A verified lucid interval in a young victim of abusive head trauma

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Research Abstract Title

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IRB Number: n/a

Describe role of Submitting/Presenting Trainee in this project (limit 150 words):

Dr. Romig conceptualized the case report, drafted the initial manuscript, and reviewed and revised the manuscript.

Background, Objectives/Goal, Methods/Design, Results, Conclusions limited to 500 words

Background:

Abusive head trauma (AHT) is the leading cause of child physical abuse fatalities, and survivors frequently face life-long consequences. Victims of AHT are typically infants, and many are subjected to repeat AHT if not accurately identified and protected. Although it is not the role of pediatricians to specifically identify perpetrators, identifying the timing of AHT is frequently a medical-forensic process. Investigative personnel use the medical-forensic determination of timing of AHT to guide safety decisions for the child victim. If the medical-forensic timing of AHT is incorrect, a child could be inappropriately placed and/or an innocent caregiver could be subject to prosecution. Victims of AHT who suffer severe/permanent injury are felt to demonstrate symptoms immediately after the trauma. AHT victims with milder injury are thought to generally have persistent or recurrent clinical signs shortly after the trauma. “Lucid intervals,” in which a victim of AHT is completely asymptomatic for an extended time period after the trauma, are felt to be rare and have not been well characterized in the literature.
Objectives/Goal:

To document a verified example of a rare phenomenon of an extended lucid interval in an infant victim of AHT in order to highlight the challenges of accurately determining timing of abuse.

Methods/Design:

A literature review was performed to identify the existing research on abusive head trauma symptom patterns and the existing knowledge on the concept of lucid intervals.
An extensive chart review on the case was performed in order to accurately provide a description of the case and the clinical course.

Results:

This case involves a 2-month-old infant victim of AHT who presented to medical care with mild neurologic symptoms that resolved without intervention from medical personnel. While hospitalized, the infant had an asymptomatic period of approximately 38 hours prior to more severe neurologic decompensation, then later returned to neurologic baseline.

Conclusions:

This case highlights the challenges in accurately timing AHT in very young victims who return to neurologic baseline by characterizing a verifiable asymptomatic lucid interval.