

Hokkanen Laura, Memory disorders in acute encephalitis. A neuropsychological study. University of Helsinki, Finland, 1997.

ABSTRACT

Acute encephalitis is an inflammation of the brain, mostly caused by viral infection. A variety of cognitive symptoms may persist after the acute stage, and neuropsychological assessment is crucial in evaluation of the outcome. The most commonly reported sequelae are memory deficits. The main aims of this study were to investigate the types of memory impairment in various encephalitides, the frequency of global amnesia following encephalitis, and the changes in the deficits during follow-up.

Between 1 January 1985 and 31 December 1994, 77 adult patients under the age of 75 with acute encephalitis but without alcohol abuse, or coexisting or previous neurological diseases were consecutively referred for neuropsychological examination at the Department of Neurology, Helsinki University Central Hospital. The aetiology was established in 44/77 (57%) patients; 17 had Herpes simplex virus encephalitis (HSVE).

Transient amnesia (TENA) at the acute stage of the disease was found in 70% of patients. Furthermore, similarly to brain trauma, TENA was found to indicate cognitive outcome. The frequency of persisting global amnesia syndrome with both anterograde and retrograde amnesia in all encephalitic patients was 6%. One patient had isolated retrograde amnesia, which is very rare. In HSVE the frequency of global amnesia was 12.5%, which is lower than expected. As a group, HSVE patients were not found to have a homogeneous pattern of amnesia, instead subgroups among all encephalitic patients were observed: some patients had impaired semantic memory, some had difficulty predominantly with executive functions and some suffered from an increased forgetting rate. Herpes zoster encephalitis was found to result in mild memory impairment only, and the qualitative features indicated a subcortical dysfunction. On the whole, the cognitive deficits were predominantly found to diminish during follow-up. Progressive deterioration was often associated with intractable epilepsy. The frequency of dementia was 12.5%.

In conclusion, the neuropsychological outcome, especially in HSVE, was more favourable than has previously been reported, possibly due to early acyclovir medication. Memory disorders after encephalitis should not be considered uniform, and the need for neuropsychological rehabilitation should be considered case-by-case.