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Mind Your Pediatric Manners: Falling Furniture Causing Death in Children

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Introduction

Pediatric death investigations are inherently difficult and often pose a diagnostic dilemma for the forensic pathologist. Classifying manner of death is equally problematic, and inconsistencies are rampant, not just from office to office, but from doctor to doctor. Yet despite the difficulties in pediatric death investigations and manner of death designations, there is a paucity of literature addressing these issues. Using two recent cases of television tip-overs as examples, we will discuss the difficulties of pediatric death investigation and point out that in order to stay consistent with the recent trends in classifying manner of death in sudden unexpected infant deaths, "undetermined" could be used more frequently in pediatric death certification.

Figure 1: Case #1 - Fractures of the squamous and occipital mastoid sutures (left). Softened, edematous brain with yellow/green exudates (middle) and prominent inflammatory infiltrate of the dura mater (right).



A dresser with a television struck a 1 year old in the head. At autopsy, there were multiple skull fractures, but no optic nerve sheath, subdural, or subarachnoid hemorrhages, and no cerebral contusions. The brain was diffusely softened and edematous, with green/yellow exudates and herniation of the cerebellar tonsils. The cause of death was blunt force injuries of the head complicated by bacterial meningitis, and the manner of death was accident.

Case #2

A television struck a 4 year old in the head. At autopsy, there multiple skull fractures with associated epidural hemorrhage, but no optic nerve sheath or subdural hemorrhages. The brain was markedly congested and edematous, and focal subarachnoid hemorrhage and fracture contusion of the right temporal pole were present. The cause of death was blunt force injuries, and the manner of death was accident.



Figure 2: Case #2 - Scalp hemorrhage of the right temporal/occipital region (left), diastatic fractures of the right occipital suture (middle), and basilar skull fracture (right).

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3.	Shapiro-Mendoza C, or reporting. America



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Discussion

Medical examiners' offices across the country have embraced the SUID Initiative with great success, uncovering a great deal of pertinent information that may have otherwise been overlooked with less structured investigative standards. This has led to an increase in the number of "undetermined" designations, reflecting the uncertainty of newly discovered contributing factors. However, investigations into the circumstances of death for infants and toddlers should not be treated differently. It seems intuitive that the same thorough protocols that are used in infant death investigations should be applied to all pediatric cases in an effort obtain the most information possible and to reduce inconsistencies in determining manner of death. A decade ago, when an infant died and there was no clear organic cause, these cases would be called SIDS/natural. Now, many of these cases are designated "undetermined" to reflect the uncertainty surrounding the infant's death. The uncertainties are not unique to infant deaths, and these same issues exist in many pediatric cases. The medical investigator only knows what one caretaker tells them with regard to the circumstances of death. They don't know if the parent was grossly negligent in their level of supervision. They don't know if the caretaker was asleep or intoxicated at the time of the event. They don't know if the caretaker threw the television onto the child. If medical examiners are calling infant deaths "undetermined" to reflect the intrinsic uncertainty surrounding those cases, then to stay consistent, they should classify many of these pediatric cases "undetermined" as well.

Conclusion

Determining manner of death in pediatric cases remains one of the most difficult and controversial topics in forensic pathology, yet there is little guidance on how to approach such cases. Given the current trend in classifying manner of death in sudden unexpected infant deaths, "undetermined" may be an appropriate designation in pediatric death certification as well.