

**2018 ACMT Annual Scientific Meeting
FIT Open Mic**

Presenter: Alex Harding, MD

Title: The Toxic Woman

Abstract: On February 19, 1994, a 31-year-old female with a history of terminal cervical cancer presented to the Riverside General Hospital ER in Riverside, California with respiratory distress. Full code ACLS was initiated after the patient went into cardiac arrest, and shortly thereafter, staff began to become ill. A nurse and physician lost consciousness. Some developed respiratory distress and seizures. This culminated in the evacuation of the ER and the eventual treatment and/or hospitalization of dozens of hospital staff. Of the numerous patients treated in an ED on a daily basis, what caused the ED staff to become ill during her management? Why did staff note an oily, slick appearance to her skin and an odor of ammonia? Why did they report crystals precipitating in the blood sample tubes drawn from her? Why were prolonged symptoms including muscle spasms, respiratory failure, hepatitis, and pancreatitis seen in the treatment team? This case has captivated the public imagination, and has been adapted numerous times in shows ranging from The X-Files to Grey's Anatomy to Law & Order. We will discuss a biochemically possible, yet controversial, answer that has been proposed, and attempt to shed light on a fascinating medical and toxicologic mystery.

Objective 1: Describe one of the most commonly referenced medical mysteries of the 20th century

Objective 2: Outline the thought process leading to a proposed mechanism of toxicity in a highly-confusing (and legally chaotic) scenario

Objective 3: Discuss the controversy surrounding the proposed mechanisms of toxicity

Citations:

[1] Grant PM, Haas JS, Whipple RE, Andresen BD. A possible chemical explanation for the events associated with the death of Gloria Ramirez at Riverside General Hospital. *Forensic Sci Int.* 1997 Jun 23;87(3):219-37.