The Sensor

BENEFITS OF Simulation Education Page 8

DON'T JUST SIT THERE! Learn the history, importance and why you should start including more simulation education in your department, today!

IN THIS ISSUE:

Pediatric Airway Management Epiglottitis

A case study of how the anesthesia team addressed difficulties and potential risks.

Member Highlight

Meet Sean Deponte, Cer. A.T., he is a Project Manager in the Anesthesia Department.

Education Director Article

Marc McGaffic, MS, Cert. A.T.T. talks about great mentors and students that have impacted him.



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Perspective

PRESIDENT'S LETTER



A YEAR IN REVIEW

Greetings ASATT Members!

Its that time of year to reflect on what has happened to ASATT this past year.

First off....Covid-19

The devastating impact to all of our lives due to Covid-19 is immeasurable. In an effort to provide CEs in a manner that would be beneficial to members, we instituted plans to move all of our regional meetings to the virtual format. This has been a huge success! We have received overwhelming positive support for this change. And it has been a long time coming.

Then we had our very first national education conference in the virtual format. That was a huge success as well! The largest number of attendees in ASATT history! The largest offering of CEs in ASATT history!

As ASATT moves forward into the future, we will continue to provide our regional meetings in the virtual format. It is what is best for our membership.

ASATT has listened to your questions regarding benefits of membership. Therefore, we adopted a "new path forward" membership model. This new model accomplishes many things, such as your CEs are included in your membership.

For 2021, we will be having the National Education Conference, in-person in Ft. Worth Texas!! We are working on a great line-up of speakers and some new things for attendees. Having an in-person national meeting is an important event to facilitate networking and interactions with our vendors.

We also have nominations for the ASATT Board of Directors for regions 1, 3, 5, and 7. If you want to contribute to our profession and ASATT, get nominated! We will be posting new requirements for both incumbents and nominees for the election process. This will allow for a level playing field for all nominees. So, if you would lie to help shape the future of our profession, continue to move it to greater heights and goals...this is your time!!!

Stay safe, stay healthy and stay informed!

God Bless, Greg Farmer, Cer.A.T. ASATT Interim President 📣

Highlights SOCIETY NEWS

ASATT's Dedication

ASATT continues to focus on the future by bringing new perspectives to the leadership of our Society. Leadership recognizes the needs of our members; therefore, we are striving to offer multiple CEU credits options. ASATT is dedicated to continue to offer innovative platforms for informing, educating and engaging our members. Thank you valued members for helping ASATT move forward, as we continue to gain momentum towards the future.



2021 Election

CAST YOUR BALLOT!!!! You may begin casting July 5th, 2021.

ASATT will soon introduce an impressive array of talented and committed members. These nominated members will be submitted to membership during elections this year. They will fill position on the Board of Directors. Your voice will be heard! We encourage each of you to NOMINATE fellow colleagues who

are ASATT members that you attest to be motivated, forward-thinking, active in the Society, and active in the anesthesia technology profession. We are looking for members who are sincere in advancing the Society for the benefit of the entire profession!

All candidate information and an electronic ballot will be posted to the Members Center of the ASATT website. The formal process of elections will commence on Monday, July 5 and conclude through Friday, August 13. Over the next few months, we ask you to please make sure to check your email frequently and stay tuned for further information.

Take part in the future of ASATT, - it is YOUR Society - therefore cast your ballot come election time!



2021 Regional **Education Awards**

Celebrating the achievements of ASATT members, other contributors to healthcare and to our profession, is a joy and privilege. The Annual Regional



Education Awards were established to pay tribute to those individuals who are not required or paid to advance the education of technicians or technologists, but whose sincere interest promotes education in our specialty.

ASATT members are invited to nominate someone in their region that has genuinely contributed to promoting and furthering the profession of anesthesia technology.

Do you know someone who has:

- Helped you or a group of technologists and technicians gain valuable knowledge in the field of anesthesia technology?
- Volunteered the time to provide quality lectures for continuing education credits?
- Worked to improve the anesthesia technology profession?

We encourage you to visit the ASATT website, and download the Nominations Form. You can find the form under the "What We Do" dropdown menu and click on the "Awards, Scholarships, Grants" Submit your nominee today! Nominations will be accepted through July 1st.

All nominations will go to the Regional Directors for review. If more than one person, facility, or company is nominated in a region, the Regional Director will ultimately choose the recipient.

HIGHLIGHTS

Winners for each region will be selected by the end of July and the awards will be given out at ASATT's Annual Education Conference during the Business session.

Certification Refresher Program!

The Refresher Program's objective is to promote attainment of the current knowledge and clinical skills necessary for safe anesthesia technology practice required for the technologist National Certification Exam (NCE).

It is offered to Certified Anesthesia Tech's who have not been substantially engaged in the practice of anesthesia technology for more than two (2) years and must update their skills and knowledge of current clinical and theoretical practice in anesthesia technology in order to meet the established standards of practice and to apply for recertification through examination.

The Refresher Program also offers a technician or technologist who has an expired certification and is not eligible for the Provisional Recertification with the opportunity to be recertified. In order to qualify, certification would have had to expire within the last 2-5 years.

For all requirements and the specific **Refresher Program**. **process**, please visit the ASATT website or contact Nicole Cheever at certifications@asatt.org or 414-908-4942 x116.

YEAR LAPSED:	TO QUALIFY, MUST APPLY BY:
2016	December 31, 2021
2017	December 31, 2022
2018	December 31, 2023
2019	December 31, 2024

Join an ASATT Committee Today!

YOU should join a committee if:

- You enjoy being creative and brainstorming with others
- You often think, "ASATT" should do THIS...."
- You get a thrill out of seeing your work in action and getting to actually measure the results
- You enjoy being an active part in making a difference
- You want to genuinely impact on the future of ASATT
- You are new to the anesthesia industry, but have veteran-quality ideas
- You're looking to gain leadership experience
- You have a genuine passion for the Anesthesia Technologist profession

If this describes you, apply for a position on a committee today. A full committee list is below but their job description of responsibilities and the application to join a committee is on our website.

- Bylaws Committee
- Code of Conduct and Ethics Committee
- Financial Committee
- Nominations Committee
- Strategic Planning Committee
- Item Writers
 - Accreditation Committee
 - Continuing Education Committee 🛛 🛝

Spotlight

MEMBER HIGHLIGHT



Sean Deponte, Cer. A.T.

What is your current job title? Project Manager

How many years have you been in the Anesthesia Technology profession? I have been in the Anesthesia Department for 32 years and counting.

What do you find most challenging about your job?

Recruiting & retaining Technicians for the department. The majority of new grads stay in the field for a few years than leave to pursue nursing/x-ray careers.

How many years have you been an ASATT member? Since 2001

What is your fondest memory of ASATT? How small the organization was back in 2001 and how its grown to what it is today.

What has been your proudest accomplishment? (Personal life, professional life, or both.)

Moving my family to California from our beloved Hawaii. As for professional accomplishment obtaining and maintaining my Cer A.T. credential.

What is your favorite food? Can't pick one - it's Asian & Italian

People would be very surprised to know that... Mistake me for a Latino from California but born & raised in Hawaii

What do you enjoy doing in your spare time? Spending time with Family, tinkering with VW's, surfing & traveling...

What is your favorite type of music? Reggae, Hawaiian, Jazz & Rock

What is your favorite movie? John Wick movies

What would you like to get around to doing one of these days? Head back to Europe and explore the country side

outside of London.

Happenings

ASATT AND RELATED EVENTS

Regional Meetings

ASATT made a shift to virtual educational meetings in 2020, due to the COVID-19 pandemic. Many of you have expressed your appreciation for the option to attend virtual Regional meetings. We sincerely appreciate your feedback and will continue to offer virtual Regional Meetings into the future to help accommodate your busy schedules, and at the same time provide a cost savings for you when compared to inperson Regional meetings.

To further help you better prepare for Regional meetings, ASATT has implemented a Quarterly Regional Meeting Schedule!

- All meetings will be held on a Saturday.
- All meetings will award 4-CEUs (16-annually).

