in more than 216 programs in 18 states. EOP is a resource designed to assist allied health students, residents and fellows with their transition from training to practice, and lend a hand in their pursuit of knowledge, opportunity and personal growth.

"We are so pleased to award Marya with this year's scholarship," said Gilbert Drozdow, M.D., M.B.A., president of anesthesia services at Sheridan. "We are pleased our scholarship program continues to recognize hardworking and dedicated students who have chosen anesthesiology as a profession and who will be the future leaders of this field."

The deadline for next year's scholarship is January 15, 2015. For information on scholarship eligibility and to download an application, please visit www.sheridanhealthcare.com.

Students of the World

THEIR EDUCATION TOOK THESE STUDENTS FROM WASHINGTON, D.C. AND FLORIDA TO ENGLAND, WALES, AND THE PHILIPPINES

Two-hundred Surgeries, 5 days, One life-changing experience for CWRU Washington, D.C. Students and Faculty

By Camille Dittmar AA-S and Kayla Imbrogno AA-S

IN FEBRUARY 2014, four students from Case Western Reserve University's Master of Science in Anesthesia Program, Washington, D.C. location traveled to the Philippines to take part in a five day medical mission. This one of a kind experience was made possible in collaboration with CWRU's Center for International Affairs and through the support of D.C. faculty Sabena Kachwalla and David Dunipace, and D.C. Program Director Shane Angus, all of whom are practicing anesthesiologist assistants (AAs). The Medical Mission of Mercy is an annual trip that has been happening for the past 20 years. The group of AAs and MSA students on this year's mission performed anesthesia for more than 200 major surgeries that took place over a period of five days. Participants in the mission included second year MSA students Kayla Imbrogno, Anish Purohit, and Meagan Barbish, first year student Camille Dittmar, and licensed AAs, D.C. Academy of Anesthesiologist Assistants and American Academy of Anesthesiologist Assistants members Kachwalla, Dunipace, Daphne Tolentino, and Priya Neti. The mission was hosted at St Fernando's Provincial Hospital in Sorsogon, a small province about 300 miles southeast of Manila. The people in this province have few resources available to help them thrive, much less easy access to health care. "I was astonished by how generous the people were despite not having many luxuries that we often take for granted such as running water, unlimited food and clothing," said Dittmar.

The AAs and students on the mission brought many of their own medical supplies, knowing the hospital did not have much in stock. They used the hospital's salvaged anesthesia machines (without mechanical ventilation options), using sevoflurane in isoflurane vaporizers. "It was an interesting experience, bagging patients through entire procedures, calculating percent sevoflurane based on differences in volatile vapor pressures, and managing an anesthetic plan without the use of opioids," reflects Imbrogno, "It was educational and eye-opening."

The hospital was over-populated with patients; some were on blankets in hallways with their IV bags, sick and in pain. The anesthetic plan was to work with what was available and provide the best anesthetic possible for the patient. The mission members participated in a variety of cases such as cleft palate and hernia repairs, thyroidectomies, myomectomies, and several emergency C-sections. Many of the patients had never seen a doctor before and did not understand what having surgery entailed. The patients were among the most thankful the team had ever encountered. Everyone who made the trip expressed how happy they were to have traveled such a long way to care for the people of Sorsogon. Seeing the smiles on the patients' faces made the makeshift anesthesia and the stress that accompanied providing it vanish and made the whole trip worthwhile.

This experience taught the student participants many things; most importantly, that first world problems are nothing compared to the daily realities of people in less developed countries. The team came back invigorated and with the priceless satisfaction of having helped people who live without the resources to help themselves. The trip gave each person who went a new attitude and outlook on life; a feeling of thankfulness for all there is to enjoy and be grateful for at home. It provided an understanding of how difficult things really can be, and illustrated how fortunate it is to have simple amenities such as a bed to sleep in and clean, running water. "This experience has been the most rewarding of my life; knowing we helped those in need is the best feeling in the world" said Dittmar, "I plan on making mission trips a yearly thing." The mission team urges everyone, students and practicing clinicians alike, to get involved in a medical mission. Not only does it improve the lives of patients, it changes your life for the better.

