ABSTRACT

Shaken baby syndrome is a term often used by physicians and the public to describe abusive head trauma (AHT) inflicted on infants and young children. Although the term is well known and has been used for a number of decades, advances in the understanding of the mechanisms and clinical spectrum of injury associated with abusive head trauma compel us to modify our terminology to keep pace with our understanding of pathologic mechanisms. Although shaking an infant has the potential to cause neurologic injury, blunt impact or a combination of shaking and blunt impact cause injury as well. Spinal cord injury and secondary hypoxic ischemic injury can contribute to poor outcomes of victims. The use of broad medical terminology that is inclusive of all mechanisms of injury, including shaking, is required. The American Academy of Pediatrics recommends that pediatricians develop skills in the recognition of signs and symptoms of abusive head injury, including those caused by both shaking and blunt impact, consult with pediatric subspecialists when necessary, and embrace a less mechanistic term, abusive head trauma, when describing an inflicted injury to the head and its contents.

HISTORY

The recognition of child abuse in modern medicine began in the 19th century, with the work of the French forensic physician Ambroise Tardieu, who described a wide array of physical and sexual injuries to children, including meningeal hemorrhage and brain injuries in fatally abused infants. More than 80 years later, American physicians began describing the clinical and radiologic manifestations of child abuse. Pediatrician and radiologist John Caffey first described the association of chronic subdural hemorrhages and long-bone fractures in 1946, but it was not until 1972 that he published a seminal paper describing the radiologic and clinical features attributed to shaking injuries. Ludwig and Warman first published the term “shaken baby syndrome” in their review of 20 infants and young toddlers injured by shaking, none of whom showed evidence of impact injury to the head. In 1987, Duhaime et al reported that victims of fatal shaken baby syndrome, and many of those who survived their trauma, showed evidence of blunt impact to the head at the time of diagnosis. The importance of impact in acceleration/deceleration injury was supported by their basic biomechanical models, and they concluded that most serious abusive head injuries required an impact to the...
The design of a country’s child protection system is driven by its ideological traditions and culture. Known as a country dominated by eastern culture, China has a different view toward child abuse and child protection.

There is no official data about the incidence and prevalence of child abuse in China. As a matter of fact, because the priority of current policies regarding children focuses on access to health insurance and education, child abuse is not yet a public concern in China, while child neglect is completely out of the picture.

According to research conducted among 485 Chinese college students, 94.6% respondents report a history of child abuse, including physical abuse (88%), emotional abuse (88%), and sexual abuse (26.6%). Among elementary school students (1481), 62.4% report having experienced physical abuse, while 25.5% reported sexual abuse. Compared to data from the United States, the rates of child abuse in China are much higher, but this research has low reliability because the questionnaire is guided by western culture, which does not adapt well to the situation in China.

Compared to the United States, the child protection system in China has many differences.

First, the definition of child abuse in China is narrow. In China, people generally understand child maltreatment to be a criminal act. However, the act of maltreating a child must be serious, malicious in intent, frequent and continuous for a long period of time. Child abuse only refers to severe abusive behaviors. In addition, the criminal charges against “Abuse Crime” are also light. According to the Criminal Law of the People’s Republic of China (PRC) Article 260, “Aggregately abusive family members will have less than two years imprisonment, detention or control as punishment; committed the crime of the preceding paragraph, cause serious injuries, deaths, will have more than two years and less than seven years in prison.”

Secondly, respecting the family is a significant characteristic in Chinese culture. The Chinese always have a large extended family, providing child care and protection. In addition, Chinese family structure is influenced by traditional values—Filial Piety, which is considered the first virtue in Chinese culture. Fathers exercise enormous power over their children, and tolerant parental conduct is viewed as a part of filial piety and respect to familism. Moreover, Chinese people have a unique family value system that puts family above individual and personal needs. A large number of parents practice physical discipline with their children because their children exhibit behavior that does not meet their expectations or causes the family shame.

