



## Toxicology Section - 2015

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### K78 Postmortem Pediatric Toxicology

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After attending this presentation, attendees will gain an appreciation for 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 a case-specific sense.

This presentation will impact the forensic science community by further delineating the interpretive aspects of toxicological findings in the pediatric population.

In this 15th Annual Special Session within the Toxicology section, pediatric cases involving toxicological findings are discussed. As a relative dearth of interpretive information involving toxicological findings in the pediatric population exists, this session is a forum to help elucidate and clarify such issues. The format is a short case presentation including pharmacokinetic data and other relevant ancillary information followed by audience participation to provide interpretive clarity around the case-specific impact 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.

James Gill will be reviewing a case from his vast experience as a forensic pathologist. Dr. Gill has a particular interest in toxicological issues and his presentation will highlight the pathologist's view on toxicological findings and mitigating factors in the interpretation of findings in this population.

Erik Christensen will discuss a case of an 8-month-old female found unresponsive face down in her bed in a blanket. The scene was indicative of potential toxicological involvement, yet the substance ultimately detected in the child, trazodone, was not one of the substances obvious at the scene. Trazodone, an atypically-structured antidepressant is not a drug typically prescribed for an 8-month-old child. The potential role of trazodone in the death of this child will be discussed in respect to a final diagnosis.

Marina Stajic will discuss a high-profile case involving the brutal murder of an 8-year-old boy who was dismembered. The toxicological findings in the case will be reviewed with the potential role of detected agents in the cause of death of the child versus being "red-herring" findings.

Ellen Moffatt will present a case of the sudden death of a child and a finding of isopropyl alcohol in postmortem samples. The genesis of the isopropyl alcohol in this child and the potential role of the substance in the fatal outcome will be described. Additionally, the potential sources of postmortem isopropyl alcohol findings in the absence of known ingestion will be described.

The case studies presented reflect current-day findings in medicolegal investigations of childhood deaths. In years past, discussions of these type cases have been educational and demonstrative of the issues in this special population. Only through these continued case studies and audience participation can there be shared perspectives on the meaning of the toxicological findings.

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#### Pediatric, Postmortem, ToxicologyA Title Sample