Case Western Reserve University, Washington, D.C. students and faculty take a break from working surgical cases during their medical mission trip to the Philippines. From left: Kayla Imbrogno AA-S, Anish Purohit AA-S, Sabena Kachwalla AA-C, Meagan Barbish AA-S, Camille Dittmar AA-S, David Dunipace AA-C. Not pictured: Daphne Tolentino AA-C and Priya Neti AA-C

My Life Abroad

By Kristl Kamm, AA-S

The author, Kristl Kamm, in front of Tower Bridge in London which crosses the River Thames.

WHEN I FIRST RECEIVED THE EXCITING NEWS in May that I would be studying anesthesiology in England and Wales in the fall of 2013, I was brimming with excitement. The opportunity to study medicine in Great Britain under The National Healthcare Service is an experience that is unique in that it is unlike ours, but is also inimitable in that it is an experience that is coupled by significant cultural and societal influences. Bags packed, stethoscope in hand, I headed east and quickly realized that this would be an experience that I was going to completely immerse myself in, making sure to take advantage of every opportunity abroad you could possibly imagine.

My experience, alongside my colleagues, Paige Hathaway and Bailey Hocking, began by spending September in Birmingham, England at Queen Elizabeth's Hospital. This provided us with exceptional training in regional anesthesia with a talented and really lovely team of PA(A)'s and anesthetists. Our days were filled with studying the nerves with the extensive amount of nerve blocks performed at QEHB and learning how to become fluent in the language of ultrasound. The team has recently created a very impressive app, available for purchase, called GuRu, which gives you a thorough visual and written guide to reference for nearly any nerve block you could want to perform. Being the largest hospital in Europe, this facility boasted 42 ORs and gave us exposure to working in and experiencing nearly any field of anesthesia that had interested us—cardiac, neuro and the Burn Unit, amongst many others. On a cultural level, we enjoyed having some of the most delicious Indian food and fish and chips you could imagine and found ourselves taking weekend trips to London and Ireland to experience more of what Britain had to offer.

As our trip progressed, we were placed in Wales for the month of October. I can very accurately describe our time at Glangwili Hospital in Carmarthen, Wales as full of education with a lot of laughter on the side. The team at Glangwili embodied the qualities of an outgoing and encouraging group of people who really enjoyed teaching and seemed to really love having "American girls" around the hospital. Glangwili Hospital was a lovely place to learn where we had weekly teaching seminars with the medical residents to explore more in depth anesthetic concepts. While in Wales, we spent time enjoying the coast on weekends, jumping off of cliffs in St. David's, and soaking in as much Rugby and Castles as we could!

Paige Hathaway, AA-S, Kyna Houston, PA-A, Kristl Kamm, AA-S, Bailey Hocking, AA-S

When I truly think about how anesthesia is performed in Britain and the United States, I realized at the end of the day the objectives are the same- safety, comfort and effectiveness. Interestingly, in terms of differences in practice, there are little things regarding the technique and ideals behind their anesthetic choices. Anesthetic rooms accompany every OR and are designed solely for induction. Drugs like morphine, metaraminol and atracurium were utilized nearly every case, whereas Versed and fentanyl were very rarely utilized, if at all. If LMAs were placed for the case, the patient would typically be escorted to the PACU with the LMA in place, where nurses were trained to remove it when necessary. Regional anesthesia involving axillary, interscalene and femoral blocks amongst many other blocks were used preoperatively and intraoperatively on nearly every patient that could potentially need these. For procedures that could be performed solely under regional anesthesia, for example surgery on the hand, we would provide the patient with an axillary block for the procedure and they would stay completely lucid and have an iPAD to entertain themselves during the entirety of the procedure. Similarly, in urology and obstetrics, patients would receive spinals and stay completely conscious during procedures. The rationale behind utilizing regional anesthesia so frequently is the decrease in cost, patient safety and quicker recovery time for turnover in the PACU, since health care is socialized and funded by the government. To my surprise, the British people were all extremely compliant and supportive of the anesthetic technique suggested by their anesthetist, and it was very encouraging to see the trust they put in their health care providers. The health care providers were all so lovely to work with and learn from, and the overall demeanor in the hospitals was incredibly positive, supportive of one another and of us, as students and visitors.