- Meeting times allow most anesthesia technologist and technicians across the country to attend meetings.
- By holding one virtual meeting per quarter, operations for members and Regional Directors are streamlined.
- Furthermore, holding one meeting per quarter allows members sufficient time to register.
- This strategy also aligns with the ASATT "New Path Forward" Initiative.

You can locate the Regional Meetings Schedule on the ASATT website. Refer to the EVENTS pulldown menu and select Meeting/Events.



2021 Annual Educational Conference

ASATT is currently planning an onsite 2021 Annual Educational Conference! Believing in the power of in-person networking and education, the ASATT Board will continue to monitor COVID-19 guidelines and adjust if necessary to ensure a safe and valuable experience. SAVE THE DATE and plan to join us Sept. 23-25, 2021 in Forth Worth, Texas! Details, including registration information, will be coming soon!

Write an article for The Sensor

Interested in writing an article for the Sensor? It's a wonderful opportunity for you to gain national recognition and earn CEUs!

To support you, the Editorial Board will be available to answer questions and provide guidance: proofing grammar, reference documentation, etc.

Click here for details outlined on the ASATT website.

DID YOU KNOW?

You can now earn up to **5 CEUs** per year for contributing SENSOR articles!

Keep an eye out for an email with more information.



SCIENCE AND TECHNOLOGY

Benefits of Simulatio Education

DON'T JUST SIT THERE! Start Including More Simulation Education In Your Department, Today!



• he process of learning has evolved over the years to introduce a more profound element of training that benefits both the student and subject matter; in this case - patient care. There is no common medical curriculum in acute and emergency care, and deficiencies in knowledge are common among graduates from medical programs¹. With a current urgent need to assist with relieving pressure on overworked anesthesia technologists, registered nurses, surgical technologists, pharmacy technicians, and dental assistants and hygienists - improving the education for the learner may better prepare those involved to help address the shortage of skilled staff².

Throughout each medical specialty - you could find the originality and how teaching moments were often conducted on live patients – within an operating room theater. Teaching moments like those mentioned are still used today - the main element that is different - the professional's practice on simulators before entering the patient care arena is widely used.

MARC MCGAFFIC, MS, CER.A.T.T. WAYNE COUNTY COMMUNITY COLLEGE DISTRICT

History of Medical Simulation



Medical simulators are dated back to the early 18th century, amazing, right? Angelique Marguerite Le Boursier du Coudray (1712-1794) used a cloth birthing simulator to teach her techniques to midwives and surgeons³. Dr. Giovanni Antonio Galli (1708-1782) developed a birthing simulator for training students and midwives in Bologna, Italy³.

Currently, birthing simulators are utilized within simulation centers across the United States and the world. SimMom is an advanced full-body birthing simulator with accurate anatomy and functionality to accelerate multi-disciplinary obstetric simulation (pictures at the end). Simulations can be developed to provide the learner an experience with both manual and automatic delivery methods. SimMom can also deliver her baby through a cesarean section – which can be completed within our technologically advanced operating room at Wayne County Community College District, Northwest Campus.

discovering the efficacy of mouth-to-mouth cardiopulmonary resuscitation. Encouraged by his work, Ausmund Laerdal, a plastic toy manufacturer, designed a realistic simulator to teach mouth-to-mouth ventilation⁴. Dr. Safar named this manneguin Resusci-Anne.







SimBaby

During the early 1960s, another pioneer of medicine, Dr. Peter Safar (1924-2003, introduced cardiopulmonary resuscitation to the medical landscape. The "Father of CPR" was an Austrian Anesthesiologist and is credited for

Physician Dr. Judson Denson and his colleague Dr. Stephone Abrahamson, an engineer, designed Sim One. The Sim One mannequin was pioneered as being the first true computercontrolled simulator. The mannequin was controlled by using a hybrid digital and analog computer⁵. A few years later, in 1968, Dr. Michael Gordon presented Harvey, the Cardiology Patient Simulator. This mannequin could produce almost any cardiac disease by varying blood pressure, heart sounds, heart murmurs, pulses, and breathing⁵.

Presently, the simulation center located at Wayne County Community College District utilizes the LLEAP Laerdal Learning Application system created by Laerdal. The LLEAP software system allows the instructor to adjust physiological features like vital signs and patient sounds. The software enables the instructor to start, pause, or fast forward your simulation wirelessly from the Laerdal SimPad.



LLEAP allows the instructor to quickly and accurately set up each scenario with the following elements: Intensive care monitors (A-Line, CVP, PA), basic monitors (BP, Pulse Ox, ETCO2, and ECG), monitor defibrillator, and AED. The instructor and simulation technician can update patient vital signs in real-time while the simulation is taking place – using the Laerdal SimPad.

Improving Patient Safety using Simulation

Medication errors are the leading cause of adverse events in hospitals⁶. Patient safety problems of many kinds occur while attempting life-saving health care. These adverse effects include, but are not limited to, blood transfusion errors, wrong-site surgery, and surgical injuries, or hospital-acquired infections⁷. To limit the occurrence of these adverse effects from taking place – educational institutions and medical facilities incorporated simulation protocols for improved training.

People have a limited understanding of safety issues occurring within healthcare facilities. However, it is essential to discuss these safety concerns with patients - if needed. When surveyed, 20 percent of patients fear exposure to infection, 13 percent stated lack of patient care experience,

SCIENCE AND TECHNOLOGY

and 11 percent cited lack of qualifications of healthcare professionals⁸. Replicating, often never seen procedures can help maintain adequate skills within your department. There is a reason the American Heart Association requires recertification of basic life support skills every twenty-four months – to ensure you are maintaining your skills needed to help save a life.

Although simulation is not the end-all-be-all instructive approach to healthcare training – the concept of simulation methodologies certainly does enhance the learning outcomes.

Teaching and Learning Concepts in Simulation

In education, scaffolding is a method for instructors to provide exceptional encouragement while the learners (students) master their new objectives and competencies. This process is tiered and enhances the element of understanding. Envision scaffolding is attached to a tall building's side; you will climb this scaffolding with the learners together. Commencing this technique requires the educator to deliver a lot of assistance – that encouragement/ assistance will be eradicated as the learner climbs the scaffolding. Thus, developing self-confidence and expertise of the skills.

Responsibility for understanding and knowledge of course objectives must pass from the instructor to each learner (student) - all while the learner validates competence. Scaffolding could be seen as a foundation of evidence to which new materials can be secured. Any of the following examples could be used⁹:

- Anatomical models
- Cues
- Prompts
- Hints
 - Partial solutions
 - · Direct instruction
- Scaffolding also serves to⁹:

- Provide clear direction
- Reduce learners' confusion
- Clarify purpose
- Keep learner on task

- Incorporate assessment and feedback
- Reduce uncertainty, surprise, and disappointment

Creation and Assembly of Simulation:

Designing and assembling the ideal multi-disciplinary or individual simulation learning experience consists of several steps and the structure of the simulation program.

- Step 1: What is your purpose of the simulation?
- Step 1 (A): Which assessments or metrics will be used?
- Step 2: Build the skeleton simulation basic concepts
- Step 3: Standardize your simulation Ensure your simulation is close to as "real" as possible
- Step 4: Test your simulation before the learner attempts the learning concept
- Step 4 (A): This step will ensure your simulation is flawless for the learner(s)
- Step 4 (B): Ensure proper equipment is operational and available (if needed)
- Step 5: Perform the simulation with the learner(s)
- Step 5 (A): Video captures should be used (video, pictures, communication devices, etc.)
- Step 5 (B): Share results with the learner(s) in an active debriefing session

Simulation in Healthcare Education

Wayne County Community College District, Health Science Center believes in a system that simulation encompasses four elements.

- 1. Education: Provide a safe and controlled environment that represents a wide range of skills from technical abilities (Psychomotor), comprehension of materials (Cognitive) to proper communication (Affective).
- 2. Simulation-based assessment: Students are afforded two assessments a pre-assessment before the simulation begins and a post-assessment when the simulation ends. The course instructor will review or compare the pre-and-post assessments ensuring the skill objective was effective throughout the simulation process.
- 3. Simulated-based research: Situating pupils into a simulation centered on real-life medical emergencies allows the learner to expand their knowledge and skills. The learner has an opportunity to think and adhere to correct algorithms ensuring patient safety critically.