Third, the Chinese government has a voluntary child abuse reporting system. Cases of severe abuse are investigated by the police and go through the criminal justice system, while less severe cases are dealt by the Women’s Association Department of Children, Neighborhood Committees, and Workers Union. They are responsible for providing counseling, education and supervision to family members. According to Criminal Law of the PRC, crimes of maltreatment not involving serious injuries or death will be handled only if there is a complaint, either by victims themselves, by relatives or by a prosecutor. Usually, after reported, child victims stay at home unless there is a chance that more abusive behavior could happen. In these cases, child victims may live with their extended family members.

Fourth, a partial termination of parental rights is another signature of child protection in China. In order to terminate parental rights, the parent(s) need to be sued by the victims, relatives, neighborhood committees or protect Minors society. Although the courts could terminate parental rights, the child and the rights of guardians will be transferred into a volunteer home, usually grandparents or extended family members. Biological parents or former guardians still have to pay for living expenses for the child.

Child abuse is an overlooked social problem in China. The child protection system is highly defined by traditional Chinese culture and far from being well established.
ABUSIVE HEAD TRAUMA IN INFANTS AND CHILDREN
(continued from page one)

head. The relative importance of impact as a contributor to the head injury sustained by abused children became a source of controversy. Biomechanical modeling has since been used to both support and refute the contributions of shaking or impact to abusive head trauma (AHT).7,8 In reality, all models and theories have known limitations, and many clinicians and researchers acknowledge that precise mechanisms for all abusive injuries remain incompletely understood.9 Efforts to better understand the mechanisms and causations of injury have improved the gathering of objective data in the clinical realm. Case investigations, including meticulous medical history taking, examinations, and medical workups, have expanded and improved. Medical diseases that can mimic the presentation of AHT are recognized, and screening is performed when indicated. Social welfare, law enforcement, and legal professionals have become better educated about AHT. Clinical research has expanded, and biomechanical modeling of injuries has improved.

Case histories clearly support the conclusion that shaking occurs in some injury scenarios. Shaking was the most commonly reported mechanism of injury described in a series of AHT cases in which perpetrators admitted abuse (68% of 81 cases).10 Shaking alone was described in 32 cases, and only 4 of the victims showed evidence of impact injury. Although this indicates incomplete admission to the injury mechanism in some cases, the commonality of a described shaking mechanism along with the infrequency of impact evidence supports shaking as an important mechanism of AHT. In addition, blunt impact trauma or impact combined with shaking can result in infant head injuries.11 In severe and fatal cases, concomitant cervical spine injury can sometimes be found.12 Secondary brain injury resulting from hypoxia, ischemia, and metabolic cascades contributes to poor outcomes.13,14 Shaken baby syndrome is a subset of AHT. Injuries induced by shaking and those caused by blunt trauma have the potential to result in death or permanent neurologic disability, including static encephalopathy, mental retardation, cerebral palsy, cortical blindness, seizure disorders, and learning disabilities. Medical and biomechanical research, clinical and pathologic experience, and radiologic advances have improved our understanding of the range of mechanisms that contribute to brain injury from AHT, yet controversy remains.

DISCUSSION

Few pediatric diagnoses engender as much debate as AHT, in part because of the social and legal consequences of the diagnosis. The diagnosis can result in children being removed from their homes, parents losing their parental rights, and adults being imprisoned for their actions. Controversy is fueled because the mechanisms and resultant injuries of accidental and abusive head injury overlap, the abuse is rarely witnessed, an accurate history of trauma is rarely offered by the perpetrator, there is no single or simple test to determine the accuracy of the diagnosis, and the legal consequences of the diagnosis can be so significant.15 Because the civil and criminal justice systems are often involved in cases of AHT, the scientific debates related to mechanism and causation of injury often are argued during courtroom proceedings. On occasion, the courtroom allows for scientific theory to be confirmed or refuted,16 but in reality, the American justice system is not designed to determine scientific truth but, rather, to balance contested facts and bring closure to a dispute. Medical terminology should accurately reflect the medical diagnosis. The term “shaken baby syndrome” has become synonymous in public discourse with AHT in all its forms.17 The term is sometimes used inaccurately to describe infants with impact injury alone or with multiple mechanisms of head and brain injury and focuses on a specific mechanism of injury rather than the abusive event that was perpetrated against a helpless victim. Legal challenges to the term “shaken baby syndrome” can distract from the more important questions of accountability of the perpetrator and/or the safety of the victim. The goal of this policy statement is not to detract from shaking as a mechanism of AHT but to broaden the terminology to account for the multitude of primary and secondary injuries that result from AHT, some of which contribute to the often permanent and significant brain damage sustained by abused infants and children.

