☐ IN REPLY TO PASSQUIRE ET AL.

☐ To the Editor:

We appreciate your interest in our article and thoughtful comments. We believe you are quite correct that the most likely cause for the disparity in our clinical outcomes lies in selection bias that was inherent to both of our studies. We believe there is ample evidence of a dismal prognosis for patients with traumatic cardiac arrest (TCA) who present without signs of life on examination and no organized electrical activity on electrocardiogram (ECG) (1–3). Our system in Montgomery County follows the American College of Surgeons/National Association of EMS Physicians joint position statement on withholding or terminating resuscitation to guide our clinical protocols. This position statement suggests that resuscitation may be withheld in patients presenting after blunt or penetrating injury, pulseless and apneic without other signs of life on examination or electrocardiography (4). Our series included only patients in whom resuscitation was attempted and excluded any patients from whom the medics in attendance withheld efforts in patients meeting our criteria, no signs of life, and without organized electrical activity on ECG. We believe further studies involving larger numbers of patients with TCA will better illustrate both the efficacy of prehospital chest drains for TCA and other factors associated with favorable neurologic outcomes in these patients.

Robert Dickson, MD, FAAEM, FACEP, FACEM
Baylor College of Medicine
Montgomery County Hospital District
Houston, Texas

http://dx.doi.org/10.1016/j.jemermed.2019.01.015

REFERENCES

1. Aprahamian C, Darin JC, Thompson BM, Mateer JR, Tucker JF. Traumatic cardiac arrest: scope of paramedic services. Ann Emerg Med 1985;14:583–6.
2. Esposito TJ, Jurkovich GJ, Rice CL, Maier RV, Copass MK, Ashbaugh DG. Reappraisal of emergency room thoracotomy in a changing environment. J Trauma 1991;31:881–5.
3. Stratton SJ, Brickett K, Crammer T. Prehospital pulseless, unconscious penetrating trauma victims: field assessments associated with survival. J Trauma 1998;45:96–100.
4. Millin MG, Galvagno SM, Khandker SR, et al. Withholding and termination of resuscitation of adult cardiopulmonary arrest secondary to trauma: resource document to the joint NAEMSP-ACSCOT position statements. J Trauma Acute Care Surg 2013;75:459–67.

☐ "CONTROVERSIES IN MANAGEMENT OF HYPERKALEMIA:" REMARKS ON THE RISK OF HYPERGLYCEMIA

☐ To the Editor:

We read with much interest the American Academy of Emergency Medicine Clinical Practice paper by Long et al. on controversies in management of hyperkalemia (1). The authors should be congratulated on the efforts to clarify this important topic. Although we agree with many of their conclusions, we would like to make two remarks on the risk of hypoglycemia in connection with the treatment of hyperkalemia. We believe they may contribute to further insight into this important area.

Our major concern is related to the statement that factors associated with hypoglycemia after the administration of insulin to treat hyperkalemia include no prior diagnosis of diabetes and no use of diabetes medication prior to hospital admission, leading to the conclusion that diabetes "per se" diminishes the risk of hypoglycemia in the above-mentioned type of insulin treatment. The study cited in relation to this statement was a retrospective one conducted on patients with hemodialysis (2). The authors, and in addition, several other studies with similar findings, treated diabetes mellitus in the analysis as one disease, although diabetes mellitus is a group of metabolic diseases resulting from various pathogenic defects and may be treated in different ways, with varying risks of hypoglycemia (3,4). Looking at the results of the study, it seems much more likely that the real reason for the lower rate of hypoglycemia found in diabetes patients was actually the higher glucose level prior to hyperkalemia treatment, which was another study finding (not statistically tested) also mentioned in the article by Long at al. (1). As there was no protocol for hyperkalemia treatment in the hospital where the study was conducted, another possible reason for the lower rate of hypoglycemia among diabetes patients could be the less aggressive treatment approach and more frequent glucose monitoring in these patients.

We have recently expressed our speculation based on clinical experience that the higher risk of hypoglycemia after insulin administration due to treatment of hyperkalemia may be associated with type 1 diabetes, as this disease is or may be accompanied by: 1) failure to clear circulating insulin during hypoglycemia; 2) lower glucose threshold for release of counterregulatory hormones, and loss of normal pancreatic alpha cell response; 3) impaired awareness of