4. Debriefing: The most important aspect of the simulation is how a debriefing occurs. Illustrating the high and low points of the skills displayed will increase the student's confidence and vital patient care skills. During the debriefing, the learner is shown a video of their competency or skill assessment.

Live Simulation Event (Pre-COVID)

Simulation development involves a multitude of experiences from healthcare leaders. Early 2020, before the pandemic ravaged our global and local communities, Wayne County Community College District Northwest Campus - Health Science Center conducted a multi-disciplinary simulation event. Each healthcare program is involved with creating and launching the simulated learning experience. The programs involved are Anesthesia Technology, Surgical Technology, Central Service Technicians, Surgical First Assistant, Nursing, Pharmacy Technicians, Dental Assistants, and Dental Hygienists.

Simulations normally involve the patient entering our Dental Clinic and is seen for a routine dental cleaning, which encompasses dental assistants and hygienists. The patient would exhibit a life-altering moment where EMS needs to be contacted. The patient (simulator) is then transported to our Emergency Department (Nursing) for consult and evaluation. Pharmacy Technicians are available for medication delivery, especially when simulated narcotics are ordered.

Once the patient has been thoroughly evaluated and appropriately assessed, the nursing department will call surgery and anesthesia for consults. The patient will be transferred to the operating room and then transferred to post-op (ICU) at the conclusion of the surgical intervention. Before the transport happens – communication is sent to our central service technicians, surgical technologists, and anesthesia technologists, alerting the team of a potential level 1 trauma.



Patient in Dental Clinic



Anesthesia and Surgical Consult



Pharmacy Technicians preparing medications for patient transport

Once surgery and anesthesia are typically contacted, the students will begin setting up the operating room with the operating case cart, surgical supplies, and anesthesia equipment. This simulation presented differently than previous simulations. This surgical case requested the use of an endo-bronchial double-lumen tube - due to the complexity of the aortic aneurysm - that was diagnosed in the emergency room.

The simulation created in early 2020 witnessed a patient with an enlarged aortic aneurysm that was on the verge of rupture. The aneurysm was created using a simple latex Transporting the patient to ICU balloon, Belmont FMS, and simulated vessels. This approach was decided upon as the latex balloon closely resembled a pulsating aorta before rupture. This simulation event was a would be analyzed/interpreted, AGM troubleshooting, fast-moving – well-oiled machine. The instructors and faculty cell salvage, Belmont, and assistance with pharmaceutical involved wanted to ensure controlled chaos took place. Think management – where appropriate. of this simulation as a cardiac stress test for our students.

In closing, when preparing your simulation regardless of Throughout the surgical intervention, surgical technology simplicity or advancement – ensure your team will benefit from the scenario generated for understanding. Creating instructors are actively engaging their surgery students with the identification of anatomical landmarks, organ and vessel a simulation event that is outside the scope of practice identification, and of course, surgical instrument recognition. or relevance of our profession can be dangerous. Ensure Anesthesia technology students participate as they would the simulation will benefit your department and, most within an active level one procedure. Arterial blood gases importantly – patient care. 🔨

SCIENCE AND TECHNOLOGY





Anesthesia Technologists operating the Belmont FMS



Surgical Technologists saving a life



SCIENCE AND TECHNOLOGY



Transporting the patient to ICU



Middle: Surgery suctioning our simulated blood from patient. Bottom: Exposure of ruptured aneurysm



Glidescope intubation practice by Anesthesia Technologist

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Outlook

PROGRAM DIRECTOR INSIGHTS



magine for a minute how education has changed your life. Regardless of what level of education – we all continue to learn. Education, to me, is defined as – the frontier of expertise once the appropriate path is decided. Many pioneers came before us and helped frame the profession that we all know and most love. Many of those forerunners continue sharing their knowledge and passion for the profession, still to this day. Some are teaching within our career as influential leaders. Few others are enjoying the Florida retirement life. Whether it is helping a new anesthesia technologist clinical student as a preceptor or aiding the nervous and scared SRNA's to their correctly appointed room. To point out which Swan-Ganz catheter should be applied because their attending is

"so-and-so", and you do not feel like drama today to the Cardiac Anesthesia Resident. Anesthesia Technologists and Technicians – both certified and not – there is always the common theme - we get the job done! Granted, not every healthcare facility utilizes Anesthesia Technologists or Technicians to our full potential, but – that is not the fault of our professional association, academic programs, anesthesia staff, nor hospitals. Everything comes back to education – formal, standardized, healthcare specific education. The frontier - if you will. I remember when I attended my first day of third clinical rotation at a level

1 trauma hospital (Pittsburgh), circa 2001, and soon thereafter began my career. I had some familiarity from previous clinical rotations, but

this hospital was and still is – built different. The anesthesia staff have a saying "only the strong survive." Whew, were they ever right! With having 60+ procedural rooms, abundant off-site anesthesia, organ transplants, level one trauma – the expertise you gain here is robust and astonishing. One mentor / preceptor, of many, that guided me and bestowed his knowledge towards many other students really stands out from my memory.

In my opinion, Steve is a forerunner in our profession. When Steve passed his certification exam – the exam was given on paper, without formal education being an option. Steve assisted with some of the first organ transplants in Pittsburgh and thousands of thoracic cases. I remember when I witnessed and assisted with my first MH+ case. That was a brutal ordeal. but the patient survived because of quick judgments that were made and effective communication that was communicated. The very next day, Steve sought me out to say, "great job last night." Pioneers set the show for the future of healthcare workers. My career would not be the same if Steve were not my mentor (pioneer) and advocate when I was a student and eventually hired full-time.

We all have that one mentor / pioneer that we rely on currently or have relied on in the past. Leadership is a skill many individuals cannot adjust towards - especially in the operating room. Continues on next page ...

Learnings

STUDENT CORNER

Situational leadership - is a model for helping those developing their skills so others can reach their full potential. Adapting those skills, when needed, comes with experience. Over the years' the situational leadership that I seek comes from the great pioneer – Steve Jannos, Cer A.T., Lead Anesthesia Technician (Retired), Pittsburgh PA. You know what...thank you, Steve, for everything!

When was the last time you (the reader) thought about a career change but decided another route - not because of time or money - but, because you thought you were not intelligent enough? We have all been there and sometimes more often than we would like to admit. Mamon Allwasy's educational journey lead him towards Anesthesia Technology all because Mamon "sensed" he was not smart enough for nursing school. Just like those before him Mamon has a journey ahead that will drive him towards success. Mamon has the passion, determination, and drive to become an extraordinary member of our profession. Mamon is an advocate for humanity and his drive to make this Earth a better place is infectious. Mamon's situational leadership has matured throughout his period in the program.

I cannot wait for Mamon to become a clinical preceptor – where he can support and lead those with insightful experiences and exceptional training - through compassion and humility.

Keep up the great work, Mamon – we at Wayne County Community College District and Henry Ford Health System are very fortunate you choose Anesthesia Technology as your career path – you are a rising star – now go out there and show them what you got, kid!

In closing, for those that feel "stuck" in the profession and would like to receive more from their career – start by entering the operating rooms and discussing case management with the anesthesia teams. I know – I know, the department is short staffed. Then look upon your departmental and hospital leaders for guidance and support. Assist each anesthesia team with starting their cases – assisting with intubations, positioning, monitoring lines and/or point-of-care testing. This is how our profession can grow leaps and bounds.

Lambasting the profession to your anesthesia departments, hospital administrators, students and/or negatively representing the profession on social media is not how positive change materializes. Career growth does not happen by negatively representing a profession that you hate or discredit. Let us all follow the positivity that Mamon (and many other students) exemplifies and the situational leadership that Steve provided throughout his career so we can leave our profession a better place for those coming after us. Each surgical patient deserves this safety and respect,--right?

