

*injury*, or *neuro-inflicted brain injury*. This violent shaking would be easily recognized by others as dangerous ([American Academy of Pediatrics Committee on Child Abuse and Neglect, 2009](#); [Kemp, 2011](#)) and is most often a result of the caregiver's frustration with crying, maternal stress, or depression ([Kemp, 2011](#)). Every year in the United States, an estimated 1200 to 1400 children are shaken, and of these victims, 25% to 30% die as a result of their injuries. The rest have lifelong complications ([National Center on Shaken Baby Syndrome, n.d.](#)).

It is important to understand what happens in AHT. Infants have a large head-to-body ratio, weak neck muscles, and a large amount of water in the brain. Violent shaking causes the brain to rotate within the skull, resulting in shearing forces that tear blood vessels and neurons. The characteristic injuries that occur are intracranial bleeding (subdural and subarachnoid hematomas) and, in approximately 80% of cases, bilateral retinal hemorrhages, which are classic results of repetitive acceleration–deceleration head trauma ([Maguire, Watts, Shaw, et al, 2013](#)). Injuries may also include fractures of the ribs and long bones. Most often, there are no signs of external injury, making diagnosis difficult. Clinicians base an abusive diagnosis on patterns of injuries to the infant but this can be subjective. PredAHT, a prediction tool, assists clinicians with an AHT diagnosis by listing six key clinical features of AHT obtained from high quality publications ([Cowley, Morris, Maguire, et al, 2015](#)). The PredAHT has high sensitivity and specificity in estimating the probability of AHT when three or more of the six features are present in the patient ([Cowley, Morris, Maguire, et al, 2015](#)).

Traumatic brain injury is often not an isolated event, with a large number of children showing evidence of a previous injury ([Kemp, 2011](#)). Victims of AHT can be seen with a variety of symptoms, from generalized flulike symptoms to unresponsiveness with impending death ([Altimier, 2008](#)). Many of the presenting symptoms, such as vomiting, irritability, poor feeding, and listlessness, are often mistaken for common infant and childhood ailments. In more severe forms, presenting symptoms may include seizures, posturing, alterations in level of consciousness, apnea, bradycardia, or death. The long-term outcomes of AHT include seizure disorders; visual impairments, including blindness;