

P02-40

## ANTIDEPRESSANT TREATMENT AND ADVANCED OXIDATION PROTEIN PRODUCTS IN DEPRESSED PATIENTS

A. Heymann-Szlachcinska<sup>1</sup>, A. Wykretowicz<sup>2</sup>, J. Rybakowski<sup>2</sup>

<sup>1</sup>Dept S, Aalborg Psychiatric Hospital, Aarhus University Hospital, Aalborg, Denmark, <sup>2</sup>Dept. of Adult Psychiatry, Poznan University, Poznan, Poland

**Introduction:** Oxidative stress plays a role in producing advanced oxidation protein products (AOPP). High level of AOPP was observed in patients with such pathological conditions as ischemic heart disease, diabetes, cancer or neurodegenerative diseases.

**Objectives:** A role of oxidative stress in depression and in antidepressant treatment has been implicated. There have been no studies so far on AOPP in psychiatric diseases.

**Aim:** An assessment of AOPP concentration, as a marker of oxidative stress, in patients with depression and the effect of antidepressant treatment.

**Methods:** Thirty-one patients hospitalized at Department of Adult Psychiatry, Poznan University of Medical Sciences, were studied. The first depressive episode was diagnosed in 5 patients, recurrent depressive disorder in 6 patients, and depression in the course of bipolar affective disorder in 20 patients. Patients were treated with venlafaxine (10), paroxetine (7), fluoxetine (5), clomipramine (4), citalopram (3), sertraline (1) and mianserine (1). Advanced oxidation protein products (AOPP) levels were measured twice: before treatment and in remission on maintenance doses of drugs. Control group consisted of 18 healthy volunteers, age- and gender matched .

**Results:** There was no significant difference between depressed patients and healthy controls in the AOPP concentration before treatment. There was no correlation between AOPP levels and diagnosis, duration of illness, duration of the current episode and the age of illness' onset. After antidepressant treatment, a significant decrease of AOPP concentration was found.

**Conclusions:** The results of the study may confirm previous data suggesting a decrease of some markers of oxidative stress after antidepressant treatment.