TID BITS

Sensor Quizzes

Don't forget the Sensor Quizzes

In each issue of our Sensor magazines we offer two feature articles, with each article accompanied by a quiz. You have the option of completing the quiz online or printing it off and sending it in.

Earning CEUs has never been so easy.



MAMON ALLWASY WAYNE COUNTY COMMUNITY COLLEGE DISTRICT

Hello, my name is Mamon Allwasy I'm in Anesthesia Technology program at Wayne County Community College District. During my journey I talked myself out of applying for Nursing school because I convinced myself I was not smart enough and the competition was too great. Meanwhile, I was accepted into the ANE program. I was not exactly sure how I was going to do it. but I knew that I could. I have been blessed to have incredible

mentors and teachers to help guide me through my journey.

walking through the doors of the hospital, on my first clinical day. I saw a man who was blind and walking using a cane. I walked a few feet further and saw another person on a bed who was COVID positive. It took a global crisis for us



I knew my life's work and purpose was to serve humanity. I have had the privilege and honor of working in one of the busiest trauma centers in Detroit, Henry Ford Health System. I remember

to recognize what was already here - a disease that tore apart individuals, families, and communities. This disease does not differentiate between men or women, but it was also revealing of our mutually combined strength to endure to love and to be there for one another. Hours later into my shift the loudspeaker announced (Code Blue) cardiac arrest on the OB unit. A little further into the night, a patient, riddled with gunshot wounds survived and lived to tell the tale while someone with a single bullet wound fights for his life in the ICU. All while a new life came into the world on the 3rd floor. One family received the best news of their life and prepared for a celebration, welcoming their new baby, while another family prepared for a funeral.

Overall, you do not know what people are going through within their own life. Be gentle and receptive to everyone you meet in life. I have learned as rhythm and natural law of nature. Change is beautiful, Change is growth and I am proud of the person I've become and I'm more ready than ever to see what blessings and challenges god has prepared for me. 📣

"CHANGE IS THE ESSENCE OF LIFE: BE WILLING TO SURRENDER WHAT YOU ARE FOR WHAT YOU **COULD BECOME.**'

BEST PRACTICES IN HEALTHCARE

Case Study: Pediatric Airway Management Epiglottitis



MARTINA BARRAGAN, KIANNA MENDOZA, BS ANESTHESIA TECHNOLOGY STUDENTS – KAISER PERMANENTE/PASADENA CITY COLLEGE ANESTHESIA TECHNOLOGY PROGRAM

Epiqlottitis is defined as an acute inflammation of the epiqlottis. This inflammation and swelling are caused by a bacterial infection, usually by Haemophilus influenzae type b (Butterworth et al., 2018). Symptoms associated with epiqlottitis include severe sore throat, difficulty and pain when swallowing, difficulty breathing, abnormal or high-pitched breathing noises, hoarse or muffled voice, fever of 100.4 F or higher, irritability and restlessness, and drooling (Butterworth et al., 2018). Although epiqlottitis is not common today due to childhood vaccinations, when it does occur it is treated as a medical emergency. Any injury, damage, or swelling of the epiglottis could have fatal consequences due to the potential obstruction of the patient's airway. Thus prompt, exacting, and careful airway management by the anesthesia care team during an acute epiglottitis case is important. Herein, we will highlight the role of the anesthesia technologist with in the anesthesia care team.

Keywords: epiglottitis, difficult airway management, anesthesia technologist

Introduction and History

In our anesthesia technology program, we are taught to participate as vital members of the anesthesia care team. We are taught to participate, think, and contribute when presented with various real and improvised case scenarios. The goal is to generate quality discussions, while also employing best practices and enhance patient safety, and care.

We will consider a fictitious case where we are presented with a 12-year-old boy who has developed an acute sore throat and fever over the course of a day. By evening, his temperature has reached 40°C (104°F), and he has developed a low-pitched inspiratory stridor. On arrival at the emergency department (ED), he is quiet, flushed, and seems frightened. Our patient also prefers to be in a sitting position. He is not speaking and is not actively drooling. Radiographs were not attempted as it would delay treatment. From the outset, the emergency physician suspects an airway problem. She thinks it could be epiglottitis. The child is immediately scheduled to be transferred to the operating room (OR). Certainly, the anesthesia care team is made aware and appropriate preparation is necessary. Also, necessary staff like an ENT surgeon that must be present prior to case start.

"Part of the FDA checkout procedure demands the checking of emergency supply of medical gases, functional suction, and an alternative ventilation device such as an appropriately sized pediatric bag-valve-mask."

During examination in the ED, the child's mother elaborates the patient's history. Our young male patient is otherwise healthy. He is current on his vaccinations and there have been no serious health concerns noted in his health records. This is his first time visiting the ED with a significant medical problem. The child's mother administered Tylenol 250mg twice before arrival to the ED. The mother also provided cold compresses and tried to get the child to rest. The mother reports that the fever increased despite the antipyretics and active cooling. The child has refused to drink or eat for the past 12 hours, citing his sore throat. She did not note any active coughing. She states the child became lethargic, did not want to lie down, but rather wanted to sit up. She observed her child and noticed that he had difficulty breathing, "redness" in the face, did not want to speak, and was making sounds when trying to take a breath. At that point, she decided to bring him to the ED. Currently, our patient seems somewhat agitated. The anesthesia care provider has asked the mother to accompany the child into the OR. She will accompany the child until the start of induction. Our patient is 5' tall and weighs 80 pounds. The goal for the anesthesia care team (ACT) is to ensure safe airway management.

Proper Equipment

Let us consider preparatory steps prior to the patient's arrival to the OR. Indeed, one of the responsibilities of an anesthesia technologist is to ensure that proper equipment is present, and fully functional. The FDA mandates that any anesthesia workstation be fully checked out prior to patient use. These checks are usually completed by the anesthesia technologist before case starts in the morning. Part of the FDA checkout procedure demands the checking of emergency supply of medical gases, functional suction, and an alternative ventilation device such as an appropriately sized pediatric bag-valve-mask. Since our patient weighs only 80 pounds, it is best practice to utilize a pediatric circuit anesthesia circuit. It is best practice to use the appropriate ventilator and tubing as to "provide highly predictable volume ventilation" to children (Ehrenwerth, p. 366). A thorough leak test must be performed, and a recalibration of the flow sensor conducted prior to ventilation of a patient, in order to deliver the most accurate tidal volumes and ventilatory pressures (APSF).

Communication with the ACT and our anesthesia care provider is of utmost importance. Since our patient is 12 years old and epiglottitis is suspected, the correct sizing of the endotracheal tube (ETT) is essential. There are different ways to calculate the size of the tube for this pediatric case. One way, according to Eipe et al. (2009), is to use the typical age-related sizing formula where the sizes are calculated using the formula of age/4 + 3.5 for cuffed ETT. However, another formula for ETT sizing related to body weight can be used, "ID = weight (kg)/10 + 3.5 mm" (Eipe et al. 2009). Using these formulas, the suggested endotracheal tubes ETT in this case would be 6.5 and 7.0. However, since our patient has epiglottitis, sizing down the endotracheal tube will better accommodate the airway edema we expect. As anesthesia technologist should supply a six (6) and six-anda-half size (6.5) internal diameter ETT, along with a stylet. Since we are using cuffed ETT, it is appropriate to provide a 5cc to 10cc syringe to inflate the ETT cuff. We should also furnish different larvngoscope blades such as a Miller 2 and Macintosh 3, this may help in case multiple airway intubation attempts are necessary. Furthermore, a size 3 LMA is should be immediately available on the cart.

Additionally, we could also supply micro laryngeal tubes which might be useful. According to Raksakietisak & Chongkolwatana (2006), "the microlaryngeal tube with a high-volume and low-pressure cuff is frequently used because it is small and long (5 mm x 31 cm) and [does

not obscure] the view of the larynx." More than likely, the (Altalhi et al., 2017). Furthermore, there is a potential for provider will not attempt to use a tongue depressor because lung injury due to negative pressure pulmonary edema "probing or manipulating the epiglottis with a tongue caused by forceful inspiration while the airway is obstructed (Butterworth et al., 2018). In the end, the amount of depressor or laryngoscope can cause the obstruction to worsen, and possibly close the airway" (The Free Library, equipment in the room in use or on standby will depend on 2014). the provider.

