EARLY PREDICTORS OF SUBCLINICAL ATHEROSCLEROSISIN EPILEPSY PATIENTS

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Abstract

Background: Patients with epilepsy are at higher risk for atherosclerosis which may be due to the epilepsy itself and/or antiepileptic drugs (AEDs) use. This work aimed to detect the impact of epilepsy itself and the antiepileptic drugs on developing subclinical atherosclerotic changes and to correlate atherosclerosis in patients with epilepsy to clinical and laboratory data. **Patients and Methods:** Ninety Egyptian patients with idiopathic epilepsy and 30 age, sex matched healthy controls subjected to neurological examination, extracranial carotid duplex, and measurement of lipid profile, uric acid and CRP levels. **Results:** The level of HDL was significantly lower in all patients with epilepsy and those treated with enzyme inducer antiepileptic drugs than the control subjects. Level of serum uric acid was statistically significantly higher in all patients with epilepsy including untreated patients and those treated with non enzyme inducer AEDs and polytherapy AEDs than control subjects. The mean common carotid artery intima media thickness (CCA IMT) was significantly higher in all patients with epilepsy including untreated and treated patients than control. There was a significant positive correlation between the CCA IMT and age of the patients, duration of illness and duration of the antiepileptic drugs. **Conclusion:** The epilepsy itself could result in subclinical atherosclerotic changes in the patients with epilepsy, which could be exacerbated by the antiepileptic drugs, particularly enzyme inducer drugs.

Key words: Epilepsy, AEDs, atherosclerotic risk factors, CCA-IMT.