One of the most interesting things about spending time experiencing health care in Europe was their interest in our health care system. We were frequently asked questions like, "Can you tell us about how things would be done differently in this procedure," or more commonly, "So what's Obamacare all about?" The overall intrigue about how things are handled in America was very humbling and I felt was very interesting. When approached, I would do my best to very diplomatically speak with their health care providers about their system and ours, their procedures and ours and their protocols and ours. What I found with overwhelming consistency was that there are many positive attributes to their system just as there are with ours. As is anything in life, nothing is 100% perfect, but to have the opportunity to take all the positive experiences from studying medicine in their system and have the ability to implement them into ours, was an experience I feel so blessed to have had.

You can truly learn a lot about yourself during your time so far from home and in a place so foreign. Of all the feelings I hold regarding my time in Europe, the ones that resonate the most with me are how fortunate I feel to have had the experience abroad with the National Healthcare Service of Britain and the incredible people that work within it, how humbled I feel to have provided anesthesia to military servicemen and servicewomen that serve alongside our heroes and fight for freedom every day and how proud I am to be studying medicine and anesthesiology in the United States of America. If I could sum it up in one phrase, I would say it was truly the experience of a lifetime, one that I will hold as such a treasure for the rest of my life.

STATE of AFFAIRS

UPDATES FROM STATE COMPONENT
ACADEMIES OF ANESTHESIOLOGIST ASSISTANTS

GEORGIA

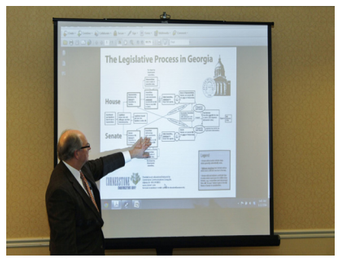
GAAA HOLDS ITS FIRST LEGISLATIVE WORKSHOP

By Kris Tindol, AA-C

GAAA members hold a booth at the legislative workshop

The GAAA has started 2014 off with yet another first. As a part of the Georgia Society of Anesthesiologists (GSA) Winter Forum in January, the GAAA hosted an informative Legislative Workshop. The goals of this breakout session were to provide the attendees with a refresher course in State Civics 101, address effective means of approaching and influencing our state representatives, and to discuss current AA national issues. We were honored to have three experts in legislative affairs as panelists: Georgia State Senator Chuck Hufstetler, AA-C, Mr. Jet Toney, the principal partner of Cornerstone Communications and Executive Secretary of GSA, and Michael Nichols, AA-C, seasoned veteran in AA national affairs and current AAAA representative to the ASA Board of Directors.

Jet Toney, who has over twenty years of experience in state politics as a successful lobbyist, began the discussion with an overview of legislation that will be discussed during the current legislative session in Georgia and how these pieces affect healthcare delivery and anesthetic practice. He also outlined the anatomy of how a bill becomes a law at the state level. Most importantly, he provided his valuable insight and knowledge in the art of establishing a positive relationship with our elected officials. He stressed the importance of always having a consistent, clear message from our constituency in all communications with our representatives. Jet reminded the attendees that although it is important to present our positions, it is equally important to listen to the requests and concerns of that legislator.



Jet Toney discusses the legislative process at the GSA Winter Forum

With a clearer understanding of the mechanics of Georgia legislative affairs, Senator Hufstetler continued with an informative and engaging presentation. The Senator began his legislative service as Floyd County Commissioner prior to becoming an AA and being elected to represent the 52nd District of Georgia; thus, he has a wealth of political experience to share. He explained the structure of our bicameral state legislature and spoke about the various committees in the House and Senate where the work is predominately completed. He gave us tremendous insight into the mechanics of contacting our officials and articulating our message in a memorable fashion.