Since the patient's IV status in unknown, an IV start kit is set up. Since the patient is not critically ill, no invasive monitors are immediately necessary; however, they should be readily available should the need arise. Certainly, we should consider the possibility for further complications as "these children are acidotic, hypoxic, and hypercapnic, all conditions that are propitious for arrhythmia and hemodynamic instability" (Lichtor et al., 2016). As anesthesia technologists we must prepare for potential complications.

Potential Complications

From the moment epiglottitis is suspected, the primary concern of the medical staff is to preserve the airway. Video laryngoscopes should be charged and checked. Perhaps, the use of a video laryngoscope might suffice for this patient. However, the difficult airway cart should be placed in the room, and the fiberoptic scope prepared for immediate use. As a last step in preparation, a tracheostomy or cricothyrotomy tray should also be in the room, but unopened. Indeed, best preparation would include all of these steps prior to case start While they remain unopened, they are readily available.

In a personal interview, Merisa Bell, M.D., a pediatric anesthesiologist at Children's Hospital Los Angeles, stated that "if the patient were older, an awake fiberoptic would have been chosen first. I do not believe that a 12-year-old would be able

"Any anesthetic induction plan must recognize that the swelling of the epiglottis may cause total obstruction of the upper airway. "

The induction of our patient will be done in sitting position. to tolerate an awake fiberoptic, so I would most likely use The patient will receive a cocktail of ketamine, sevoflurane, a [video laryngoscope] instead". Even though "fiberopticand dexmedetomidine. When giving the patient this guided tracheal intubation remains the gold standard for cocktail, one of the objectives is to "maintain spontaneous pediatric difficult airways, its use in smaller children may ventilation" (M. Bell, M.D., personal communication, February be challenging and necessitate inhalational induction 19, 2021). During an interview with Dr. Barry Bloom, M.D, at technique" (Totoz et al., 2018). Due to the patient's condition, Kaiser Permanente Los Angeles, he stated that "breathing he has "a potential for larvngospasm and unalterable loss of the respiratory tract due to the airway edema. Early the patient down with sevoflurane will allow for the agitation diagnosis with careful as well as quick intervention of this to subside. It is important to consider that epiglottitis is severe problem is essential to avoid deadly difficulties" not as common as it used to be. This particular case could

BEST PRACTICES IN HEALTHCARE

Plan of Anesthesia

Any anesthetic induction plan must recognize that the swelling of the epiglottis may cause total obstruction of the upper airway. In which case, the patient will be unable to spontaneously ventilate and oxygenate. Concurrently, the rapid progression of the inflammation in the glottis could result in the inability to intubate and ventilate. Anytime epiglottitis is suspected, the procedure/treatment "must be carried out in the OR while preserving spontaneous air flow. The induction may be performed with the individual resting upright. Compelling the child into a supine position could precipitate intense respiratory tract obstruction" (Altalhi et al., 2017). As stated, attempts to rescue the airway must be done in the OR where adequate equipment is present or available. In this case, the ENT surgeon is present to perform an evaluation of the airway and to perform a tracheostomy, if necessary. There is no established airway management algorithm in patients with epiglottitis, yet positioning is crucial. We would not place the patient into a supine position, because "gravity may cause total airway

obstruction, thereby displacing the enlarged epiglottis both posteriorly and caudally. This causes a dilemma in airway management: optimal posture for the patient causes difficulty in implementing the necessary airway procedures. Second, patients are restless and agitated because of this breathing difficulty" (Ozaki & Murashima, 2019).

very well be just croup as there is no drooling because the 4 D's of epiglottitis are not present - Dyspnea, Drooling, Dysphonia & Distress. Sometimes the anesthesiologist becomes a diagnostician. No muscle relaxants would be used to allow for spontaneous ventilation" (B. Bloom, M.D., interview, February 26, 2021). Even though per Dr. Bary Bloom, M.D. (2021), the patient's epiglottitis may not be confirmed due to the lack of drooling, based on the patient's condition and the mother's historical statements that her son has not drunk fluids for the past 12 hours, it could be determined that the patient's lack of drooling is caused by dehydration. Therefore, after the airway is secure additional crystalloids, such as 0.9% normal saline, will be needed. Drugs that decrease respiratory function are contraindicated; additionally, antibiotics will be given as they are the main treatment after securing of the airway. In this case, the antibiotic of choice would be ceftriaxone (Guerra & Waseem, 2021). In the past, the use of steroid therapy was indicated because it was thought to reduce edema. However, according to Phillips et al. (2004), many studies have shown that the steroid therapy did not reduce the need for intubation, decrease the duration of intubation, reduce the length of stay in the intensive care unit or the length of hospitalization. If steroids were to be used, hydrocortisone or dexamethasone would be appropriate in this case, according to Phillips et al.

Induction of Anesthesia

The patient is brought into the OR sitting on a gurney in a classical tripod position (sitting, leaning forward, and supporting himself with hands between his legs). Mother is present to keep her son calm and less agitated. The anesthesia technologist is on

"...the child is quickly put into a supine position and direct laryngoscopy is attempted. No cricoid pressure is applied, however BURP maneuver during intubation by the provider can prove to be beneficial. "

one side of the child's bed helping to keep him secured and less stressed as the arrival to the OR can be frightening. The child is moved very carefully from the gurney onto the OR table and placed into a sitting position. The anesthesia technologist supports the child's head during the transfer onto the table to ensure the least amount of manipulation and aggravation to his neck. According to Dr. Barry Bloom, M.D. (2021), there is no reason for the child to not be given

sevoflurane while still on the gurney. However, it is our belief that the child should be moved onto the OR table; and that it can be done safely while the patient remains in the sitting position. The anesthesia technologist will place all ASA monitors onto the patient. These include the pulse oximeter, electrocardiograph, noninvasive blood pressure cuff, and a temperature monitor. Furthermore, assurance of IV access is crucial. In our case, the patient already has a 20g IV access that is well functioning. A 20g IV is the most common gauge seen in the OR and allows for "most infusions, rapid fluid replacement, trauma, and routine blood transfusion" (Peripheral IV Catheter Chart).

Patient has a severe stridor on his inspiratory drive. Hence, without any delay, the provider starts with a ketamine bolus to lightly sedate the patient and starts breathing him down with sevoflurane. The use of versed would be minimal or it would be used in conjunction with ketamine due to the fact that "sedation with midazolam alone was associated with a significant reduction in airway muscle activity and partial upper-airway obstruction; however, ketamine, preserved airway patency and airway muscle tone" (Deng et al., 2001). The induction is performed in the sitting position with maintenance of spontaneous ventilation under careful observation of the ENT specialist. The anesthesia technologist provides support to the child while monitoring vital signs and waiting for the steps of the provider. Once the child has relaxed due to the drugs and sevoflurane, the mother is taken out of the operating room

> by the anesthesia technologist while the child is quickly put into a supine position and direct laryngoscopy is attempted. No cricoid pressure is applied, however BURP maneuver during intubation by the provider can prove to be beneficial. When direct laryngoscopy is done by the provider "a cherry red epiglottis and surrounding structures will be observed. If the inflammation makes it difficult to identify the glottic opening, manual chest compressions

may create air bubbles at the glottis opening and assist in the visualization of the glottis. After confirmation of bilateral breath sounds, CPAP should be maintained to decrease risk of pulmonary edema from relief of severe upper airway obstruction." (Open Anesthesia, 2021). As mentioned earlier, should direct laryngoscopy not be successful, the use of a video laryngoscope is indicated. If the patient is ventilating on his own, the provider has time to truly visualize the