The term “shaken baby syndrome” has become recognized by the public; prevention strategies for curtailing the incidence of AHT have been developed and researched, and some states have mandated shaken baby syndrome education for parents of all newborn infants.18 Because it may not be obvious to parents that shaking can be harmful to infants, the newborn nursery is an appropriate venue for this education. The American Academy of Pediatrics supports prevention efforts that reduce the frequency of AHT and recognizes the utility of maintaining the use of the term “shaken baby syndrome” for prevention efforts. Just as the public commonly uses the term “heart attack” and not “myocardial infarction,” the term “shaken baby syndrome” has its place in the popular vernacular. However, for medical purposes, the American Academy of Pediatrics recommends adoption of the term “abusive head trauma” as the diagnosis used in the medical chart to describe the constellation of cerebral, spinal, and cranial injuries that result from inflicted head injury to infants and young children.

THE ROLE OF THE PEDIATRICIAN

As mandated reporters of suspected child abuse and neglect, pediatricians carry the burden of recognizing and responding to medical manifestations of AHT. The diagnosis is sometimes obvious, but injuries in many symptomatic infants are unrecognized by unsuspecting physicians.19 In addition, physicians do not always report to child welfare agencies injuries that are highly suspicious for abuse, which puts children at further risk for injury.20,21 To protect abused infants and prevent future severe neurologic injury, pediatricians must remain cognizant of the possibility of AHT in infants who present with both subtle and overt neurologic symptoms and take seriously the ethical and legal mandates to report suspected child abuse to governmental agencies for investigation. Pediatricians also have a responsibility to consider alternative hypotheses when presented with a patient with findings suggestive of AHT. A medical diagnosis of AHT is made only after consideration of all the clinical data. On some occasions, the diagnosis is apparent early in the course of the evaluation, because some infants and children have injuries to multiple organ systems that could only be the result of inflicted trauma. On other occasions, the diagnosis is less certain, and restraint is required until the medical evaluation has been completed. However, as physicians, we have an obligation to make a working diagnosis, as we do with many other diagnoses, and take the legally mandated steps for further investigation when indicated. Pediatricians often find it helpful to consult a subspecialist in the field of child abuse pediatrics to ensure that the medical evaluation has been complete and the diagnosis is accurate. Subspecialists in radiology, ophthalmology, neurosurgery, neurology, and other fields should also be consulted when necessary to ensure a complete and accurate evaluation. When child protective services or law enforcement is involved in an investigation, the pediatrician is required to interpret medical information for nonmedical professionals in an understandable manner that accurately reflects the medical data. Pediatricians also have a responsibility to the family of the abused

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FIELD CENTER CELEBRATES
FIVE YEARS OF MAKING A DIFFERENCE

The Field Center for Children's Policy, Practice & Research celebrated five years of making a difference in the lives of abused and neglected children with a gala held at the Please Touch Museum on April 23, 2009.

Event chairs Maida Milone and Janis Goodman welcomed honorees, Joseph and Marie Field, founding benefactors of the Field Center. Mayor Michael Nutter served as honorary host and sent a message of congratulations, acknowledging the critical work of the Field Center and praising the commitment and humble generosity of Mr. and Mrs. Field.

