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Ensuring Appropriate Expert Testimony for Cases Involving the “Shaken Baby”

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Abstract

For the past 50 years, the “shaken baby” syndrome (SBS) has been one of the many terms used to describe a form of abusive head trauma in children. The term now preferred is pediatric abusive head trauma (AHT), which is defined as “an injury to the skull or intracranial contents of an infant or young child (less than five years of age) due to inflicted blunt impact and/or violent shaking.”^{1, 2} This new term reflects the fundamental construct that certain forms of head trauma are intentionally inflicted. The incidence is estimated to be 20 to 30 cases per 100,000 children under one year of age with a case fatality rate exceeding 20% and significant disability for about two-thirds of the survivors.¹ In addition, AHT results in major healthcare costs for the survivors. (see Libby AM, Sills MR, Thurston NK, Orton HD. Costs of childhood physical abuse: comparing inflicted and unintentional traumatic brain injuries.

Overall, about 40% of child abuse cases result in criminal prosecution with a conviction rate of 88%.³ Some legal observers claim that many individuals charged and convicted of AHT are innocent, whereas prosecutors often express the belief that numerous apparently guilty perpetrators go free, thus compromising society's responsibility to protect infants and young children from abuse. In both circumstances, the medical professional's expert testimony may influence these diverse results. However, the quality of legal work, skill of the legal representatives, and resources available to the prosecution or the defense certainly may affect the outcomes for cases of AHT. Physicians involved in the diagnosis and treatment of AHT, as well as members of the criminal justice system and general public, should be concerned that different AHT cases with identical findings and similar circumstances have led to different verdicts.³ The possibility that an innocent person may go to prison or that a guilty person may go free is a troubling conundrum, but is well known in the criminal justice system. Jurors making decisions in AHT cases are required to evaluate complicated medical testimony and legal instructions. Accordingly, in some cases, there may be an unexpected outcome that is contradictory to what an objective view of the science and facts would otherwise dictate.

Why does this inconsistency occur despite evidence-based, peer-reviewed medical literature with 40 years of contributions by pediatricians, neuroradiologists, clinical and forensic pathologists, ophthalmologists, and physiologists clearly supporting the construct of a medical diagnosis for AHT? ⁴ Mainstream medical experts agree with the physical, laboratory, and imaging findings associated with the medical construct of AHT, which can include subdural hemorrhage, retinal hemorrhage, encephalopathy, and often evidence of

previous trauma or other bodily injury.⁵ However, case evaluation must go beyond assessing the simple presence of these factors to evaluating each child's specific injury attributes and history. Physicians who evaluate and diagnose these cases consider numerous other disorders/diseases that may mimic individual findings also seen in AHT. Physicians treating and studying the pathology of children with these other disorders/diseases that mimic AHT agree that these cases can be diagnosed or ruled out on the basis of routine diagnostic evaluation and ancillary studies. However, some defense lawyers choose to emphasize this overlap between AHT and other diseases. Instead of presenting the totality of all medical findings, typical defense strategies are to isolate each medical finding and its multiple differential diagnoses to confuse the jury. Presentation of such complex medical information requires that an expert witness have specialized training to clearly explain the complex material in an understandable fashion to the judge and jury. In addition to making the correct diagnosis, it is necessary to determine who abused the child. This is dependent on investigation by law enforcement and child welfare.

At first glance, there appears to be little difference between AHT and comparable crimes in which medical evidence plays a major role; however, AHT has proved more problematic and vexing for a number of reasons: First, perhaps some caregivers are wrongfully convicted of AHT, but the frequency of such an occurrence has not been substantiated. Most believe that wrongful convictions is a rare occurrence, although some legal observers estimate it to be as high as 5%.⁶ Second, as Ricci et al suggest, "...many children with AHT have been seen by medical providers for signs and symptoms possibly related to abuse, yet were not identified as possible abuse...."⁷ The reported rates of child abuse homicide have been documented to be underreported by as much as 50 to 60%.³ The related assumption is that guilty individuals escape punishment. Third, some physicians with variable credentials have a willingness to disparage scientifically-grounded and accepted testimony, use unique theories of causation, omit pertinent facts or knowledge, use unique or very unusual interpretations of medical findings, make false statements, or engage in flagrant misquoting of medical journals.⁸ Fourth, the ease with which effective lawyers can exploit the complexities of a case can confound the jury into believing there is a "reasonable doubt" even though this seems unlikely to most professionals involved. And, fifth, there is inconsistency in trial outcomes, as well as dispositions, with sentences ranging from probation to life in prison.

Organized medicine has a responsibility to ensure that unbiased and evidence-informed opinion is used to explain to a judge and jury the significance of medical findings. Many professional medical societies have drafted rules of ethical conduct for members providing expert witness testimony.^{9, 10} In addition, some professional societies will censure or dismiss members who provide false testimony. Several states have enacted tighter restrictions on expert witness testimony for cases pertaining to medical negligence.¹⁰

While these positive steps are having an effect, it is essential that a system be in place to provide some degree of certainty that physicians testifying for both the prosecution and defense as AHT medical experts are indeed expert, experienced, and unbiased. This is an appropriate area of study, perhaps for the Institute of Medicine (IOM), or for some other authoritative group to evaluate systematically and thoroughly. A comprehensive study of the strength of the medical evidence for AHT and the accuracy of AHT testimony would inform a difficult medical-legal problem.

In addition, a certification program should be developed for medical professionals who are called upon to provide opinions or diagnoses in cases of suspected AHT, thus providing them the prerequisite training, experience, and knowledge of the literature regarding AHT to be considered qualified to give expert testimony on this topic. This approach follows the

current trend of certification in medicine. The certification could encompass medical specialties such as (but not limited to) child abuse pediatrics, forensic pathology, ophthalmic pathology, pediatric radiology, pediatric neurosurgery, and pediatric ophthalmology. Such certification would distinguish these professionals to judges, attorneys, prosecutors, and juries as reliable witnesses deserving of credibility. The current child abuse pediatrics certificate might serve as a template for other professional boards wishing to develop some authentication of expertise. It is possible such strict certification could lead to volunteer multispecialty panels to be available when called upon for rendering a non-binding opinion as to whether the physical findings are consistent with a diagnosis of AHT. Others would not be excluded from serving as witnesses, but their credentials would be evaluated on their own merits.

Enhancing “rules of ethical conduct”, conducting a comprehensive authoritative study of this issue, and imposition of stringent criteria for certification as medical expert witnesses are important steps in developing an effective way for the medical profession to help ensure unbiased testimony in cases of AHT. As Rorke-Adams suggested, “Those who offer untested hypotheses to defend individuals who have harmed infants do considerable disservice to science and to the victims.”⁴ The actions proposed in this article should help in developing an effective way for professional medicine to counter this troubling problem.

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