



Pathology & Biology Section – 2004

G71 The Enigma of SIDS: Variations in Diagnosis and Recommendations

Peter Vasilenko, PhD, Michigan State University, College of Human Medicine, Department of Obstetrics, Gynecology, and Reproductive Biology, 227 West Fee Hall, East Lansing, MI 48824; Joyce de Jong, DO and Brian Hunter, MD, E.W. Sparrow Hospital, Department of Pathology, 1215 East Michigan Avenue, Lansing, MI 48912*

After attending this presentation, attendees will understand how SIDS is diagnosed differently by medical examiners and to discuss recommendations to enhance consistency in diagnosis and contribute to prevention efforts.

Consensus is needed on guidelines to diagnose SIDS and suffocation. These guidelines should be based on the definition of SIDS, autopsy data, death scene investigation, and pertinent medical and social history, as well as consistent decision making on whether these factors are positive or negative. The next phase of this effort will involve forensic pathologists, medical examiners and other interested parties forming a task force with the goal of developing a greater consensus regarding the diagnosis of SIDS. Forensic science should strive to produce the most accurate and truthful diagnosis of sudden unexpected infant deaths, both as a professional standard, and to benefit prevention. Since many prevention efforts are based on vital statistics data, the more accurate and consistent diagnosis of SIDS or other forms of sudden and unexpected deaths would serve to focus and enhance the reduction in preventable infant deaths.

Purpose: There is great debate about the diagnosis of SIDS in deference to other causes such as accidental asphyxia. In fact there is accumulating evidence that unsafe sleep environments are linked to many infant deaths although the diagnoses are controversial. Variations in diagnosis lead to inconsistency in vital statistics and confusion or misdirection of prevention efforts. The purpose of this session is 1) to present information on a study which investigated differences in the diagnosis of SIDS among medical examiners using case scenarios and 2) to use these study results as a starting point to discuss efforts and recommendations to increase consensus among forensic pathologists and medical examiners regarding the diagnosis of SIDS.

Methods: A mailed survey was obtained from Medical Examiners/Deputy Medical Examiners (ME) in Michigan. The survey included 28 case scenarios with varying diagnostic factors, questions about the diagnosis of SIDS, and demographics.

Results: A total of 53 surveys were returned for analysis representing a 59% return rate. Only 15% of MEs believe SIDS is a distinct syndrome, 58% think SIDS is a catch-all diagnosis but includes actual SIDS cases, and 27% believe SIDS is a catch-all category and that SIDS does not exist. Among MEs, 21% say they would sometimes give SIDS as a comfort diagnosis so the parents would not feel guilty. In a case that classically meets the definition of SIDS, 80% called it SIDS, 11% indicated accidental asphyxia (AAX), and 9% would call it undetermined (UDTM). In a similar case with the only change being a 14-month-old baby, 32% of MEs would still call it SIDS, while 66% would call it UDTM. If a baby was found prone on a pillow, 17% call it SIDS and 73% AAX. When an infant was found alone on a waterbed or air mattress there was a fairly even split on SIDS vs. AAX. When bedsharing was involved, the diagnostic distribution was 42% SIDS, 39% AAX and 19% UDTM. As factors were added to cases which make suffocation more likely, AAX increased as a choice, but a substantial proportion of MEs continue to call these cases SIDS. When an intoxicated parent is bedsharing both AAX and homicidal asphyxia (HAX) increased as cause of death. (10% SIDS, 63% AAX, 8% HAX, 19% UDTM). Cases in which parents were sleeping with infant on couches elicited the highest rates of AAX (77-85%).

Conclusions: There is significant variation in the way that SIDS is diagnosed in Michigan. Even in cases that have accepted definitions of SIDS or AAX there are marked differences in diagnosis, in part based on beliefs of what SIDS actually is. This variance makes it difficult to use and interpret death certificate data concerning SIDS. These results will be used to stimulate discussions and recommendations toward a consensus on the diagnosis of infants suffering sudden and unexpected deaths.

This study was funded by a grant from First Candle (National SIDS Alliance).

Sudden Infant Deaths Syndrome, SIDS, Infant Mortality