Preventative pathology and childhood injury

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Abstract
Objective—To delineate a role for pathologists in coordinating the study of childhood deaths due to injury and in developing public safety recommendations.

Methods—Ongoing evaluation of cases of death due to injury occurring in children under 16 years, with formal review of all cases of fatal pediatric injuries recorded in the Department of Histopathology, Women’s and Children’s Hospital, over the past 35 years, has been undertaken as a part of the “Keeping Your Baby and Child Safe” programme.

Results—Information obtained from these cases has been used to formulate a number of safety recommendations dealing with unsafe sleeping environments, unsafe eating practices, scalding, and dangerous farm environments. Some products have been withdrawn from sale and other products modified.

Conclusions—Pathologists often have extensive knowledge of childhood injuries, which can contribute significantly to health promotion initiatives and community education programmes.

(Injury Prevention 1999;5:292–293)

Keywords: preventative pathology; public health

Injuries continue to account for a significant proportion of preventable childhood deaths despite international and national initiatives to improve the safety of children’s environments. It has been gratifying in recent years to observe an improvement in the safety of children’s environments. Despite international and national initiatives to decrease the proportion of preventable childhood deaths, injuries continue to account for a significant proportion of childhood injuries.

Methods—Ongoing evaluation of cases of death due to injury occurring in children under 16 years, with formal review of all cases of fatal pediatric injuries recorded in the Department of Histopathology, Women’s and Children’s Hospital, over the past 35 years, has been undertaken as a part of the “Keeping Your Baby and Child Safe” programme.

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undertaken. These data provide an excellent resource and basis for ongoing research into causes and mechanisms of lethal childhood injuries.

Information obtained from these cases has already been used to formulate safety recommendations.6–11 Collaboration with clinical colleagues and with organisations such as the Sudden Infant Death Syndrome Association of South Australia and Kidsafe has resulted in the initiation of, and participation in, campaigns dealing with unsafe sleeping environments, unsafe eating practices, scalding, and dangerous farm environments. Involvement with the Department of Consumer Affairs and the State Coroner has also enabled pertinent information to be passed from the pathologist to the relevant authorities. Collaborative efforts have resulted in some products being withdrawn from sale, other products such as rocking cradles being modified, the packaging of “V” shaped pillows being changed, and legislation governing cot safety being recently introduced to make certain safety standards mandatory.

To more accurately assess the circumstances surrounding fatal childhood injuries the author has either visited death scenes, or been provided with accurate descriptions, including photographs and videotapes, by attending police officers. Cots and bedding are also often brought to the mortuary for assessment by the pathologist before the performance of the autopsy. In addition the Police Department has arranged lectures for cadets, officers, and detectives on the importance of scene examination in childhood deaths. This close collaboration with the police, emphasising the potential importance of accurate data collection in terms of injury prevention, has been mutually beneficial.

Examples of successes that have arisen to date from this programme include the identification of potential dangers to young infants from overhead suspended rocking cradles, mesh sided cots, stroller prams and “V” shaped pillows.12–17 Close liaison with media through the hospital’s public relations department has facilitated the dissemination of important information to parents and child carers. After publicity surrounding these problems there have been no further deaths in South Australia involving these products.

Although there are many researchers who have published comprehensive original data on childhood safety, the references cited have been deliberately restricted to those coming from the Women’s and Children’s Hospital, State Forensic Science Centre, and the “Keeping Your Baby and Child Safe” programme run by the author. This is not meant to detract from other excellent studies, but rather to demonstrate the range of information that can be derived from even small centres when close collaboration between professionals within the hospital, government, police, and coroner’s departments, community organisations, and the pathologist occurs.

Pathologists should be encouraged to contribute their often extensive knowledge of childhood accidents to health promotion initiatives, and groups involved in community education programmes should avail themselves of this expertise. “Preventative pathology” as a concept may produce wry comments from clinical colleagues, however, it does not seem unreasonable to encourage any new initiative that may reduce childhood injury and death. What better tribute to the memory of children who have died unnecessarily than to learn from the experience and to actively try to minimize the possibility of similar tragedies in the future.