Finally, we had the pleasure of hearing from Michael Nichols, who has been extraordinarily active in AAAA legislative affairs for over a decade. He shared with us the many ways that AAAA is working with state component societies and individuals to provide additional opportunities for AAs throughout the nation. Michael shared his enthusiastic vision of the state of our profession as a whole and how the changes in healthcare place the AA and Anesthesia Care Team in good position for growth. When asked how current national issues of the AA profession will be impacting Georgia AAs, Michael challenged the attendees to focus on how the GAAA can impact national issues instead.

The AAs and Anesthesiologists present left the workshop with a greater understanding of the logistics of contacting and building a relationship with our elected representatives as well as how to effectively advocate for our growing profession in State Houses across the country. The GAAA would like to thank Jet Toney, Senator Hufstetler, and Michael Nichols for taking the time to share their knowledge and experiences with our organization and for participating in this first of many member-focused workshops. The GAAA is looking forward to implementing these tools during our 1st AA Day at the State Capitol in Atlanta on February 24, 2014.

SOUTH CAROLINA

SOUTH CAROLINA FORMS A STATE COMPONENT SOCIETY, WORKS WITH SCSA TO IMPROVE SUPERVISION RATIO

By Jeb Benson, AA-C

Greetings from South Carolina! Since the AAAA's 34th Annual Conference is on Hilton Head Island, South Carolina this year, we would like to update you on the Anesthesiologist Assistant practice in our beautiful state.

Currently, there are 24 AA-Cs practicing in South Carolina; in Rock Hill, Myrtle Beach, Hilton Head, and Aiken. In the past three years this number has grown significantly, from 8 to 24.

Our biggest issue in the State of South Carolina is our supervision ratio. While we have been licensed practitioners from the start, our supervision ratio is only 2:1, compared to CRNAs who enjoy a 4:1 ratio. That alone drastically reduces our financial benefit to the anesthesiologists as well as creates a scheduling headache within our practices. We have been working with the South Carolina Society of Anesthesiologists (SCSA) and hope that this is our year to increase the supervision ratio to 4:1.

We are also in the process of forming the South Carolina Academy of Anesthesiologist Assistants. Our goals are to unify the AAs in our state, increase awareness and education about the AA profession, and work with the SCSA to change our supervision ratio.

We would like to welcome all of you to our great state, and encourage all of you to become members of your state component academies, your state Society of Anesthesiologists, the AAAA and the ASA. Increasing awareness and providing information about who we are, what we do, and why we are assets to the anesthesia care team are the only ways to promote our profession and increase our opportunities. Thank you and welcome to South Carolina!

Check Up on Compliance

UP-TO-DATE INFORMATION TO CONSISTENTLY MEET JOINT COMMISSION STANDARDS

By Heidi Ruth, AA-C

WE'VE ALL BEEN THERE. An OR nurse comes into the room and announces that "JACHO is here," so we immediately begin checking our syringes for initials and dates. Or, we've been forewarned that we are due for an inspection, so for a few weeks, we make sure our work area is immaculate. But what is JACHO, and more importantly, what are they looking for during an inspection?

The Joint Commission (TJC), formerly the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredits and certifies more than 20,000 health care organizations and programs in the United States. It was created in 1951, with the mission "to continuously improve health care for the public, in collaboration with other stakeholders, by evaluating health care organizations and inspiring them to excel in providing safe and effective care of the highest quality and value." From 1965- 2010, any hospital that met Joint Commission accreditation also met the Medicare Conditions of Participation (the Medicare Improvements for Patients and Providers Act of 2008 made TJC subject to Centers for Medicare and Medicaid Service (CMS) requirements for organizations seeking accrediting authority, as of 2010). The Joint Commission uses a three-year accreditation cycle, and will conduct unannounced inspections within 18 to 39 months after the previous inspection. Accreditation is awarded to any organizations deemed to be in compliance with all or most of the applicable standards.

