

## **Jurisprudence Section – 2010**

## E17 But What if It's Not Child Abuse!

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After attending this presentation, attendees will have learned of a host of physical conditions that might be confused with child abuse and the necessity that they be recognized to prevent unfounded accusations.

This presentation will impact the forensic science community by alerting all those disciplines involved in the issue of child abuse to 20+ musculoskeletal entities that could be mistaken for intentional trauma, thus seriously disrupting families, social services, and the legal system.

One hundred and fifty years ago Ambroise Tardieu, a French physician published a paper on the abuse and maltreatment of children. In his 32 cases, Tardieu set forth all of the salient features of child abuse – sociologic, demographic and medical – except, of course, for the radiologic. He described the typical injuries, recognized that caregivers were the perpetrators and observed the emotional responses of victims. His work was republished in a book on wounds a year after his death nineteen years later. On neither occasion is there evidence that much attention was paid to his revelations or for the next 65 years. It was only then that the seminal work of the pediatric radiologist, John Caffey, and the provocative name, *The Battered Baby Syndrome*, proposed by the pediatrician, Henry Kempe, finally attracted the widespread interest of the lay public, the medical profession and the legal community. This led to increased vigilance for evidence of child abuse, and laws were passed mandating compulsory reporting of suspected abuse to authority. Thus, overzealousness and over-reporting is encouraged and may lead to serious consequences in unsubstantiated cases.

Many congenital, developmental, infectious, and accidental traumatic entities have been reported as mistaken for child abuse and neglect. In a large series of 504 referrals for possible abuse, slightly more than half proved to be unsubstantiated, and 7% of those had been initially misdiagnosed as abuse.<sup>2</sup> Most mistaken diagnoses of abuse or neglect are related to dermatological or neurological conditions or to growth disorders.

Caffey's description of the skeletal and cerebral radiological findings in child abuse have stood the test of time and are well-known in both medical and legal circles. Yet there are musculoskeletal conditions that resemble somewhat the lesions of intentional trauma, and others, more farfetched, that might be mistaken for child abuse by the untrained or inexperienced observer. Some of these are well known, others quite rare. Since radiological findings often are central to the successful prosecution or defense of physical child abuse, it is important that these imitators be recognized; the unfounded diagnosis and/or allegation of child abuse can cause cruel multigenerational distress for the families involved and wastes time and resources for social services and the judicial system.<sup>3</sup>

More than two dozen of these "mimicking" conditions – congenital, developmental, infections, metabolic, iatrogenic, accidental, anomalous, or peripartum – will be presented in order to acquaint the attendees with the magnitude of these diagnostic dilemmas. Most include findings of

metaphysical abnormalities, fractures, subluxations or dislocations, periosteal reactions, bone distruction, or combinations of these abnormalities anomalies, and injuries. Considerable experience and expertise is required in distinguishing the unfortunate from the felonious finding.

This presentation is designed primarily for clinicians, pathologists, anthropologists, attorneys, and child advocates.

## References:

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- Wardinsky, T.D. Viscarrondo, F.E., Cruz, B.K. The mistaken diagnosis of child abuse: a three-year USAF Medical Center analysis and literature search. Military Med. 1995; 160:15-20.
- Kirschner, R.H., Stein, R.J. The mistaken diagnosis of child abuse: a form of medical abuse? Am. J. Dis. Child. 1985; 139: 873-875.

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