



K65 Postmortem Pediatric Toxicology

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After attending this presentation, attendees will understand the impact of certain toxicological agents in death determination of pediatric patients. There will be imparted many of the reasons why children are not small adults. Through discussion, all attendees will better discern how to interpret toxicological findings in this population.

This presentation will impact the forensic science community by assisting pathologists and toxicologists to integrate pharmaco-/toxicokinetic and pharmaco-/toxicodynamic principles with pathological principles in respect to death determination of children.

In this 9th Annual Special Session within the Toxicology section, pediatric cases involving toxicological findings are discussed. As a relative dearth exists of interpretive information involving toxicological findings in the pediatric population, this session is a forum to help elucidate and clarify such issues. The format is a short case presentation including pharmaco- toxico- kinetic data and other relevant ancillary information followed by audience participation to provide interpretive clarity around the case-specific impact of the toxicological findings.

This years presentations will be:

1. Dr. Kenneth Snell, Interim Chief State Medical Examiner, Alabama Dept. of Forensic Sciences, will be discussing the impact of verapamil in a pediatric fatality. Verapamil is a calcium channel blocking agent not generally indicated in children less than 1-year-old. In the current case, a 1 y/o male was found to have verapamil, a non-prescribed medication, in his blood. The implication of this finding in the face of a potential inborn error of metabolism will be discussed and presented for audience consult.
2. Dr. Phil Kemp, Chief Toxicologist, OCME, Oklahoma City, OK, will discuss the potential role of methamphetamine on fetal and/or neonatal deaths. Methamphetamine, labeled as the modern day catastrophic drug of abuse, is highly prevalent in the world of drug abuse. Fetal exposure is generally through maternal abuse of the substance. Young children are often exposed through the living environment. Such exposures will be highlighted through case experience where methamphetamine may have been a contributing factor in the determination of death.
3. Dr. Carl Schmidt, Chief Medical Examiner, Wayne County, MI, will review cases of "accidental" fentanyl exposure to young children. A common route of exposure of young children to fentanyl is through manipulation of fentanyl patches. These patches contain specific directives against various forms of manipulation due to exposure to the patch contents. As a drug with a narrow therapeutic index, such exposure is potentially fatal, as will be demonstrated through case history.

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