A recent conversation with the Director of Surgical Services for HCA hospitals shed some light on commonly cited mistakes involving the Anesthesia Department. They include time out protocols, hand washing, and drug handling. Here are some things to remember:

Anesthesia providers must be active members of "Time Out". During Time Out, anesthesia providers must pay attention and cease all other activities. Some states, such as Florida require a separate anesthesia Time Out before induction or prior to blocks or lines outside the procedure room. Again, anesthesia must cease all other activities and focus solely on the Time Out.

Syringes must be labeled with drug, dose, date and initials. Narcotics need to be secured at all times. All narcotics must be accounted for and wasted appropriately with a witness. Anesthesia providers must wash their hands often. This includes before and after any direct patient contact.

Other frequently cited mistakes include the pre- and post-anesthesia evaluation. A pre-anesthesia evaluation must be performed for each patient who receives general, regional or monitored anesthesia within 48 hours prior to surgery. This evaluation must be completed and documented by an individual qualified to administer anesthesia, such as an anesthesiologist, AA or CRNA.

The pre-anesthesia evaluation of the patient must be completed before induction, and should include:

- Review of the medical history, including anesthesia, drug and allergy history
- Interview, if possible given the patient's condition, and examination of the patient, including airway exam, with Mallampati score documented
- Notation of anesthesia risk according to established standards of practice (e.g., ASA classification of risk)
- Identification of potential anesthesia problems, particularly those that may suggest potential complications or contraindications to the planned procedure (e.g., difficult airway, ongoing infection, limited intravascular access);
- Additional pre-anesthesia data or information, if applicable and as required in accordance with standard practice prior to administering anesthesia (e.g., stress tests, additional specialist consultation);
- Development of the plan for the patient's anesthesia care, including the type of medications for induction, maintenance and post-operative care and discussion with the patient (or patient's representative) of the risks and benefits of the delivery of anesthesia.

A post-anesthesia evaluation must be completed and documented by an individual qualified to administer anesthesia, no later than 48 hours after surgery or a procedure requiring anesthesia services. This evaluation should not begin until the patient is sufficiently recovered from the acute administration of the anesthesia. It should include:

- Respiratory function, including respiratory rate, airway patency, and oxygen saturation
- Cardiovascular function, including pulse rate and blood pressure
- Mental status
- Temperature
- Pain
- Nausea and vomiting
- Postoperative hydration

TJC/CMS surveys often bring a lot of stress for the entire OR. The OR staff will spend weeks or months being "on guard" for an inspection. However, as good anesthesia practitioners, we should incorporate these safety and quality measures into everyday practice, not just during "survey season". Benjamin Franklin once said, "It is easier to prevent bad habits than to break them." Doing the right thing, every time, when no one is watching, will ensure that you continue to do the right thing when TJC or CMS is looking over your shoulder.

Case Study: Malignant Hyperthermia

15 YEAR OLD MALE, ASA CLASS 1, WITH NO MEDICAL HISTORY PRESENTS FOR AN ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION UNDER FEMORAL BLOCK AND GENERAL ANESTHETIC WITH FORANE AND NITROUS OXIDE IN A STAND ALONE SURGERY CENTER

By Susan McIntire, AA-C

The patient was brought to the operating room and standard ASA monitors were applied. A temperature strip was place on his forehead. Two hundred milligrams of propofol were administered and a number four LMA was placed without difficulty. Forane and 50% nitrous oxide were delivered via the LMA. The patient was prepped and draped. A thigh tourniquet was placed and inflated to 300 mm Hg.

Uneventful surgery proceeded with assisted breathing (ETCO2 ranged from 50-52 mm Hg) and vital signs were all stable. Skin temperature readings were around 98 degrees Fahrenheit. At roughly two hours of tourniquet time, a rise in pulse was noted along with a slight rise in ETCO2. Skin temperature was 98 degrees Fahrenheit. Despite giving respiratory assistance, ETCO2 continued rise. Malignant hyperthermia (MH) was suspected. The patient's head, neck and torso were physically palpated and no rigidity was noted. I informed the surgeon of my concerns of MH, turned the Forane and nitrous oxide off, administered 100% oxygen, and had the anesthesiologist paged to the OR. These events occurred simultaneously. I Informed the nurse to get the MH cart. The Bair Hugger warmer was turned off and removed from patient.

