

## P-394 - PSYCHOLOGICAL FACTORS AFFECTING DIABETES MELLITUS TYPE 2 IN CORRELATION WITH CORTIZOL AND HOMOCYSTEINE

K.Kontoangelos<sup>1,2</sup>, A.E.Raptis<sup>3</sup>, C.C.Papageorgiou<sup>1,2</sup>, G.Tsiotra<sup>3</sup>, A.D.Rabavilas<sup>2</sup>, G.Dimitriadis<sup>3</sup>, G.N.Papadimitriou<sup>1</sup>, S.Raptis<sup>3,4</sup>

<sup>1</sup>1st Department of Psychiatry, Eginition Hospital, Athens University, <sup>2</sup>University Mental Health Research Institute, <sup>3</sup>2nd Department of Internal Medicine-Propaedeutic-Research Institute and Diabetes Center, Athens University, <sup>4</sup>Hellenic National Center for Research, Prevention and Treatment of Diabetes Mellitus and Its Complications, Athens, Greece

**Introduction:** Chronic poor metabolic control of type 2 diabetes is characterized by elevation of plasma homocysteine and there is a evidence of both hypothalamic-pituitary-adrenocortical(HPA) axis and cognitive dysfunction in type 2 diabetes.

**Objectives:** Recent research indicates an association between cortizol and homocysteine and psychological factors in diabetes type 2 however the nature of this relationship remains unclear.

**Aims:** The aim of this study was to investigate the association of cortizol and homocysteine with trait and state psychological factors in diabetic patients.

**Methods:** In this study cortizol and homosysteine and psychological data were analyzed from 86 controlled diabetic patients (Glycosylated Haemoglobin HbA1c < 7) and from 45 uncontrolled diabetic patients (HbA1c ≥ 7). Trait psychological characteristics were assessed with the Eysenck Personality Questionnaire (EPQ)and Hostility and Direction of Hostiity Questionnaire(HDHQ) while state psychological characteristics were measured with the Symptom Checklist 90-R (SCL 90-R). Blood samples were taken for measuring cortizol and homocysteine of both subgroups, during the initial phase of the study (T0).

One year later (T1), the uncontrolled diabetic patients were re-evaluated with the use of the same psychometric instruments and with an identical blood analysis.

**Results:** Uncontrolled diabetic patients type 2 with high levels of cortizol score lower in the extraversion subscale of EPQ. In the controlled diabetic patiens high levels of homocysteine are correlated with high scores in the psychotism subscale of EPQ.

**Conclusions:** These findings give credence to the idea that cortizol and homocysteine in association with personality traits may be implicated in diabetes type 2.