

Letter by Ho and Dawes Regarding Article, “Sudden Cardiac Arrest and Death Following Application of Shocks From a TASER Electronic Control Device”

To the Editor:

We read with interest the case series “Sudden Cardiac Arrest and Death Following Application of Shocks From a TASER Electronic Control Device” (ECD),¹ where Zipes focused on the issue of sudden death related to law enforcement restraint. We are emergency medicine physicians and also sworn peace officers. We have also examined these cases in detail. We are concerned that potential misinterpretation of these cases will lead to the unintended consequence of elevated officer and suspect morbidity and mortality.

In this analysis, it is our opinion that several facts were missed, dismissed, or misunderstood. This has led to an overreaching association between the ECD and sudden death in several cases. An example includes one of the cases where there is video, forensic, and metallurgic evidence indicating no ECD probe contacting the subject’s chest and no current conducted through the probes (meaning the officer missed). Another example is a separate case where the subject had a long QT interval (QTc >480 ms), was on chronic antipsychotic medication, and had a 0.35% blood alcohol level around the time of the incident. This case involved significant physical resistance and required 3 ECD applications in the same body location. In the first case it is difficult to conclude that the ECD induced cardiac arrest because an incomplete electrical circuit was present. In the second case, it is our opinion that it is inappropriate to represent this subject as a “...previously clinically healthy male...” Failure to collapse with the first 2 ECD applications in combination with physiological conditions known to be higher risk for sudden death, independent of ECD application, should create significant questions regarding statements of causation.^{2–4} These examples create significant doubt with respect to ECD causation and may artificially inflate the presented case numbers. It is our opinion that it is difficult at best to make affirmative statements of causation based on these examples.

We agree with Zipes¹ that sudden death after ECD deployment occurs infrequently. However, we are concerned that his case series provides an opinion of these cases that a lay public will misinterpret as fact. This will potentially lead to restricted availability of ECDs for professionals who need them to deal with complex, dynamic, and high-risk situations. It is our opinion that the unintended effect will be to resort to control methods with a guaranteed risk of significant injury and death, such as impact weapons or firearms.

Disclosures

Dr Ho is the medical director of, and Dr Dawes is an expert medical consultant for, TASER International, Inc. Both personally own shares of stock in the company and have provided expert witness testimony in litigation involving ECDs.

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