

Clinical Features and Consequences of Abusive Head Trauma in Children: a Siriraj Experience

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Background: Abusive head trauma (AHT) is one of the most fatal or life-threatening form of child abuse. Presenting symptoms are nonspecific and it is crucial for physicians to recognize this disorder.

Objective: To study the clinical features, neuroimaging findings and short-term outcomes following abusive head trauma.

Method: Children with a diagnosis of AHT during January 2005 to December 2017 were retrospectively reviewed. Demographic data, age at the diagnosis, clinical features, neuroimaging findings, long-term outcomes and associated family risk factors were reviewed, recorded into a standard record form.

Result: There were 26 patients included during the study. There were 19 boys with a median age of 5 months (range 1-32 months). 80.8% of the patients aged under 12 months. The most common presenting symptoms were seizures (88.5%), decreased level of consciousness (42.3%), vomiting (38.5%) and irritability (34.6%). Subdural hemorrhage was the most common neuroimaging findings (96.1%). Retinal hemorrhage were found in 92.3% and 79.2% were found bilaterally. Two patients died during admission. Of 23 cases who had a follow up at 6 months, 22 patients (95.6%) had developmental delay, 21 (91.3%) had behavioral problem, 12 (52.2%) had epilepsy and 15 (65.2) had visual impairment. A poor family environment (e.g. domestic violence, substance abuse in caregivers) was related with AHT. Unplanned pregnancy was the only significant factor that correlated with GFES (P=0.038).

Conclusion: A clinical suspicious of AHT should be raised children with seizure, decrease level of consciousness and the findings of Subdural hemorrhage and retinal hemorrhage.

Keyword: Abusive head trauma, subdural hemorrhage, retinal hemorrhage