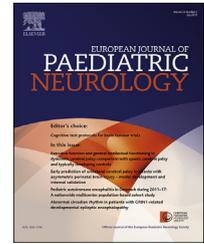




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Editorial

Abusive head trauma and the cerebellum: Another piece of the puzzle

Child abuse has many faces. One of these is the *abusive head trauma* (AHT) which represents the most frequent cause of lethal outcome in child abuse and mainly relates to children within their first and second years of life.¹ AHT is predominantly caused by acceleration-deceleration trauma (also referred to as *shaken baby syndrome*), blunt force trauma, or a combination of these mechanisms. Shearing and rotational forces may cause severe injuries not only at meningeal structures or the retinae but also, of course, within the brain tissue, of which the latter mostly determine prognosis. Neuroimaging plays a key role in uncovering such findings.² However, in contrast to other brain regions, cerebellar lesions in connection with AHT have only sparsely been described.

In this issue of EJPN, Haas-Lude et al. report on two cases of suspected AHT.³ The cases showed typical findings of AHT such as subdural collections, retinal hemorrhages, clinical and neuroradiological signs of an acute encephalopathy, and missing reporting of an adequate trauma. Special attention is paid to the depiction and development of AHT-associated lesions of the cerebellum using neuroimaging. In addition, the authors provide a comprehensive review of the literature on the topic and discuss the cerebellar involvement in AHT as a sign of high severity and widespread involvement of the brain.

Besides these considerations, the two cases illustrate that, from the diagnostic and also from the forensic point of view, AHT is still a challenge. Therefore, close cooperation between numerous different medical disciplines such as pediatrics, ophthalmology, neurosurgery, laboratory medicine, forensic medicine, and radiology in particular, will remain of vital importance in order to address the sometimes difficult question of whether AHT has occurred or not.⁴ A synoptic expert opinion on the case, discussing differential diagnostic aspects

and merging all medical puzzle pieces to a clear concluding statement, will help authorities and the court understand the frequently complex situation. In this context, every puzzle piece which is able to shed light on the dark must be considered as helpful.

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