TRAUMA ANESTHESIOLOGY SOCIETY

Trauma Anesthesiology Society

Spring into the Trauma Anesthesiology Society, ASA's Newest Affiliated Subspecialty Society

James G. Cain, MD, MBA, FAAP, DABA

It is with great pleasure that I welcome you to the Trauma Anesthesiology Society (TAS), ASA's newest component society! The past few years have presented enormous challenges as we all have collectively faced heretofore unimaginable struggles. Layered upon that have been our personal health concerns as well as significant illness and loss of loved ones. Nonetheless, from the local to the international, many among our TAS have led and continue to lead efforts to combat COVID-19. While COVID will long be with us, it appears that the previously unthinkable levels of morbidity and mortality from COVID may be behind us. As such, we must prepare as our well-known nemeses, trauma, and accidental death, re-emerge as the leading causes of death and disability from early childhood through early middle age, devastating many with pain and suffering, while costing our country more than $4.2 trillion annually. Trauma and accidental injury result in more than 30% of all life years lost, with nearly 23 million emergency department visits, 3 million hospital admissions, and 280,000 deaths per year (*Weekly* 2021;70:1655-9; asamonitor.pub/3Jpqmr0; asamonitor.pub/3YXnojl). In that light, the TAS finds a reinvigorated purpose to add value for our current members and demonstrate value to potential members and our global anesthesiology community.

The initial and most obvious concerns of the trauma anesthesiologist are necessarily the Primary Survey (Airway, Breathing, Circulation, Disability, and Exposure) and Secondary Survey with attendant immediate interventions such as initial airway management and/or subsequent intraoperative care of those most seriously injured from blunt force or penetrating wounds within large academic centers. However, trauma anesthesiology encompasses the spectrum of anesthesiology care in a team-oriented environment, from the relatively minor injury to the patient on death's doorstep, from the prehospital setting though the ORs and acute pain management to critical care, long-term chronic pain therapy, rehabilitation, and occasionally palliative care. Trauma anesthesiologists play an integral role in multidisciplinary trauma care with surgery, critical care, emergency medicine, orthopedics, neurosurgery, ophthalmology, otolaryngology, plastic surgery, urology, obstetrics and gynecology, radiology, and blood banking.

The TAS aims to assist all anesthesiologists, from those only infrequently providing such care to those in level 1 trauma centers, as a resource in the care of their injured patients. While we count among our membership some of the most well-known leaders in trauma care, mass casualty and emergency preparedness, and airway management, the core of our society are the frontline anesthesiologists providing trauma care in an assortment of settings. The American College of Surgeons (ACS) verifies trauma centers from level 1-5. While demonstrable benefits have been shown when severely injured patients receive care in level 1 trauma centers, approximately 15% of the U.S. population lives farther than one hour from either a level 1 or 2 center. As such, in addition to the patients with relatively minor traumatic injuries for which most anesthesiologists expect to provide care, many may find themselves caring for significantly more seriously injured patients, even if only in a triage and resuscitation fashion.

Perhaps surprising to some, even level 1 centers have a paucity of trained trauma anesthesiologists. Despite the complexity of trauma patient management, with its unique demands and skill requirements, severely injured patients are often cared for by "on call" anesthesiologists of any background or interest, yet are expected to participate as part of a multidisciplinary trauma team in designated trauma centers around the country. Trauma anesthesiology, as an emerging subspecialty, is critical to the care of injured patients. As such, TAS is working to foster the ongoing development of trauma anesthesiology fellowship training and applauds the trauma anesthesiology fellowship programs. Should anyone desire to pursue a trauma anesthesiology fellowship, or perhaps look to hire a fellowship-trained trauma anesthesiologist, please contact the current fellowships at University of California, San Francisco, University of Maryland R Adams Cowley Shock Trauma Center, University of Texas Health Science Center, Houston, University of Washington, Harborview Medical Center, and Washington University School of Medicine in St. Louis.

Our TAS is a young society, with the mission to advance the art and science of trauma anesthesiology and all related fields through education and research. Please join us. We have much left to accomplish as we pursue our near- and long-term initiatives and goals:

- *Focus upon adding value to members*
  - Survey membership annually to determine how TAS is or is not meeting their needs
  - Survey lapsed members annually to determine how TAS is or is not meeting their needs
  - Survey faculty at level 1 and 2 trauma centers to determine how TAS is or is not meeting their needs, and if not a member, what is holding them back from membership
- *Increase direct society communications and educational opportunities to membership*
  - Monthly communication from the leadership with societal updates, announcements, etc.
  - Monthly "Journal Club," with article of the month and an invited "editorial"
  - Increase CME opportunities
    - ASA now accredits TAS CME
  - Annual mid-winter membership virtual business meeting
    - Mid-year update to all membership
    - Video available on website
- Increase frequency of communications among executive leadership
- Increase social media presence
  - DocMatter
  - Twitter
  - Facebook
  - YouTube
- Create a TAS-branded indexed Medical Reference Guide, akin to Stat Pearls or UpToDate®.
- Create a TAS trauma handbook
  - Create a companion app for mobile devices
- Create TAS cognitive aids
- Enhance TAS research
  - Ensure ongoing commitment to annual trauma-focused edition of *Anesthesia & Analgesia* (journal of TAS)
  - Annual meeting at ASA, bringing industry and TAS members with research interests together to increase bilateral research opportunities and funding

