The AAST Presidential address

By - Elliott R. Haut, MD, PhD

For those of you who missed it, watch the video of the 2018 AAST Presidential address by Michael F. Rotondo, MD. It was an inspiring call to action to “do the right thing” with a goal of improving care of the injured patient. The event started with AAST President-Elect Martin Croce’s introduction. Using his dry sense of humor, obligatory embarrassing childhood photos, and mentions of his beautiful family, we were regaled with the personal life of Dr. Rotondo. “He’s not just another hack on the drums; he’s a real musician,” was accompanied by a video drum solo of our multi-talented president.

The address covered a wide range of topics, and I suspect that each person in attendance will have a different takeaway message. Dr. Rotondo mentioned what he personally learned over three decades in academic trauma surgery. As expected, he thanked mentors for where he is today. But, just as importantly, he emphasized “the future is bright” and how he cherishes time spent mentoring the next generation. He shared lessons learned about himself and why he continues to take on new challenges. He summed it up with two reasons: 1) to be on a mission, and 2) to be a force for good and a force for change.

He told of attending his first AAST meeting in 1987 as a resident, having been sent by Drs. Vernick and Schwab. Hearing Don Kauder’s voice resonating and that “the indecision about my career choice was blown away.” He was going to be a trauma surgeon. He wove stories of time at Jefferson, Penn, East Carolina, and eventually his move back to his hometown of Rochester, NY.

He gave concrete advice on leading change. Look for every person’s intrinsic motivation. Strive to be both analytical and creative- use both cerebral hemispheres. Start with passion and purpose, move ahead with a product, path, plan, and parameters. Be a force for change. Run a campaign. Take feedback. He emphasized the importance of culture, cohesion and communication.

President Rotondo ended with a call to action. “It doesn’t matter what you call us” he said, commenting on the ongoing name debate in trauma and acute care surgery. “We just want them to call us.” We are all in the “survive and thrive business.” Now it is time to do the work. Execute on the vision. “Go with what you are. Go to the extreme.”
WTC Panel 1:  
Hemorrhage Control for Complex Pelvic Fractures 

By - Mayur Narayan, MD, MPH, MBA, MHPE, FACS, FCCM

The session opened with Dr. Ingo Morzi speaking on pelvic ring fixation and pelvic stabilization. He presented a series of cases on different types of pelvic fractures. He also shared an algorithm used at his hospital. He stressed the importance of understanding which patients are responders and which patients are not in helping guide decision making for fixation.

Dr. Clay Burlew spoke on the role of pelvic packing in the management of pelvic fractures, especially when a patient is in extremis. She stressed the importance of avoiding a transperitoneal approach to evacuate the hematoma. She also suggested using 6 packs for adults and that packing could be used in children (up to 4 packs). She also stated that packing can be done for open fractures. She also reminded the audience to have some degree of caution when sending a patient for empiric angioembolization. She offered an approach that suggested getting the correct diagnosis and then having a discussion with Interventional Radiology on the need for embolization. This strategy may decrease the chances of a patient experiencing undue harm.

Dr. Ryosuke Usui spoke to us on the role of endovascular techniques in managing pelvic fractures. He shared the Japanese experience and presented data on 4 cases of pelvic angioembolization. He also explained the increasing utilization of the Hybrid ER, where the patient is brought directly from the scene for resuscitation and management. This avoids the potential unnecessary move across the continuum of care from the Scene to the ER to the CT to the OR and finally to IR for angio.

Important questions asked during the session close noted that the use of hemostatic materials (QuikClot) were not routine around the globe. The panelists noted that using pelvic packing doesn’t prevent the utilization of angiography.