Anesthesia Emergence glottic opening. If the glottic opening is constricted to the point that the patient is beginning to desaturate, the Under normal circumstances, the patient can become decision to perform tracheostomy or cricothyrotomy must combative during emergence due to his age and because be made in concert by the ENT surgeon or the increases. "pain is often manifested as postoperative restlessness The anesthesia technologist would immediately prepare the and agitation" (Butterworth et al., 2018). However, with procedure kit for the anesthesia care provider. Indeed, we epiglottitis, once the airway is secured, the patient will would help prepare the patient for either tracheostomy or remain intubated and transferred to the intensive care cricothyrotomy and would assist the anesthesia care provider unit (ICU). Nonetheless before the transfer to the ICU, the during the cricothyrotomy procedure. A tracheostomy would anesthesia provider will confirm that the patient has a be handled by the surgical team, yet we would be assisting in "patent airway, have adequate ventilation and oxygen, and preparation. are hemodynamically stable" (Butterworth et al., 2018). This patient is young and healthy; therefore, it would be According to Lichtor et al. (2016), once in the ICU, the customary to expect no problems during treatment. However, patient will undergo antibiotic therapy with broad spectrum this case has a great potential for complications. In his state, antibiotics such as ceftriaxone, followed by cefdinir for the patient can "have a bronchospasm, laryngospasm or a 7-day course. Vancomycin and steroid therapy may be become hypoxic and hypercarbic" (M.. Bell, M.D., interview, ordered. The patient may be ready for extubation once February 19, 2021). This can further lead to the patient there is an indication that the treatment with antibiotics having cardiac arrhythmias if left untreated (Butterworth and steroids has allowed for the inflammation to subside. et al., 2018). A complete collapse of the airway can lead to Typically, "most patients improve within 48-72 hours" respiratory failure and cardiac arrest. Indeed, the inability to (Guerra & Waseem, 2021). However, extubation should be ventilate or intubate is always of concern to the anesthesia done back in the OR and not in the ICU, because "the ideal care team, and in this care, it takes a whole other dimension. method of extubation is one that permits a withdrawal from the airway that is controlled, gradual, step by step, **Maintenance of Anesthesia** and reversible at any time" (Benumof & Hagberg, 2007). During maintenance of anesthesia, the role of the The patient will be assessed prior to extubation, in which anesthesia technologist is somewhat limited. This would be clinicians "should take into account the cause of the the time when the ENT surgeon and the anesthesiologist patient's respiratory failure, prognosis, and expected make their assessments and decisions regarding the case. course of the disease, as well as the absence of any The anesthesia technologist is there to ensure that all reasons to stay on mechanical ventilation for a longer monitors are functioning, IV is working, and that all necessary time" (Saeed & Lasrado, 2021). When these assessments equipment for a possible emergency is readily available and are complete and the patient has "successfully passed the functioning. In this case, the goal was to secure the airway. spontaneous breathing trial, they should be extubated Once the airway was established, the patient is relatively unless management plans change" (Saeed & Lasrado, 2021). safe as there is no further surgical intervention needed. The anesthesia technologist must verify that suction is However, should an emergency arise during intubation, the nearby and fully functioning since "regardless of whether provider may ask to monitor the patient's arterial pressure the tube is removed when the patient is deeply anesthetized through the arterial line. Also, placement of an arterial or awake, the patient's pharynx should be thoroughly line would help in obtaining periodical blood gas values. suctioned before extubation to decrease the potential The anesthesia technologist would set up the arterial line for aspiration of blood and secretions" (Butterworth et al., pressure monitoring kit for the provider, help the provider 2018). The anesthesia provider will, "check for an air leak during the placement and securing, connection to the when assessing any child for extubation readiness and the monitors, and the calibration procedure. Once connected same should apply to determine extubation readiness for a to the patient, the anesthesia technologist would ensure a patient with epiglottitis" (Lichtor et al., 2016). Checking for proper waveform. The anesthesia technologist would also a leak will indicate whether or not there is airway edema. participate in any potential next steps as needed. However, Leak is indicative of airway edema. If there is a small leak, our assumption here in this case is that once the airway is this is indicative of no airway edema and "extubation can be established, the emergency has been dealt with, and the entertained" (Guerra & Waseem, 2021). patient is on his way to recovery.

Conclusion

Anytime epiglottitis is suspected, it must be treated as a medical emergency. As described, despite the possibility of differential diagnosis, the anesthesia technologist must be ready for the worst. Communication with the providers regarding their needs and expectations in any case, whether emergency or not, is key. Additionally, being prepared, thorough, and attentive to detail, while utilizing current techniques, knowledge, and skills completes the anesthesia team. Furthermore, it improves the rate of success for the patient and improves the overall quality of care.

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TID BITS

ASATT is YOU!

A breakdown of the current ASATT members, by the numbers.

1,412

Current ASATT Members



Member Growth Since 2007 (Year that ASATT and AEG joined forces to manage the Society)





INDUSTRY NEWS

The McMurray Enhanced Airway

Pharyngeal airways (oral and nasal) are commonly used open an obstructed airway. Recently use of softer nasopharyngeal airways orally has become more common as a way to avoid adverse effects of traditional oropharyngeal airways such as gagging, tissue trauma and dental damage, as well airway collapse, airway aspiration or trauma to the airway.

The McMurray Enhanced Airway (MEA) was developed to address this problem. It is a "multimodal" flexible pharyngeal airway device designed to more effectively and comfortably maintain an open airway by lifting redundant tissue off the pharynx. The MEA is longer than both traditional nasal and oral airways, is smaller in diameter and much more flexible than current oral airways which can decrease need for a jaw thrust or chin lift. The slim design is beneficial for patients with narrow mouth opening too.

It is packaged with an optional connector that attached to the breathing circuit or manual resuscitation bag. Potentially it can eliminate need for mask ventilation by coupling the bag or circuit and manually sealing the patient's mouth and nose and applying positive pressure ventilation. This delivers O2 closer to the vocal cords and improves oxygenation when needed. A cushioned bite block is incorporated as well to help reduce risk of dental damage and eliminates need for other bite blocks if used alongside of an ETT or LMA. A large flange helps to keep it in place. To estimate the appropriate size, measure the distance between philtrum and earlobe. Once the patient is sedated insert MEA with curved end facing the hard palate and guide the MEA straight back over the tongue toward the posterior pharynx. It has been shown to be useful with EGD bite blocks too.

As with all new innovations the price point may seem high but the reduced risk of trauma, ease of use and improved ability to oxygenate justifies the price vs. using multiple products.

Thank you, Julie Anderson

Call for Nominations



ELECTION SEASON IS HERE!

Each year members nominate fellow members for election to the ASATT Board of Directors. This year, Regions 1, 3, 5, and 7 are up for election of Regional Directors. The positions of President-Elect is also up for election this year.

Those nominated for President-Elect must have previously served or currently serve on the Board of Directors prior to nomination. The President-Elect is a three-year term (one year each as President-Elect, President and Immediate Past-President).

Individuals nominated for Regional Director must live in the Region to be able to be on the ballot for that Region. ASATT Regional Directors serve a two-year term. The nomination form need to be submitted by June 11, 2021.

The formal election will commence on **Tuesday**, **July 6**, and conclude on **Friday**, **August 13**. Further information will be provided throughout this process in the monthly *ASATT Update* and other communications.

Greg Farmer, Cer.A.T. ASATT Interim President

Position Descriptions for the ASATT Board of Directors

Have you ever wondered exactly what the responsibilities of individual Board members are? Here is a simple overview of the "position descriptions" of the Board of Directors.

No Board members or Officers of ASATT are paid for their time ... their service is voluntary!

Secretary Two-year term

Responsible for taking minutes at all Board meetings and business meetings and submitting the minutes to the Board of Directors.

Responsible for co-signing all contracts negotiated.

Treasurer

Two-year term

Responsible for supervising the handling of ASATT funds.

Responsible for the accounting of ASATT funds to the membership.

Responsible for assisting ASATT management in the planning of the annual budget.

Monitoring the profit and loss on a monthly basis.

Regional Directors *Two-year term*

Responsible for organizing at least one yearly meeting and in some situations, two. This includes obtaining speakers, selecting locations and obtaining sponsors. The Regional Director is financially accountable for operating within the budgeted funds for the regional meeting. They are also responsible for providing an outline of the meeting to ASATT for distribution and sending ASATT a final list of attendees to facilitate awarding of CEs.