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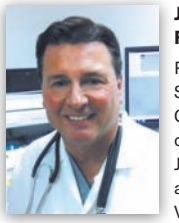

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apsf Anesthesia Patient Safety Foundation

Anesthesia Patient Safety Foundation

International Experience and Outcomes of OR Emergency Manual Implementation

Dylan S. Irvine, BS **Jeffrey Huang, MD, FASA**

The implementation of the emergency manual (EM) as a perioperative medicine tool has been critical in improving patient safety during anesthesia administration. An EM indexes many resources to provide an anesthesia delivery plan that is synchronous between both the individuals of the anesthesia care team and other OR personnel (*Cureus* 2019;11:e4888; *APSF Newsletter* 2016;31:43-5; *Anesth Analg* 2013;117:1149-61; *Anesth Analg* 2016;123:641-9). The EM does not eliminate the importance of continuous knowledge acquisition, but rather serves as a memory aid during nonroutine critical events in patient care in order to minimize errors and optimize outcomes (*Cureus* 2019;11:e4888; *Anesth Analg* 2013;117:1149-61; *Anesth Analg* 2016;123:641-9).

The reliability of the EM as a patient safety tool has been extensively studied. Simulation-based studies from Harvard University have demonstrated that lifesaving processes of care were four to six times more likely to be implemented when EMs were utilized (*N Engl J Med* 2013;368:246-53). In the United States, most institutions have gradually achieved significant cultural acceptance to integrate EMs into their practice and training.

Introduction of EMs to China

Although there is increasing international awareness of the advantages of EM utilization, the implementation of EMs in the clinical setting is challenging. Access to EMs within ORs has been implemented in China through free EM distribution and the introduction of protocols for EM placement (*APSF Newsletter* 2016;31:43-5; *APSF Newsletter* 2020;35:62-3). Anesthesia EMs that have been translated into Chinese and effectively adopted in anesthesia practice in China include the Stanford Emergency Manual, Harvard Ariadne Lab Operating Room Crisis Checklists, Society for Pediatric Anesthesia PediCrisis Critical Event Checklists, and Stanford Obstetric Emergency Manuals (*APSF Newsletter* 2016;31:43-5; *APSF Newsletter* 2017;32:53-4). All these manuals were published in the New Youth Anesthesia Forum, and new versions are translated and updated immediately.

This method of free downloads and access to anesthesia providers was an effective strategy to eliminate the barriers of cost and language in distributing EMs to a large audience (*APSF Newsletter* 2016;31:43-5). Over 125,000 copies were downloaded within the first six months of the first Chinese version of the Stanford EM publication. Thirty-eight thousand copies of the third Chinese version of EM were downloaded. These numbers do not include the large number of individuals who received their copies through email distribution lists and social networking (*APSF Newsletter* 2016;31:43-5).

Media platform promotion and education are other keys to successful implementation of EMs. Operating room EM education series were organized and broadcasted from 2017 to 2019 by the New Youth Anesthesia Forum, covering 22 critical events and attracting 130,000 views. A series of OB emergency management online lectures featuring 15 speakers was organized by the Chinese American Society of Anesthesiology and the New Youth Anesthesia Forum. To date, these lectures have attracted 2.51 million views (asamonitor.pub/3kBmQkQ).

One of the largest reported barriers to EM use during a critical event is a lack of sufficient simulation training programs (asamonitor.pub/3IEWA0T). In China, a simulation training competition was founded by the Zhongshan City Society of Anesthesiology (*APSF Newsletter* 2017;32:53-4). Finalists from seven hospitals competed in a half-day event that focused on crisis resource management skills using EMs (*APSF Newsletter* 2017;32:53-4). The event served as a catalyst to encourage facilities to organize simulation training for OR EM implementation. A

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The 2018 Chinese Association of Anesthesiologists Annual Meeting Operating Room Emergency Manuals simulation instructor training workshop.

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- Enhance efforts to obtain unrestricted grants, funding, and donations to provide research seed grants
- Increase research component of annual meeting
  - Added poster presentations and awards at TASCON 2023 in New Orleans, Louisiana
- Notify membership when TAS member has trauma-related publications
- Develop TAS Trauma Adjusted ASA Physical Status Classification System
- Guide development and consensus agreement of standards for Trauma Anesthesiology Fellowship
- Enhance external relationships
  - Partner with ACS to provide TAS credentialed anesthesiology site reviewers for trauma accreditation
- Formalize partnerships with ASA affiliate member societies with significant involvement in trauma care such as SNACC, SOCCA, ASRA, SPA, and Uniformed Services
- Enhance membership value for international members and build relationships with international trauma-related societies

Thank you for your interest and engagement. While we have accomplished much in a relatively short time, TAS must continue to strive to add value for our members. TAS is committed to developing and supporting a robustly diverse, equitable, and inclusive community, where all members feel a sense of belonging and have an opportunity to participate. I very much look forward to working with you all as we continue this journey to build and define TAS, the ASA's newest subspecialty component society. When at the ASA annual meeting, make certain to include our annual meeting (TASCON) in your plans, this year on October 13 in San Francisco, California, with a focus upon neurologic considerations. Come for the educational and research opportunities and leave with a host of new friends! Please visit us at **TASHQ.org** for further information and membership. Additionally, should you desire, you may reach out to me directly at **james.cain.tas@gmail.com**. ■