The Evolution of the Child Maltreatment Literature

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child maltreatment, literature appraisal, abusive head trauma

ABBREVIATION

AHT—abusive head trauma

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The first descriptions of the injuries associated with child abuse are commonly attributed to the French pathologist Auguste Ambroise Tardieu.^{1,2} His “Étude médico-légale sur les sévices et mauvais traitements exercés sur des enfants” (Forensic Study on Cruelty and the Ill Treatment of Children) in 1860³ described findings of child fatalities from “acts of cruelty and ill treatment, of which young children fall victim from their parents, their schoolmasters, and all who exert over these children some degree of authority.”² John Caffey reintroduced the study of child abuse in 1946⁴ when he described 6 infants with chronic subdural hematomas in whom he identified long bone fractures from an “obscure” traumatic origin. Fredrick Silverman, a junior associate of Caffey’s,⁵ collaborated with C. Henry Kempe and colleagues in 1962 to frame “The Battered Child Syndrome.”⁶ They proposed a constellation of findings from the trivial to the fatal. They noted these injuries were historically noted to be from “unrecognized trauma” but were in reality from “serious physical abuse.”⁶

From these early investigators, the body of medical literature on child abuse now numbers >25 000 citations.⁷ After decades of increased academic study, clinicians and researchers can now begin to reap some of the benefits of earlier researchers and clinicians. Piteau et al,⁸ in this issue of *Pediatrics*, ask a clearly defined question, use a comprehensive search strategy, and lucidly assess the quality of the studies retrieved. Their meta-analysis confirms the systematic review findings recently described by Maguire and colleagues.⁹ Both of these reports, using different search protocols and analyzing different data from the same body of literature, independently confirm the diagnostic precision of retinal hemorrhages, subdural hemorrhages, and rib fractures for abusive head trauma (AHT). By independently using different strategies on the same body of literature and demonstrating similar results, we see clear support for these clinical findings, which are often used in diagnosing AHT.

The modern study of child maltreatment continues to evolve. It has grown from the case reports and case series into large reports of institutional experiences, database surveys, and sophisticated literature syntheses. Sophisticated observational cohort¹⁰ and case-control¹¹ studies have provided important outcomes and prevention data. Despite the absence of a coordinating national research body and being underresourced,¹² some promising multisite prospective networks^{13,14} have emerged. Two challenges exist: the absence of a definitive gold standard test for abuse and the heterogeneity of the data. Abusive injuries can occur in various locations, have a variety of appearances, and may result from many mechanisms. Research in the diagnosis or prevention of child maltreatment requires consideration of epidemiology, radiology, ophthalmology, neurology and neurosurgery, biostatistics, psychiatry and psychology, biomechanics, and pathology. The literature from each of these clinical perspectives consistently supports of the diagnostic features associated with AHT.

When considering the vast child maltreatment literature base, the evidence has become clear. As the research methodology evolves, literature base

increases, and analyses become more sophisticated, we will be able to delineate more clearly the certainty of our diagnoses. The more we know about

abuse when it has occurred, the more informed we will be in our efforts to study, ensure safety, provide services, and ultimately prevent, it.

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OPENING THE EMERGENCY DEPARTMENT TO FAMILY: *As an Emergency Medical Technician and medical student, I have had the opportunity to participate in some of the most sensitive and challenging aspects of patient care. For many individuals seen in the Emergency Department, there is a palpable sense of urgency and concern both among the patient care team and family. In life-threatening situations, many family members justifiably hope to remain close to their loved one; however, emergency department policies regarding family participation in such cases is quite variable. Many ban relatives and close friends from viewing the initial patient evaluations or therapeutic interventions, as the emotional state of the family might influence patient care. It may be time to reconsider such policies. As reported in The New York Times (Well: May 1, 2012), family member presence did not affect the quality of care for children in a trauma ward of a level I trauma center. Researchers at Children's National Medical Center analyzed video recordings of 145 cases involving patients under the age of 16 years old with serious injuries seen in the trauma center. Of the 145 patients, 86 had family members present while they were being treated. There was no significant difference in patient care regardless of whether or not family members were allowed to stay with the patient. In a time when parents take comfort in spending such critical moments with their children and can act as vital historians, it may be beneficial to the patient, relatives, and healthcare workers to have family close by.*

Noted by Leah H. Carr, BS, MS-III