



Pathology Biology Section – 2006

G41 TASER-Related Fatalities: Case Report and Review of the Literature

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After attending this presentation, attendees will be aware of TASER-related fatalities, understand the pathophysiological effects of TASER stunning, know common comorbid conditions identified in deaths resulting in conjunction with TASER use, and identify important clinical and pathologic information in the assessment of a TASER-related death.

This presentation will impact the forensic community and/or humanity by demonstrating a compilation of information regarding TASER-related deaths and will educate the forensic community (police, coroners, medical examiners, and investigators) regarding use and pathophysiological effects of the TASER. Identification of comorbid conditions and risk factors for poor outcomes associated with TASER stunning may lead to additional studies concerning guidelines for use. Recommendations may inspire the implementation of clinical and histopathological standards in evaluation of future TASER-associated deaths. Finally, understanding the need for cautious use may limit the number of TASER-associated fatalities, and therefore support continued utilization of this non-lethal weapon.

A recent rash of TASER-related fatalities has inspired controversy regarding the use of the touted non-lethal weapon, as well as the exact role the TASER (an acronym for "Thomas A. Swift's Electric Rifle") has played in the deaths of over 100 people since 2001. Most reports have been prominently featured by the media. TASER International, Inc. asserts that the TASER has not been directly responsible for these deaths.

The TASER is an electric stun gun designed to cause incapacitation upon delivery of approximately 50,000 volts of electricity by means of two metal darts. A cartridge containing two barbed darts is loaded in the gun. The darts are attached to the cartridge by means of thin wire (some with ranges up to 21 feet), and are deployed from the cartridge by pressing a trigger button. One press of the trigger causes a five-second delivery of electricity. A longer duration of delivery may be obtained by continuing to press the trigger. Following deployment of the darts, the gun may be used to deliver electricity by direct contact. Delivery of such an electrical stimulus causes intense, immediate, and painful muscle contraction. Many law enforcement agencies throughout the U.S. employ TASER guns; the TASER is also commercially available to civilians. While the TASER likely has been useful in preventing lethal use of force in some situations, a concern is that few standards are in place governing the use of the TASER. Fatalities have occurred during or following TASER stunning. Many perpetrators on whom the TASER has been deployed have been acutely intoxicated by various drugs, including cocaine, methamphetamine, and phencyclidine (PCP). Acute intoxication has generally been ruled as the cause of death in these cases, and TASER use indirectly implicated. In the absence of any evidence of illicit substances, other causes of death have included positional asphyxia, excited delirium, or underlying cardiac disease.

A case of a 29-year-old schizophrenic inmate who died immediately after being tased approximately six times, subsequent to his attack on corrections officers is reported. He collapsed in a supine position, and his hands were cuffed in front of his body. Postmortem examination revealed an anatomically normal heart, normal postmortem vitreous chemistries, and a negative urine drug screen. No obvious cause of death was revealed by autopsy. Focal interventricular cardiac septum subendocardial myocardial contraction bands were identified by light microscopy. The authors concluded that the inmate died of a fatal cardiac arrhythmia, and in light of the temporal relationship to delivery of TASER electrical stimulus, the manner of death was deemed homicide.

The pathology findings in this case are reported, with a review of the existing literature concerning TASER-related deaths.

TASER, Forensic Medicine, Death