

Challenging diagnosis of a patient with head injury

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Introduction: The greatest challenge of a diagnostic process is to find a correct cause of a given symptom. Meningitis is potentially life-threatening condition and its clinical manifestation can vary depending on the age of a child. Symptoms include headache, vomiting, altered mental status and neurological signs such as seizures. Intercranial pressure and meningeal irritation, typical for meningitis, can be associated with other diseases such as trauma, haemorrhage or malignancies.

Case report: A 7-year-old patient was admitted to Emergency Department due to loss of consciousness after a head injury – fall from his height. Symptoms occurred 1.5 hours after the injury. Upon admission patient was unconscious and had seizures. Head CT scan didn't show any signs of intracerebral bleeding and cerebral oedema. Patient was transferred to the ICU due to his critical condition (GCS 4). During hospitalization in ICU patient began to be febrile and in the laboratory test the inflammatory markers started to rise. Examination of the cerebrospinal fluid suggested viral infection. Treatment with antibiotics and antiviral agents was administered. After 5 days clinical improvement was observed, and patient was transferred to the pediatric ward in order to continue treatment and further investigation. Head CT scan, MRI and EEG were performed and revealed ambiguous findings. His symptoms resolved gradually and he was discharged after 19 days. Finally, he was diagnosed with meningitis and advised further neurological investigation.

Conclusions: This case illustrates that the diagnostic process can be sometimes long and complicated. It is difficult, especially in case of pediatric patients when diseases often present atypically and with unusual symptoms. Therefore, the differential diagnosis process should be carried out thoroughly and with particular care. In this case additional difficulty was the head injury which initially was considered as a reason of a patient's symptoms.