



K80 Postmortem Pediatric Forensic Toxicology

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Learning Overview: After attending this presentation, attendees will understand the challenges unique to toxicological findings in postmortem pediatric cases. Attendees will learn interpretive guidelines for pediatric cases involving forensic toxicology in both a general and case-specific sense.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by further delineating the interpretive aspects of toxicological findings in the pediatric population.

During this 19th Annual Special Session within the Toxicology Section, pediatric cases involving toxicological findings will be discussed. As a relative dearth of interpretive information involving toxicological findings exists in the pediatric population, this session is a forum to help elucidate and clarify such issues. The format is a short case presentation or issue-specific concern, including pharmacokinetic data and other relevant ancillary information, followed by audience participation to provide interpretive clarity around case-specific impacts of the toxicological findings. This session, attended by various sections of the Academy, allows for various perspectives of case issues that lead to integrative consensus, or differing opinions, as to cause of death in children.

Four cases will be presented that highlight the difficulty in assessing the role of toxicants in each case or the lengths one must go to in some cases. Sarah Avedschmidt, MD, David Fowler, MD, Robert Forrest, LL.M., and Greg Vincent, MD, will be reviewing cases from their experiences as forensic pathologists that highlight the issues and confounders in the pediatric population.

Dr. Avedschmidt will be discussing a case of a 4-year-old with Cri du Chat and sickle cell disease who expired in an emergency room. The postmortem toxicology demonstrated the presence of oxycodone. The steps taken to determine the role of the oxycodone in the death will be examined in the face of known pathologies, a number of other factors, and the ever-present unknowns.

Dr. Fowler will draw on his years of experience as a forensic pathologist in an inner city to discuss cases of note.

Dr. Forrest will dive deep into a 19th-century case involving strychnine, the initial diagnosis, and how a conclusion was reached given the availability of scientific data at the time. He will also discuss the likelihood of a proper diagnosis if a child were to present with similar signs and symptoms today.

Dr. Vincent will bring forward a case involving the death of an 8-year-old in a fire and how failure to perform proper toxicological testing may lead to an overlooked cause of death. The twists and turns of the case are both fascinating and caution-bearing.

Pediatric, Toxicology, Postmortem