At a rapid rate, the patient's ETCO2 rose to 116 mm Hg, pulse rate to 145 BPM and skin temperature was difficult to ascertain. Mallignant hyperthermia protocol was implemented. Multiple nurses and anesthesia personnel responded to the crisis. It was an extremely coordinated effort. Like all emergencies, the following events occurred within seconds or minutes of each other. The patient was intubated with a 7.5 oral endotracheal tube without difficulty and placed on ventilator settings which helped facilitate a reduction in ETCO2. Dantrolene was administered at 2.5mg/kg (patient was roughly 70 kg). Intravenous lactated Ringer's was replaced with cold normal saline. A secondary peripheral IV was started and cold normal saline was administered. The patient's torso was packed in ice. Both the MH hotline and EMS were called.

The anesthesia circuit and CO2 canisters were changed and a Foley catheter was placed with sterile technique. It should also be noted that the surgeon and first assistant maintained their sterile field and closed the knee without problem. It should also be noted that the patient did not exhibit any muscle rigidity during the crisis.

The highest temperature noted via temporal monitor was 105.5 degrees Fahrenheit. The highest ETCO2 measured was approximately 116 mm Hg. As Dantrolene was being administered while awaiting EMS, the ETCO2 declined to 45 mm Hg. The pulse and blood pressure were 63 BPM and 145/70 , respectively. The temperature was 98 degrees Fahrenheit. Dantrolene was administered continuously throughout. Urine output was approximately 250 ml clear yellow urine. Approximately 2000 ml cold normal saline was given.

EMS transported the patient to the ER with Dantrolene given en route. The patient was flown to Egelston Children's Hospital and admitted to the ICU. MH protocol was continued. The patient remained intubated overnight with normal temperatures, vital signs, and urine output. He was extubated the following day with normal vital signs (he wondered where he was and he was hungry!).

Today, he has no long-term sequelae from his MH crisis. He is currently rehabilitating his knee and is looking forward to continuing his sports.

I think what makes this case different and interesting is the timing of observed signs of MH. Signs of MH manifested roughly two hours into surgery. Coupling surgery time with tourniquet time (and the resulting pain), made it hard to decipher what was really going on with the patient. From my training, all signs told me it was indeed MH. It was then my job to inform staff without hesitation and run the proper protocol quickly.

It was truly the incredible coordination of all responding personnel that resulted in such an extraordinary outcome. Jobs and roles needed to be filled and it was done so with professionalism and calmness. I thank them.

Frequently Asked Questions About Malignant Hyperthermia

By Megan Varellas, AA-C

1. What is MH and what causes an MH episode?

Malignant hyperthermia is an inherited metabolic disorder of the skeletal muscles that presents when a patient undergoes general anesthesia. MH is often referred to as an "allergy to anesthesia" by laypersons. MH can cause death even when an episode is recognized by the healthcare practitioner. Survivors of an episode may be left with brain damage, failed kidneys, muscle damage, or impaired major organs. All MH susceptible patients have a gene mutation that results in the presence of abnormal proteins in the muscle cells of their body that when exposed to certain anesthetic agents (inhalation agents and succinylcholine) triggers a biochemical chain reaction response in skeletal muscles. The crisis is due to an abnormal release of calcium in the muscle cell which results in a sustained muscle contraction and thus an abnormal increase in metabolism and heat production. The muscle cells eventually are depleted of ATP (the source of cellular energy), and die, releasing large amounts of potassium in to the bloodstream, causing hyperkalemia, which can lead to ventricular arrhythmias.

2. How do you recognize an MH episode?

The signs include muscle rigidity, tachycardia, increased end tidal CO2, decreased O2 sat, hyperthermia, tachypnea, dark brown urine, flushed skin and sweating. Left untreated, these changes lead to cardiac arrest, kidney failure, coagulation problems, internal hemorrhage, brain injury, liver failure, and may be fatal.

