



Pathology Biology Section – 2003

G89 Pediatric Injury Evaluation: A Clinical Forensic Pathology Program in Georgia

Lora A. Darrisaw, MD, Julie P. Gardiner, BA, Geoffrey P. Smith, MD, and Kris L. Sperry, MD, Georgia Bureau of Investigation, 3121 Panthersville Road, Decatur, GA*

The goals of this presentation are to describe the authors' consultative experience in the evaluation of physical injury in children.

Child abuse is a common cause of physical injury in children. It is estimated to occur in one million children each year in the United States. The majority of cases of child abuse do not result in fatal injury. It frequently becomes the responsibility of a medical professional to recognize and accurately interpret the nature of injuries in suspected child abuse. An accurate diagnosis is critical in protecting the child and in providing medical-legal information. Thus, it is necessary to develop expertise in the field of child abuse through extensive experience or specific training in a forensic medicine program. The authors have established a child abuse investigative support center to address the critical need to accurately interpret injuries in children and to train more forensic pathologists in this field.

The Child Abuse Investigative Support Center (CAISC) is a clinical forensic medicine program at the Georgia Bureau of Investigation (GBI) Division of Forensic Sciences (DOFS) that was established in August 2000. The center was established to address the needs of agencies involved in investigations of child maltreatment. The center performs dual functions of providing consultative assistance and educational training throughout the state of Georgia. Physician members of the center consist of forensic pathologists of the GBI Medical Examiner's Office who possess expertise regarding injury causation. They are requested for expert consultation in suspected child abuse cases and are available for court testimony. An investigative division of the center provides consultations by criminal analysts who possess expertise in reference to crimes involving children. The center is also an integral part of the forensic pathology fellowship at the GBI and serves to train fellows in the field of child abuse and neglect. The center operates under state and federal grants and provides services free of charge to consulting agencies.

Since its inception, 103 cases (mean age 2.7 yrs; range 19 days to 16 yrs; 58M:45F) of pediatric, predominately non-fatal, injuries have been referred to the center for evaluation. Various law enforcement agencies presented the majority of the cases and the Department of Family and Children Services requested the center's service in 33% of the cases. The interpretation of injuries was based upon the evaluation of pertinent documents depicting and/or describing the injury. These included medical records, photographs, case files and radiographs. In four instances the object implicated as the source of the injury was evaluated and on two occasions the acutely injured child was evaluated while hospitalized.

A spectrum of injuries was represented in the cases we evaluated including bone fractures (35%), dermatologic injuries such as bruises and abrasions (31%), burns (24%) and cranial-cerebral injuries (22%). Only 3 cases involved injuries to regions involving or near the genitalia and were presented to evaluate for possible sexual abuse. Overall, 56% of the injuries were interpreted as abusive in nature. Nine cases were interpreted as representing discipline but not clearly abusive in nature and injury causation was inconclusive in eight cases. In the majority of cases a written consultation report was provided at the time of the evaluation. So far, courtroom testimony has been necessary in only three cases.

This review of the child abuse investigative center has yielded useful information. The authors identified that the service is particularly of value to rural areas that lack the resources and medical expertise that are typically available in large metropolitan areas. They recognized that in many cases there is a long delay in the investigation and prosecution of child maltreatment. Their goal is to improve marketing of their services and to evaluate more acutely injured children. They have experienced difficulty in interpreting injuries on some occasions because of sub-optimal documentary material (i.e. photographs).

Overall, this study reveals that forensic consultative teams can perform several functions related to child abuse crimes: 1) provide expertise in evaluation of the injuries, 2) provide training opportunities in the field of child abuse, 3) provide expert court testimony.

Child Abuse, Clinical Forensic Medicine, Georgia Bureau of Investigation