

# **CASR REPORT**

# Battered Child Syndrome; a Case Study

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#### Abstract

One of the important and usual missed causes of pediatric traumas is child abuse. This ominous phenomenon, which can be presented physically, psychologically, sexually, and emotionally has grown significantly in recent years. Many children are not diagnosed in the early stages of evaluation. Battered Child Syndrome is used to describe the clinical condition of the child serious physical abuse by parents or caregivers. Medical staff should always keep the syndrome in their mind for those brought to the emergency department with trauma. In this report, we described a patient complained of dysphagia following a falling from a height and multiple epidural hematomas and final diagnosis of battered child syndrome.

Key words: Hematoma; brain edema; cerebral palsy; Child Abuse; Battered Child Syndrome

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#### Introduction:

Physical abuse is one of the specific types of trauma among childhood and should be considered for all pediatric patients who referred to the emergency department (ED) with inexcusable conditions (1, 2). The reported incidence of child abuse in ED approximately is 2-10%, however half of these cases are not reported due to fear of jeopardizing their reputation (3). There has been an increasing trend of child abuse in Iran and recent statistics have showed about 3-4 % growth rate during previous years (4-6). To emphasize the importance of this entity, we reported a patient presented with a history of congenital cerebral palsy who was fallen and found as a case of child abuse. **Case Report:** 

The patient was a 17-year-old boy who was brought to the ED with complaint of dysphagia from the last day followed by falling from a height of half meter. The Subject was a known case of spastic cerebral palsy who was kept in a care center and brought by the care center staff. As was mentioned, the patient could open his eyes spontaneously, make whining sound, and be able to swallow food easily before falling, but after that, he was not able to swallow or produce sound. In primary assessment, his blood pressure was 120/80 mmHg, pulse rate 95/minute, respiratory rate 16/minute, tympanic temperature 37 °C, and 96% oxygen saturation in room air. On physical examination, all four limbs were spastic and he was not able to move the extremities. He opened his eyes in response to painful stimuli. Signs of head trauma and swelling were seen on the left side of the head. Any signs of erythema, ecchymosis, or swelling were not visible on the chest, abdomen, and extremities. There were no obvious deformities in the long bones and auscultation of the lungs was symmetric on both sides. The abdominal examination was not reliable due to the spasm; however, focused abdominal ultrasonography for trauma (FAST) was reported normal. Brain computed tomography (CT) scan revealed large volume multiple epidural hematomas with mass effects in the left fronto-temporal lobes (Figure 1). The patient was transferred to the operating room and the hematoma evacuation performed. According to the mismatch between mechanisms of injury with CT findings, a complete detailed history was taken again. It seems that the patient had been abused due to his restlessness and lack of cooperation and thus we announced it to the authorities

#### **Discussion:**

Child abuse is referred to a behavior in which the child is exposed to different physical and/or sexual abuses, neglect or emotional misconduct. The clinical condition of the seriously physically child abused by parents or care givers is called "Battered Child Syndrome" (7, 8). Physical child abuse can be manifested with different findings (9).



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Figure 1: Patient's brain CT scan

Abusive head trauma can be seen as multiple subdural hematomas, inter-hemispheric hemorrhage, hypoxicischemic brain injury, and brain edema (10-12). Many children are not diagnosed in the early stages of evaluation. In this situation, taking a second detailed case history and reviewing positive findings would be helpful. Often a mismatch between the clinical findings and the history, provided by the child caregivers, is a main diagnostic finding among the victims of the Battered Child Syndrome (12). Medical staff should provide the victims of the syndrome with appropriate care and contact with the relevant organizations for required interventions. In addition, many governmental organizations have to take effective control measures to create a safe environment for these children (13). Health staff should always keep child abuse in their mind in dealing with suspected cases of pediatric trauma to respond appropriately in this regard.

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