Dr. Raul Coimbra highlighted the Japanese experience and noted that doctors there actually go out to the scene. There the doctor completes a fast and activates massive transfusion protocol before the patient ever gets to the hospital. With three publications showing improved outcomes, this could be a model for other systems across the globe.
Session 5:

Papers 9-16: Trauma Systems

By - Jason W. Smith, MD, PhD, FACS

Following and outstanding presidential address by Dr. Rotondo, Drs. Croce and Winchell kicked off the afternoon plenary session discussing trauma systems research. Highlights of the afternoon included, Dr. Robert Winchell presented on his facilities work on using geospatial analysis to plan for trauma center placement. Dr. Fred Rogers discussed to complexities of trying to use this system in an imperfect world, and the problems associated with political influence and financially driven decisions that often decouple actual need from desired facility growth. He noted, “Despite that overall growth of trauma centers across the US, this isn’t necessarily a good thing.” Dr. Jim Davis from Fresno reiterated these questions and also wondered how to use data to drive what has become an increasingly political decision. Dr. Winchell suggested that modeling could tell you how adding a trauma center to an existing network might affect the overall patient movement across the system. “You tell me where you want to put the new trauma center and I will tell you how its placement will affect the surrounding area and existing facilities.” The afternoon discussion continued when Dr. John Harvin from Houston, presented the multicenter trial evaluating the effects of using damage control surgery on general surgery patients who might have been able to be closed definitively at the end of their initial operation. While the study found no significant impact on overall complications, there was a significant difference in hospital, ICU and ventilator days. Drs. Peter Rhee, Kim Davis, Karl Hauser and David Livingstone questioned the indications for damage control surgery, and questioned how other than group vote we could identify patients better prior to damage control surgery being utilized. Overall, the response from the audience was impressive and Dr. Harvin and teams presentation engendered a great deal of discussion. It is this authors humble opinion that despite all of our research as acute care surgeons regarding the use and the deployment of these techniques to treat trauma and abdominal sepsis, this topic is still very much in the air. It was a great afternoon with research presented on trauma triage and activation, more efficient deployment of helicopter evacuation and transport using a simple scene triage tool, and multicenter trials evaluating the best management for duodenal trauma. In particular, Dr. Ferrada’s presentation on the management of duodenal trauma, highlights the great multicenter work done across the globe. Without strong multicenter support, there would be no way to scientifically evaluate the impact, incidence and treatment of duodenal trauma due to the entities overall rarity. I join with the Association in thanking the all the authors and teams that presented, shared and discussed their work during this great session.
Session I

Papers 1-8  Plenary

By - Daniel N. Holena, MD, MSCE, FACS

The first plenary session of the 2018 AAST annual congress was jam-packed with high quality research presentations focused on important clinical questions. The presentations were extremely well done and the follow-up questions were thoughtful, but perhaps the most impressive aspect of the session was the methodology utilized for some of these important projects. Dr. Thomas Carver et al conducted a double blinded randomized controlled trial to examine the impact of a ketamine infusion on pain in patients with ≥3 rib fractures. While there was no difference in numeric pain scores or oral morphine equivalents (OME) between groups in the overall cohort, in severely injured (ISS≥15) patients randomized to the ketamine arm had significantly lower OME utilization compared to those in the control arm. Given the current national attention focused on the opioid crisis, these interesting findings suggest an expanded role for ketamine infusions for pain control in severely injured patients.

When randomized controlled trials are not possible, other methods of causal inference can be employed. Using propensity score matching, Dr. Bellal Joseph et al examined REBOA utilization in a propensity-matched cohort study using the Trauma Quality Improvement Program (TQIP) dataset. After matching patients on a host of factors including demographic, physiologic, and injury characteristics, the authors found that REBOA was associated with higher rates of mortality (36% vs. 19%), acute kidney injury, and limb amputation rates. As alluded to by the discussants of this presentation, inability to control for unmeasured confounders is a known limitation of propensity matching, and so it is possible that factors not recorded in TQIP (including physiology at the time of REBOA insertion and specific injury patterns) could contribute to these findings. Regardless, this paper led to an interesting discussion regarding adoption of disruptive technologies and highlighted the need for further study on this exciting topic.