3. Who is susceptible to MH?

MH susceptibility is an autosomal dominant inherited gene, which means children and siblings of patients with MH susceptibility have a 50% chance of inheriting a gene defect for MH. Not everyone with the gene defect develops MH crisis upon each exposure to the triggering anesthetics. The most reliable test, muscle biopsy of the thigh, is performed at 8 locations in the US and Canada for diagnosis.

4. How likely am I to see an MH crisis?

It happens so rarely that most practitioners will never see a case throughout their career. 500-800 cases are reported in the US yearly. Epidemiologic studies reveal 1 in 100,000 surgeries in adults and one in 30,000 surgeries in children. The prevalence of MH susceptibility is much higher, being 1 in 2,000 patients. Incidence varies by geographic region, with higher incidence in Wisconsin, Nebraska, West Virginia, and Michigan.

5. How is MH treated?

Treatment is dependent upon preparation for a rare event. Every anesthetic should be associated with a plan for unanticipated MH. Prompt recognition is essential to an optimal outcome. The anesthesia provider is typically the first to notice the signs of MH. The anesthetist should be familiar with the MH poster available from MHAUS and the number of the MH hotline prominently displayed. The plan should include an unexpired supply of dantrolene, a means to actively cool a patient, and monitoring of end tidal CO2, blood oxygen saturation, and core body temperature. The anesthetist immediately discontinues triggering agents, changes out any disposable items and the surgeon will work to quickly complete the surgery as best they can and close the surgical incision. Dantrolene is the most critical medication used in MH treatment. A 70 kg patient will require 36 vials of dantrolene.

TRUE OR FALSE

1.Patients who have had previous anesthetics with triggering anesthetic agents without incident are not at risk.

False. Patients with MH susceptibility are at risk with every exposure to triggering agents. Episodes may be triggered up to one hour following surgery and in rare cases from strenuous exercise or heat stroke. 25% of patients successfully treated for MH will have a second episode in the hours following the MH crisis.

2. During MH treatment, the patient should be cooled until the crisis is resolved or the patient is stabilized.

False. You should beware of unintentional hypothermia and stop cooling measures when the temperature falls to 38 degrees. Cooling measure may include a hypothermia blanket, cold isotonic saline for iv infusion or gastric, peritoneal or rectal irrigations.

3. Dantrolene does not block neuromuscular transmission.

True. Dantrolene does not block neuromuscular transmission or interfere with reversal of muscle relaxants. The mechanical response to nerve stimulation will be depressed with non depolarizing neuromuscular blockade potentiation. Extubation should occur with extreme caution.

4. Dantrolene should be mixed 60cc/vial with sterile water only.

True. Dantrolene should not be mixed with cooled crystalloid solution. It is stored at room temperature and mixed with sterile water without a bacteriostatic agent. The drug will not dissolve in crystalloid containing solutions and clumps in cooled solution. Dantrolene is physically difficult to reconstitute and will require several staff members to keep the supply ready.

5. Dantrolene does not cross the placenta.

False. Dantrolene can be given to a pregnant woman, but it does cross the placenta and there are side effects in the neonate.

6. MH susceptible persons are at risk for a crisis when exposed to waste gases in the OR.

False. There are no reports of MH susceptible patients having problems when exposed to waste gases while working in the operating room. Typical air handling procedures maintain a low amount of volatile anesthetic in the air. During mask induction trace gas can be avoided and volatile agents are heavier than air, drifting down to the floor where the ventilation system should clear the vapor.

7. Dantrolene expires in 36 months from date of manufacture.

True. Dantrolene is good for 36 months at which time expired dantrolene can be used for your institutions MH practice drills or sent to MHAUS for simulation training centers.

8. Calcium gluconate or calcium chloride may not be given to handle hyperkalemic cardiac arrhythmias during an MH crisis.

False. Both Calcium gluconate (10-50 mg/kg) which is less potent but less irritating to the peripheral veins and calcium chloride (4-10 mg/kg)which is more appropriate in an acute crisis may be given for hyperkalemic cardiac arrhythmias.

