Original article

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Clinical, semiological, electroencephalographic, and neuropsychological features of "pure" neocortical temporal lobe epilepsy

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Epileptic Disorders

- The clinical, semiological, scalp EEG, and neuropsychological features of patients with “pure” neocortical temporal lobe epilepsy (NTLE), who were successfully treated by neocortical temporal resection sparing the mesial temporal structures, were examined.

- Twenty patients with mesial temporal lobe epilepsy (MTLE) and hippocampal sclerosis, who had favorable postoperative seizure outcomes (Engel Class I), were selected as a control group.

Clinical features

- Age at seizure onset was significantly greater in patients with NTLE than in the controls.
- History of febrile convulsion was significantly less frequent in NTLE.

Semiology and EEG

- Epigastric ascending sensation, oral automatisms, gestural automatisms, dystonic posturing, and postictal confusion were significantly less frequent in NTLE than in MTLE.

- Ictal unitemporal rhythmic theta activity was significantly less frequent in NTLE than in MTLE.

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Neuropsychology

- Preoperative IQ score was significantly higher (p=0.003) in NTLE; preoperative memory quotient score was also significantly higher in NTLE.