P021 The relationship of oxidative metabolism and treatment response in major depressive disorder: a biological basis for treatment duration?

Hasan Herken[1], Salih Selek[2], M. Cemal Kaya[3], Hakim Celik[4], Haluk A. Savas[3], Ozcan Erel[4] and Bunyamin Kaptanoglu[5]

Pamukkale University Medical School, Psychiatry[1] and Biochemistry[5] Departments, Denizli-Turkey Kahramanmaras State Hospital, Psychiatry Department[2] K.Maras-Turkey Gaziantep University Sahinbey Research Hospital, Psychiatry Department[3], Gaziantep-Turkey Harran University Biochemistry Department[4] Sanliurfa-Turkey

We aimed to determine the relationship between anti depressant treatment and oxidative metabolism in this study. Two groups, with patients diagnosed as having depression and controls were enrolled in the study. The patients received naturalistic anti-depressant treatment. Total Anti-oxidant Status (TAS) and Total Oxidant Status (TOS) were measured with EREL's method. Oxidative Stress Index (OSI) was calculated. Baseline and final HAM-D scores of the patient group differed significantly. There were significant differences between the groups both at the baseline and the final visit for TAS, TOS and OSI. Patients deemed to be unresponsive to treatment differed significantly from the controls both at the baseline and at the final visit for TAS, TOS and OSI. The chronically increased anti-oxidant and oxidant levels in patients may be related to the elevation of anti-oxidant defenses in response to increased oxidative metabolism. These results may illustrate the biological necessity of continuing anti-depressant treatment up to 6 months. Also, chronic changes in TOS and OSI may predict lack of response to treatment.