

P01-228 - OXIDATIVE STRESS AND FAMILY ENVIRONMENT IN UNAFFECTED RELATIVES OF PSYCHOTIC PATIENTS

M. Martínez-Cengotitabengoa¹, P. Vega¹, A. Besga¹, J.R. Peciña¹, R. Gonzalez-Oliveros¹, P. Lopez¹, G. Garcia¹, F. Uribe¹, N. Alvarez², A. Gonzalez-Pinto¹

¹Psychiatry, ²Biobanco, Santiago Apostol Hospital, Vitoria, Spain

Objectives: Oxidative stress supposes an imbalance between oxidants and antioxidants molecules. Negative and positive family environment have been related with worse and better outcomes respectively in schizophrenic patients.

Our objective is to determine antioxidant defense in healthy controls and unaffected relatives of early onset psychosis patients and to assess its relationship with familiar environment.

Methods: We included 82 healthy controls (HC) and 14 healthy controls with second degree family history of psychosis (HCWFHP), aged between 9 to 17.

Total antioxidant status and lipid peroxidation test were determined in plasma and antioxidant enzyme activities and glutathione levels were determined in erythrocytes.

We used the Global Assessment Functioning scale (GAF) and the Family Environment Scale (FES). The FES is made up of ten subscales: cohesion, expressiveness, conflict, independence, achievement, intellectual-cultural, social, moral, organization and control.

Results: The analyses showed a significant decrease in total antioxidant level in HCWFHP compared with the HC (U Mann Withney = 281.00, p=0.009, effect size= -0.78).

HC and HCWFHP did not differ in the GAF scale, nevertheless the scores of HCWFHP were significantly higher in cohesion and intellectual-cultural dimensions of the FES (p=0.007, p=0.025).

Adjusting by this two FES dimensions, antioxidant status remained significantly different between groups: OR= 10.86, p=0.009.

Discussion: Although we cannot induce causative relations, we can state that family environment is not playing a role in inducing oxidative stress in these subjects. It could be hypothesized that families with affected relatives protect themselves with positive environmental factors such as cohesion and intellectual-cultural activities.