

## **ANTIEPILEPTIC TREATMENT AND COMA STATE**

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**Aim:** Study purposed to investigate the prognostic value of EEG in postischemic coma state  
**Patients and Methods:** Fifty four ischemic stroke patients in coma state have been investigated. Ischemic lesion size and site was detected by CT. Patients were divided into 2 groups according to Glasgow Coma Scale (GCS). EEG was performed between 5-7 days of coma by application of 16 channel computer encephalography. Outcome of coma state was established at 1 month of coma onset. Statistics performed by SPSS-11.0.

**Results:** First group (29 patients with GCS=6) revealed the predominantly alpha EEG pattern (35%), predominantly beta EEG pattern (20%), delta EEG pattern (44.13%) and epileptiform pattern, sharp and pick activity (0.87%). Second group (25 patients with GCS>6) showed the predominantly teta EEG pattern (70%), predominantly beta EEG pattern (15%) and delta EEG pattern (15%). In first group 45% of patients were died within month, 25% developed the persistent vegetative state and 30% survived with neurological deficiency. Among them 3 patients with unusual EEG pattern immediately aroused from coma state after receiving the antiepileptic treatment. In second group 35% of patients died, 15% developed the vegetative state and 50% survived with neurological deficiency. Positive correlation was found between alpha and delta EEG patterns and patient's death at 1 month of coma state ( $r=+ 0.31$ ;  $p<0.00$ ).

**Conclusion:** In postischemic coma state alpha and delta EEG patterns indicate to the poor outcome. Probably, stroke patients can develop the coma state due to status epilepticus.