Guests heard inspirational words from University Of Pennsylvania President Dr. Amy Gutmann, Field Center Faculty Director Dr. Richard Gelles, Montgomery County District Attorney Risa Vetri Ferman and Philadelphia Family Court Administrative Judge Kevin Dougherty. The Field Center’s newly produced video was unveiled during the event.

Advisory board member Renee Johnson was instrumental in arranging the evening’s special entertainment: a performance by the West Philadelphia Children’s Choir. With the museum’s restored carousel in the background, the haunting melodies of children’s voices reminded everyone of the importance of the Field Center’s work.

The inspirational setting of the Please Touch Museum served as a perfect backdrop for the evening, capturing the vision of the Field Center to improve the lives of victims of child abuse and neglect.

Clockwise from top:
Judge Kevin Dougherty, Debra Schilling Wolfe, DA Risa Vetri Ferman, Maida Milone
Herbert Kean, Don Kardon, Joyce Kean, Dorothy Kardon, David and Romayne Sachs
Judge Flora Barth Wolf, Peter Christian
Marie Field, Dr. Amy Gutmann, Joe Field, Faculty Director Dr. Richard Gelles
Penn President Dr. Amy Gutmann and the West Philadelphia Children’s Choir
Debra Schilling Wolfe, Event Co-chairs Maida Milone and Janis Goodman
A SPECIAL THANK YOU TO OUR DONORS!

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The Field Center welcomes additional support. Your tax-deductible donation to the Field Center for Children’s Policy, Practice & Research enables us to continue our critical work. Thanks to a challenge grant from the Joseph and Marie Field Foundation, gifts are matched on a dollar-for-dollar basis.

An envelope is attached for your convenience, or you may give a gift online by visiting www.fieldcenteratpenn.org. For more information, please contact Director of Development Nadina Deigh at (215) 898-5518 or deighn@sp2.upenn.edu.
FOCUS ON THE FIELD CENTER

FIELD CENTER ADVISORY BOARD PROFILE: CATHERINE C. CARR, ESQ.

Catherine Carr joined the Field Center Advisory Board in 2002. The Board has greatly benefited from her expertise in public interest law, as well as her involvement in the Philadelphia legal community.

Ms. Carr is the Executive Director of Community Legal Services, Inc., a nonprofit law firm which provides free legal services to indigent Philadelphians in civil matters. Ms. Carr served as a staff attorney at CLS for eleven years before becoming director, specializing in public benefits case litigation, including access to welfare, Social Security, and Medicaid benefits.

Ms. Carr serves or has served on the board of directors of a number of public interest law firms and nonprofits in Philadelphia, including the Community Justice Project, Women's Law Project, The Reinvestment Fund and VIP, Philadelphia's pro bono project. She has served in leadership positions for a number of bar associations, including in the House of Delegates of the Pennsylvania Bar Association, the Judicial Selection Commission of the Philadelphia Bar Association, and the Legal Services Project of the ABA Section of Litigation. She serves as a Lecturer of Law at the University of Pennsylvania Law School where she teaches “Public Interest Lawyering”, and where she is a member of the Public Service Advisory Board and on the Board of Managers of the Alumni Society.

Ms. Carr received her J.D. magna cum laude from the University of Pennsylvania Law School, where she was an editor of the Law Review. She received her B.A. cum laude from Yale University, where she was the first graduate with a Women’s Studies major. She clerked for the Honorable Norma L. Shapiro of the U.S. District Court for the Eastern District of Pennsylvania.

FIELD CENTER STUDENT PROFILE: THEDA ALLEN

Theda Allen is an MSW candidate at the University of Pennsylvania School of Social Policy & Practice. Theda came to Penn as a transfer student from the Rutgers MSW program, impressed with the school’s reputation and faculty, as well as the racism sequence that is offered.

