



## Comparison of cognitive problems in patients with epilepsy and non-epileptic patients

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**Background:** Cognitive problems are common in epileptic patients although its impact is not studied. In this study we focused on cognitive problems in patients with epilepsy and compare them with non-epileptic patients in the same conditions.

**Methods:** comprehensive neuropsychiatric study was performed in 53 patients with epilepsy and 45 healthy patients in a one year period. Patients were between twenty to fifty five years old and selected in two groups and all patients had at least 12 year primary education (diploma). Depression and psychosis were evaluated in both groups respectively. Neuroimaging was performed as needed in selected patients. EEG was done if it was necessary.

**Results:** Patients with epilepsy had worse performance in nearly all cognitive tests ( $p<0.002$ ). Performance was even worse in uncontrolled seizures and patients with depression ( $p<0.001$ ). There was no significant correlation between MRI findings and poor performance in neuropsychiatric tests. Patients with high dose drug regimen had poorer performance. In patients with psychosis performance was poor regardless of epileptic and non-epileptic groups and. There were also no significant findings in correlation with EEG findings and neuropsychiatric performance.

**Conclusion:** Patients with epilepsy have greater neuropsychiatric problems in comparison with the other patients with same conditions. Uncontrolled ones and patients with depression and high dose drug users are even worse than other patients and all of them needs more mental support than other groups.