Regarding the 'Joint statement from the American College of Surgeons Committee on Trauma (ACS COT) and the American College of Emergency Physicians (ACEP) regarding the clinical use of Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA)'

Trauma remains a leading cause of mortality in the USA.[1] In 2016, the American College of Emergency Physicians (ACEP) and the American College of Surgeons Committee on Trauma were major stakeholders in the National Academy of Science, Engineering and Medicine report that suggested there are up to 30 000 preventable deaths from trauma annually in the USA, many from uncontrolled hemorrhage.[2] As the front-line provider, the emergency physician (EP) must receive extensive training in the care of traumatically injured patients. Several procedural interventions, including the performance of an emergency department resuscitative thoracotomy (EDRT), ultrasound, and arterial catheter insertion, are therefore included as part of the model of clinical practice for emergency medicine (EM).[3]

Resuscitative endovascular balloon occlusion of the aorta (REBOA)[4] has emerged as a potential technique for controlling previously lethal truncal hemorrhage in the extremis trauma patient. Advances in ultrasound and catheter technology have simplified placement, decreasing the need for post-placement vascular access site repair. Programs to educate providers in the use of REBOA have emerged, but have been designed exclusively for surgeons with limited ability for EP participation. We strongly think that with appropriate training, EPs can develop the skills necessary to obtain arterial access and appropriately advance/place a REBOA catheter. However, the recently released consensus statement clearly aims to take this procedure out of the hands of the front-line EP.

Specifically, these authors take exception with several non-evidence-based recommendations made in the '*Guidelines For REBOA Use And Implementation*' section of the consensus statement. All seven recommendations are listed below:

1. REBOA protocols should be developed in conjunction with vascular operation.
2. REBOA should be performed by an acute care surgeon or an interventionalist (vascular surgeon or interventional radiologist) trained in REBOA.
3. An acute care surgeon must be immediately available to definitively address the specific cause of hemorrhage to avert the dire complications of truncal and spinal cord ischemia from prolonged aortic occlusion.
4. EM physicians with added certification in critical care (EMCC) training in REBOA may train and perform REBOA, as long as the surgeon(s) is/are immediately available to definitely control the focused source of bleeding.
5. EM physicians with documented significant experience and training with REBOA during military deployment may train and perform REBOA in conjunction with an acute care surgeon or vascular surgeon trained in REBOA, as long as the surgeon(s) is/are immediately available to definitively control the source of bleeding.
6. EMCC-certified physicians trained in REBOA must not perform REBOA unless a surgeon is immediately available.
7. EM physicians without critical care training should not perform REBOA.

Recommendation 1 is quite logical, but incomplete. As was done at Carolinas Medical Center, a multidisciplinary team including EPs, acute care and vascular surgeons, interventional radiologists, and nursing should develop protocols for the safe and effective use of REBOA.

Recommendations 3 and 6 would benefit from additional language to define the term 'immediate'. As the literature has shown, immediate presence of an acute care surgeon on patient arrival and evaluation may have no benefit on patient outcomes, and extended patient care may be required prior to arrival of the surgeon.[5-7] REBOA may have a role in life-saving hemorrhage control at non-level 1 trauma centers that are part of a robust trauma system and can move patients to the operating or interventional suite within a reasonable period of time.

Recommendations 4 and 7 imply that the only path for an EP to gain proficiency with the use of REBOA is via EM critical care training and that EPs without this training should not be permitted to use REBOA. EPs have repeatedly demonstrated that when given proper training, they can become experts in many procedures traditionally done by other disciplines (eg, rapid sequence intubation, cricothyroidotomy, EDRT, and lateral canthotomy). REBOA requires rigorous 'specialized' training, not fellowship training. It is ACEP's responsibility to defend this position and help support development of recommendations for rigorous REBOA training curricula, with an appropriate amount of hands-on training, proctoring, and proficiency assessment.

Recommendation 5 sends a confusing and contradictory message implying that military deployment provides a pathway that civilian EPs (and their patients) cannot benefit from. From a training standpoint, most military EM docs are struggling for ongoing trauma experience, which is why §708 of the 2017 National Defense Authorization Act mandated that the Secretary of Defense devise a plan to place military trauma teams at civilian level 1 trauma centers.[8]

Combat experience *has* shown us that trauma care is a team sport. The evolution of multidisciplinary trauma teams in the USA has saved lives, but we must continue to improve. EPs and acute care surgeons play critical, complementary roles in 'Stopping the Bleed', stabilizing and resuscitating the critically ill, and reducing morbidity and mortality from trauma. As our professional society, ACEP would do well to advance the care of the traumatically injured by rejecting the limitations recommended in this statement. Rather, ACEP should support the implementation of integrated competency-based REBOA programs that include rigorous educational standards that are carefully studied for effectiveness, support real-time process improvement, and strive for interdisciplinary collaboration. This is how the house of medicine builds a robust trauma care system that saves lives.

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