

P-570 - OXIDATIVE STRESS IN EPILEPTIC PATIENTS IN TWO ENTIRELY DIFFERENT GEOGRAPHICAL REGIONS OF IRAN, ARDABLI & ALBORZ 2009-2011

M. Dehghan

Biochemistry and nutrition Department, Alborz University of Medical sciences, Karaj Medical Faculty, I. R. of Iran, Karaj, Iran

Objectives: Generalized epilepsy is a chronic disorder characterized by recurrent seizure which can increase the content of reactive oxygen species and super oxide generation in the brain. The aim of the present study was to estimate the plasma level MDA as marker of oxidative stress in patient with epilepsy of in two entirely geographical different regions of Iran, Ardabli (North West) & Alborz (Central).

Methods and materials: Thirty epileptics patients from those referred to neurology department with age limitation of 20-50 years(from each mentioned geographical regions as the case group) and sixty normal subjects aged between 20-50 years referred to Blood Donation Organization (as the control group) were involved in the study. MDA Plasma level of the above mentioned groups were determined by spectrophotometric assay.

Results: The analysis of the plasma from epileptics revealed: increased MDA level and in comparison to control persons and these differences were statistically significant. The increased MDA level of Alborz province epileptics was statistically higher than Ardabil.

Conclusion: Our results indicate on the oxidant disturbances in epileptic patients, particularly in larger cities of stressful life which can play an important role in the pathophysiology of epilepsy.

Suggestion: We suggest that further studies should be done on the role of oxidative stress in patients with epilepsy especially socio-economically lager cities.