9. Masseter muscle rigidity (MMR) is a prognosticator of an MH episode.

False. Mild or transient MMR response to succinylcholine is normal and is not a prognosticator of an MH episode. 1% of children receiving sevoflurane or halothane and succinylcholine will develop MMR. If the patient has peripheral muscle rigidity or it is impossible to open the jaw, the clinician should assume this is an MH episode and begin treatment.

10. The anesthesia machine should be flushed for 20 minutes prior to being used on an MH susceptible patient.

True. The machine should be flushed at 10 L/min through the circuit via the ventilator for 20 minutes (60 minutes in some newer machines (see your machine user manual)). The vaporizers should be taped in the off position or removed (draining is not acceptable) and the CO2 absorber often needs to be changed.

Reference:

Malignant Hyperthermia Association of the United States. (2014). In Official MHAUS Home Page. Retrieved March, 2014

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Atlanta, GA 30318

Calendar of Events

March

9 – 12 – Marco Island, FL
Perioperative Management – In Its 30th Year. The Johns Hopkins University School of Medicine designates this live activity for a maximum of 23.75 AMA PRA Category I Credits™. Register online at www.HopkinsCME.edu.

22 – 26 – Walt Disney World® Resort
The 51st Annual New York Anesthesiology Review. The Ichan School of Medicine at Mount Sinai designates this live activity for a maximum of 40.25 AMA PRA Category 1 Credit(s)™. Register online at www.newyorkanesthesiologyreview.org.

April

12 – 15 – Hilton Head Island, SC
AAAA 38th Annual Meeting.
This live activity is seeking 24.0 hours of AAPA Category 1 CME, accepted by the NCCAA for CME credit. Discounted meeting registration available with hotel reservation. See www.anesthetist.org for details.

24 – 27 – Baltimore, MD
29th Society for AMBulatory Anesthesia (SAMBA) Annual Meeting. The ASA designates this live activity for a maximum of 23.5 AMA PRA Category 1 Credits™. Register online at www.SAMBAhq.org or call
(312) 321-6872.

May

17 – 20 – Montreal, Canada
International Anesthesia Research Society 2014 Annual Meeting and International Science Symposium. Meeting information and hotel reservations available online at www.iars.org/congress.

June

13 – 15 – Palm Beach, FL
The Florida Society of Anesthesiologists Annual Meeting. For more details, visit FSA online at www.fsahq.org.

25 – 29 – Kiawah Island, SC
27th Annual Carolina Refresher Course: Update in Anesthesiology, Pain and Critical Care Medicine. The Mountain AHEC designates this live activity for a maximum of 28.5 hours of AMA PRA Category 1 Credit(s)™. Online registration available at www.aims.unc.edu.

Online CME

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Are you an ASA member? Find continuing education products and events at reduced rates at www.asahq.org/continuinged.htm. Products include the ASA Refresher Courses in Anesthesiology with current and previous volumes available for ordering at http://journals.lww.com/asa-refresher/pages/default.aspx. Print + online with CME available for $95.00 with $15.00 savings for online only. Earn up to 22 AMA PRA Category 1 Credits™.

Video & Audio Programs

Harvard Anesthesia Update. Intended to provide anesthesia practitioners with a comprehensive review of the most important advances in clinical anesthesiology and each of its major subspecialties. Sponsored by the Harvard Medical School Department of Anesthesia and Continuing Education. A maximum of 27.5 AMA PRA Category 1 Credits™ may be claimed for this enduring material activity. Video, audio, or a combination of both are available starting at $695. Order via website for fastest service at www.cmeinfo.com/HarvardAnesthesia or call 1-800-633-4743. Date of credit termination: April1, 2015.

Perioperative Management. Designed for practitioners, including anesthesia providers, to limit patient risk by proper preoperative evaluation, intraoperative management, and postoperative care. Presented by Johns Hopkins University School of Medicine. Practitioners may earn a maximum of 16.25 AMA PRA Category I Credits ™. Program costs start at $695. For fastest service, order through the website at www.cmeinfo.com/775 or call 1-800-284-8433. Date of credit termination: July 31, 2014.