Responsible for promoting the Annual Educational Meeting within the Region with both vendors and members.

Responsible for attending the Annual Educational Meeting.

Assisting with registration, sales, etc., during the Annual Meeting.

Assisting with the ASATT exhibit booth at national meetings of related organizations, if needed.

Responsible for participating in all Board activities, to include:

- Attending all Board meetings.
- Participating in all Board conference calls. (Usually every other month on a Saturday morning).
- Responding to all e-mails when questions/ opinions are solicited.
- Submitting monthly, quarterly and yearly reports
- for your Region and/or committees to the President.
- Submitting *Sensor* and Website updates by the date requested.
- Participating in the yearly budget process for the region's activities.

President-Elect

Three-year term

Communicate directly with the ASATT President.

Assume the responsibilities of the President when necessary.

Be familiar with the Bylaws and Policy and Procedure Manual and the workings of all committees.

Succeed the President at the end of his/her term.

Co-chair the Annual Educational Meeting.

President

Handle daily Society business as required.

Preside at all Society membership, Board of Directors and Executive Committee meetings.

Responsible for co-signing all negotiated contracts on behalf of the Society.

Fiscally responsible for operating the Society's business within the approved budget.

Prepare agendas for Board business.

Co-Chair the Annual Educational Meeting.

Responsible for set-up, staffing and breakdown of ASATT booths at the national meetings of related organizations.

Immediate Past-President

Serve as a member of the Board and Chairperson of the Nominations Committee.

Fulfill various other duties for the Society at the pleasure of the President by mutual agreement of both parties.

Assist with set-up, staffing and breakdown of ASATT booths at the national meetings of related organizations.

Participate in conference calls and Board meetings.

Partners

AANA

Many patients take a variety of prescription/non-prescription medications and are presented to the anesthesia provider in the pre-operative phase of anesthesia care. Many self-administer herbal medications which the anesthesia care team needs to be aware of which may have implications for anesthesia and surgery.

What are Herbal Products?

Medical herbs have been part of personal usage throughout history. Most prescription medications that are currently used today are plant derivative. These herbal plant-based products are also classified as dietary supplements, alternative medicine therapy, or homeopathic care. Commonly used herbal supplements include Echinacea, Feverfew, Garlic, Ginger, Ginkgo Biloba, Ginseng, Hoodia, Kava, St. John's Wort, and Valerian. Herbal products are supplied in a variety of forms such as tablets, liquids, granules, powders and in herbal teas. Herbal products are often classified as dietary supplements or food products and are not FDA regulated. Discrepancies can exist regarding effective usage, recommended doses, toxic side effects, or interaction with other medications. Therefore, unpredictability exists regarding how patients react to these herbal supplements.

Patients often assume that if something is natural or organic that it is safe to use, which may not be true. When used properly, herbal supplements may have health benefits, however ingestion of these products may have implications for anesthesia and surgery, as interactions can occur such as increased bleeding, cardiovascular effects, enhancement of sedatives, or immune suppression. Although not a contraindication for surgery and anesthesia, it is imperative that communication with the anesthesia provider/surgeon regarding any herbal supplement usage herbal products occurs. The patient should bring the herbal product container with them to the preoperative anesthesia interview if unsure of its content as they should be treated as a medicine, and make sure others are aware of herbal medication usage in case of a medical emergency so they can share this information. Prior to scheduled anesthesia and surgery, it is recommended to stop herbal medication usage 1-2 weeks prior to prevent any adverse reaction.

Most common used herbal supplements including side effects and anesthesia interaction are:

- Black Cohosh decreased blood pressure, prolonged bleeding.
- Echinacea hepatic damage, suppression of immune system.
- Feverfew Migraine headaches, insomnia, joint inflammation, prolonged bleeding.
- Garlic blood pressure instability, prolonged bleeding.
- **Ginger** increased sedation, prolonged bleeding.
- Ginkgo Biloba prolonged bleeding.
- Ginseng insomnia, cardiovascular instability.
- Hoodia blood glucose fluctuation, changes in heart rhythm.
- Kava sedation, hepatic toxicity.
- St. John's Wort sedation; blood pressure fluctuation; prolongation of anesthesia.
- Valerian sedation.

Patients should consult with their physician prior to taking any herbal supplement and should be cautious during pregnancy or nursing. Herbal supplements can interact with anesthesia/surgery which can cause unwarranted harm or adverse outcomes.

Michael Boytim CRNA, Ed.D. Liaison to ASATT

ASA

Looking back on Anesthesia Tech Week!

Starting today and through April 4, ASA recognizes Anesthesia Tech Week – an acknowledgement of the hard work and valuable input that anesthesia technologists and technicians provide to the other members of the anesthesia care team. Among their many responsibilities, the techs protect us by providing handson support and confirming our equipment is functioning as we care for our patients. They were invaluable teammates during the worst of the pandemic. ASA, in return, is there for ASATT and its anesthesia tech members throughout the country as they strive for recognition of their education and skills. A shout out to ASA's liaison to the ASATT, Joe Answine, for all his important work with our anesthesia tech colleagues.

-Beverly K. Philip MD, FASA

Beverly wrote the paragraph above back in March in honor of anesthesia techs everywhere for National Anesthesia Tech Week. I agree with her words completely and I am proud to be associated with ASATT.

Joseph F. Answine, MD, FASA Liaison to ASATT

Notes

REGIONAL UPDATE



REGION 1

Happy Summer Everyone!!

The flowers are blooming like crazy up here in the cold Northeast. However, at least we know what is next.... more sunshine, and beautiful fragrant of lilacs drifting in the crisp air. I hope you all had an amazing Anesthesia Tech

Week. If anyone took pictures of the celebration that was dedicated to you amazing Anesthesia Techs and would like to share them with me, send them to my email and I will get them into the May's Web Report. 9

The excitement of more meetings is so exciting. I want you all to know that Region 1 broke more records for a Regional Meeting with the one that I held in February. If you were one of the MANY that attended, Thank you for your attendance and great reviews. I am planning Region 1's next Zoom Meeting, stay tuned for more details. The Sensor Quizzes are a great way to earn more CEU's. Do not forget to start planning your trip to Fort Worth, Texas for our VERY EXCITITNG MEETING. Dates are September 23rd- 25th, as it is now, we are planning a live meeting and yes, I am sure there will be restrictions. Stay tuned to the website and of course the Sensor for update.

STAY SAFE AND HEALTHY, Jonnalee Geddis, Cer.A.T.



REGION 2

I hope everyone is doing well. I am looking forward to spring being here! I know this past year has been hard but hopefully you will get time to plan a vacation and just relax!!

Be on the look for more

Hello to our members,

information about Region 2 zoom conferences. I am planning to have them In June and November of this year.

As most of you have seen or heard there will be new changes moving forward to move our profession in the right direction. I know our members have or will have concerns regarding the new membership fees. I have heard for years that members wanted more benefits to being a member and now we will have that available to us.

For questions regarding the new membership model, please email Bryan Fulton at treasurer@asatt.org.

Don't forget to visit our ASATT website it has very useful information and articles on Healthcare news. Plus don't forget the discussion boards where you can ask questions and share ideas. Remember if you would like to discuss the new membership with other members and the ASATT board, please visit the Discussion Forum.

It's not to early to be thinking about our Annual Educational conference that will be held on September 23 - 25, 2021 in Fort Worth, TX. Be watching for updates regarding our Annual Conference.

Stay safe, wash your hands and think about the social distancing! Karen Patrick, Cer.A.T. 🛛 🔨



REGION 3

Greetings Region 3 Technologists and Technicians!

Anesthesia Technologist & Technician week has come and gone, but I am hoping that this year the celebration of our contributions to the anesthesia care team at your facility was

recognized. As technologists and technicians, our role behind the scenes sometimes goes unnoticed or underappreciated. For many facilities, the COVID-19 pandemic has brought to light the many contributions we make to ensure not only patient safety, but also provider and staff safety. They have relied on our knowledge and networking systems to ensure that the anesthesia machine was protected against transmission of the virus, as well as additional safety measures to protect the health and well being of anesthesia staff and faculty.