She was placed with the Field Center for Children’s Policy, Practice & Research in the Fall 2008 semester, interested in learning more about the issue of child abuse and neglect. Her field placement with the Field Center has provided her with both a personal and an academic learning experience. Theda worked on a Child Neglect Study with Faculty Director Alan Lerner, and did preliminary research on evidence-based therapy models for abused children.

After graduation, Theda would like to become a teacher in her local public school district, saying, “teachers play many roles and I know that I am highly equipped to assume those roles because I will have an MSW degree from Penn’s School of Social Policy and Practice.” Originally from Philadelphia, Theda now resides in New Jersey and is the mother of three children.

FIELD CENTER WELCOMES NEW ADVISORY BOARD MEMBER

Janis L. Goodman, PhD, is the most recent addition to the Field Center’s Advisory Board. She became involved immediately by volunteering to co-chair the Field Center’s recent 5th Anniversary Celebration at the Please Touch Museum along with Advisory Board Chair, Maida R. Milone.

Dr. Goodman brings a strong background to her position on the Advisory Board. She received her Ph.D. in Social Welfare from the University of Pennsylvania in 2005. Her research interests include women’s psychological development, women’s identity formation in early adolescence, and gender issues in health care. Dr. Goodman’s other graduate degrees include an M.S.W. in social work, an M.A. in anthropology, both from the University of Pennsylvania, and an M.F.A. in theatre arts from Florida State University.

She currently serves on the Boards of the Pennsylvania Ballet and the Alliance Française; is a member of Cambridge Who’s Who among Executives, Professionals and Entrepreneurs; and was a Founding Partner of Globalislocal. Dr. Goodman is a member of the Cosmopolitan Club, serving as its President from 2001-2003. She is married to Stephen M. Goodman, Esq., a Partner with Morgan Lewis & Bockius. They live in Society Hill, Philadelphia, with their Teacup Maltese, Snippet. The Field Center looks forward to Dr. Goodman’s service on its Advisory Board.

Field Center Faculty Director Alan Lerner was recently appointed to the Pennsylvania Supreme Court Juvenile Rules Committee.
child. The diagnosis of child abuse has enormous social, psychological, and legal implications for families. The role of the pediatrician is not to apportion blame or investigate potential criminal activity but to identify the medical problem, treat the child’s injuries, and offer honest medical information to parents and families. Finally, pediatricians can work to prevent AHT by supporting prevention efforts in the community and in practice. Pediatricians may help prevent AHT by providing anticipatory guidance to new parents about the dangers of shaking or impact and providing methods for dealing with the frustration of a crying infant. They can also stress the importance of leaving a young infant or toddler in the care of adults whom the parents trust will not harm their child and can participate in comprehensive community-based prevention efforts. AHT commonly results in permanent neurologic damage and carries tremendous family and societal costs. With an aim toward prevention, the American Academy of Pediatrics recommends the following.

RECOMMENDATIONS

1. Pediatricians should be alert to the signs, symptoms, and head injury patterns associated with AHT.

2. Pediatricians should know how to begin a thorough and objective medical evaluation of infants and children who present for medical care with signs and symptoms of potential AHT. Consultants in radiology, ophthalmology, neurosurgery, and other subspecialties are important partners in the medical evaluation and can assist in interpreting data and reaching a diagnosis.

3. Pediatricians should consider consulting a subspecialist in the field of child abuse pediatrics to ensure that the medical evaluation of the patient has been complete and that the diagnosis is accurate.

4. Pediatricians should use the term “abusive head trauma” rather than a term that implies a single injury mechanism, such as shaken baby syndrome, in their diagnosis and medical communications.

5. Pediatricians should continue to educate parents and caregivers about safe approaches to calming and coping with crying infants and the dangers of shaking, striking, or impacting an infant’s head.

REFERENCES


17. Lazarit S, Baldwin S, Kini N. The whiplash shaken infant syndrome: has Caffey’s syndrome changed or have we changed his syndrome? Child Abuse Negl. 1997;21(10):1009–1014


June 2009

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THE FIELD CENTER
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University of Pennsylvania
3815 Walnut Street
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