As we move forward, changes to the membership announced at the annual meeting are being implemented. While it may provide angst for some, the restructuring will allow for easier acquisition of continuing education credits that are required for recertification. Not only that, these CE's will take the guess work out of what will and won't be accepted as well as be credited to your member profile. That way, at the end of the two year cycle, the process for renewal will be more expedient.

ASATT Board of Directors nominations are approaching and ASATT will be seeking nominations for the open positions. Stay tuned to the website for more information regarding deadlines associated with the process.

With the changes to membership and meetings, Region 3 is slated for a virtual meeting this fall. The tentative date at this moment, is November 13th.

As vaccines become more readily available, we are hoping that individual states will lift restrictions as to how many individuals can assemble for meetings. As herd immunity is reached, we will once again be able to hold live meetings. Something I know we are looking forward to!

As always, Stay Safe and Stay Healthy! Sue Christian, Cer.A.T.T. 🗛



Greetings from the Midwest & Region 4!

As 2021 gets into full swing and we begin to ramp up for summer, more & more folks are being vaccinated and cities and states are beginning to open up, I just want to

take a moment to thank all of you for your hard work through these trying times...your dedication has not gone unnoticed or unappreciated!

Just a few things to note, Regions 4 & 5 will be having a joint webinar in late May, please watch for info on the website. Also, don't forget to start planning for the National Conference in Ft. Worth, September 23-25...more info and agenda will be coming soon!

Once again, THANK YOU for all that you do!

As always, be safe and see y'all soon, Matthew Chandler, Cer.A.T.T.

REGION 5



Hello from Region 5.

I hope everyone is doing as well as possible during these times. In addition, I know during the struggling time the reenacting has changed many duties for us as anesthesia techs. As experiences keep

changing, I hope hospitals are adapting better for you. As you know the ASATT national conference is in Fort Worth Texas from September 23rd to the 25th of 2021. I hope Another great way to receive CEs is to check out and most of y'all can make plans to come and learn new ideas take our Sensory Quiz on the website under the ASATT and techniques. This is also a great time to network and Academy tab. meet other anesthesia techs around the nation. If you have never been to one they are great for education and Save the date for the 2021 Annual Educational Conference meeting new people. In addition, coming to the great state in Fort Worth Texas this year, September 23-25. More of Texas just makes it that much better! We are planning information will be coming soon! a lot of great speakers and events for the conference. Region 5 and ASATT is looking for any anesthesia tech Stay safe, Allison Kohn, Cer.A.T.T that is looking to write an article for the Sensor. Let us

REGION 4

get some new information on The Sensor. Also looking forward to doing, more virtual regional meetings and these are not set up for only one region anyone can join and earn the CEUs.

Stay safe, Jason Menchey, Cer.A.T. 🗛



REGION 6

Hello Region 6!

Hope you all had an AMAZING anesthesia tech week! You all deserve the recognition for all the hard work we do, mostly unseen, as anesthesia techs. I feel so blessed to be part of such a great and hardworking community.

I have had a lot of questions from you all about taking the board exam and where to take it because of COVID, but rest assured the testing sites are open and you will be able to take your boards to become certified. If you have any questions or issues finding out where or how to go about this please don't hesitate to reach out.

Please make sure you check out the Meetings/Events tab to see when we will be having our regional meetings coming up. Remember, you can attend any regional meeting, even if it's not your region! They are virtual and we have some amazing speakers lined up for you all to get some valuable and relevant information from. This is not only a convenient way to get CEs without having to leave your home, but the topics are all anesthesia tech related and all relevant to the work we do. Since they are all ASATT meetings the CEs will automatically be tracked and added to your ASATT account by us, so you don't have to worry about keeping track of the fact that you attended.

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REGION 7

Howzit Region 7!!!

I hope everyone is doing great and enjoying the warmer weather as we move into summer and the dreaded pandemic is easing its grips on you and where you live. We don't know what or where

normal will be like as we move forward. But we must take everything in stride and move forward. Please continue to stay vigilant; "Situational Awareness". Don't let your guard down and stay alert.

"Life is a roller coaster, live it, be happy, enjoy life."

~ Avril Lavigne ~

Let's all vow to make 2021 a better year than 2020. We're not going to get past this pandemic quickly but, as the vaccines are distributed and administered we should see less extremely sick Covid-19 patients.

"In all this chaos, we found safety." ~ Unknown ~

But as we reflect on what 2020 taught us or brought us... Virtual meetings. I have been attending ASATT BOD's conference calls for many years, but they are now virtual meetings. We also have virtual CE meetings. The 2020 ASATT Hawaii Meeting was the first virtual meeting ASATT had, then our virtual Annual Meeting.

In ASATT's new path forward members will be able to attend virtual meetings free. The membership fee will include the 2021 virtual Hawaii Meeting scheduled for Sunday, August 8th. This will be the 23rd Anniversary of the Hawaii meeting. I'm looking to coordinate a four CE meeting starting at 0800 Hawaii Time. Other than that members will have the chance to earn CE's quarterly.

ASATT is still planning to hold our Annual Meeting, September 21st – 23, in Fort Worth, Texas. This will be our first live meeting since the Region 7 Meeting in Oregon. Please make plans to attend the meeting to network and see our peers. Further details on the meeting will be posted on the website shortly...

ASATT Elections – Nominations for President-elect and Regions 1, 3, 5, & 7 Directors are being accepted now. If you want to nominate someone, please advise them before you do. Please visit the website for further details. Nominations end on June 11, 2021.

I'll say it again and again... ASATT is the society that will help our profession grow and move forward into the future. I know ASATT's plan WILL NOT make everyone happy, but you must look at the overall direction that our profession is headed. Give our leaders the benefit of the doubt they are not out to short change you. There will be some hard decisions to be made and they are making these decisions without careful consideration to improve our profession. I have been around for a LONG time and we have grown and improved more than many of you know. There's only a small percentage of our peers that have been in this profession >30 years like I have. I was around when we NOTHING and look at where we stand now. As I have said before... We are laying the foundation for future generations of Anesthesia Technicians & Technologist and we MUST build this **together**.

"The key responsibility of leadership is to think about the future. No one else can do it for you."

~ Brian Tracy ~

Please be careful with Covid-19, it's nothing to take lightly. Take precautions and follow all of the CDC bulletins and guidelines, but don't let it overwhelm your life.

PLEASE BE SAFE AND PROTECT YOURSELVES...

Aloha, Delbert Macanas, Cer.A.T.T.

Academy ASATT ACADEMY

ASATT Virtual and Live Education Opportunities

ASATT has embraced the virtual realm and is harnessing virtual technology to bring you time –saving and cost effective educational opportunities that better align with your schedule. ASATT is excited to announce that Regional meetings will continue to be held virtually and our 2021 Annual Meeting will be held in-person in Fort Worth, Texas! We look forward to seeing you there! Please visit the website for further details.

NEW! Virtual Meeting Realignment

The ASATT Board is excited to announce the implementation of a new virtual meeting realignment structure that will offer consistent Regional meetings every quarter. The new model will combine two to three regions each quarter to provide our members with an option to attend a regional meeting nearly every other month throughout the year. This structure will allow our members to plan ahead and register for Regional meetings months in advance. Check your email for specific details!

NEW! Earn CEUs for SENSOR Publications!

We want to hear from you! Have you recently written an article on Anesthesia Technology or a subject related to the Anesthesia Technology field?

If so, this is the perfect opportunity to showcase your publication in the SENSOR and earn up to 5 CEUs per year! ASATT is always seeking Feature Articles from you to share with our membership. More information to come, keep your eyes open for more details!

TID BITS

Share. Inquire. Learn.

ASATT's online Discussion Forum is available for members to connect and share!

You do not have to confront the COVID-19 crisis alone. ASATT has an online Discussion Forum that members can support each other through the sharing of vital resources, knowledge and experiences, and to seek answers to questions and concerns.

Join the Conversation!



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Join one of our ASATT Committees by visiting our Committee page.

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AMERICAN SOCIETY OF ANESTHESIA TECHNOLOGISTS AND TECHNICIANS

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