

P-1224 - NIGHT-TIME/DAY-TIME ANTIOXIDANT STATUS LEVELS IN PARANOID SCHIZOPHRENIC INPATIENTS

E.Díaz Mesa¹, A.Morera Fumero², P.Abreu González², A.Jiménez Sosa¹, M.Henry¹, L.Fernández López¹, R.Gracia Marco¹

¹Service of Psychiatry, University Hospital of the Canaries, La Laguna, ²School of Medicine, ³Department of Physiology, University of La Laguna, Santa Cruz de Tenerife, ⁴Research Unit, University Hospital of the Canaries, La Laguna, Spain

Introduction: The Total Antioxidant State (TAS), expressed as equivalent to the total antioxidant capacity of blood plasma. It is the cumulative ability to trap molecules, as H₂O₂ and free radicals such as RO, ROO, and O₂.

Objetives: Our aim is to describe the TAS levels in schizophrenic patients and to analyze if this marker has got a circadian rhythm. The only study in humans on this subject has carried out by Benot et al (1999) in healthy subjects, which has reported that there was a circadian rhythm of TAS, with a peak night at 01:00, which correlated directly with melatonin (MLT).

Methods: The sample was comprised by 43 paranoid schizophrenic inpatients. Blood samples were extracted by venipuncture at 12:00 and 24:00 hours. TAS levels were measured three times: at admission, discharge and three months after discharge. Clinical state was assessed by means of the Clinical Global Impression Scale (CGI). TAS serum levels were measured by ELISA techniques.

Results: Our results show that there is statistical significance between 12:00 and 24:00 for the TAS at admission and three months control. This means that at both times, the income and control of the three months, the levels of midday TAS is significantly higher than the midnight TAS. However, these differences did not occur at discharge. Respect to CGI there are differences in clinical status, less high-control.

TASI: $0,66 \pm 0,14$ $20,60 \pm 0,158$, $p < 0,027$.

TASA: $0,64 \pm 0,15$ $30,63 \pm 0,135$ $0,740$.

TASC: $0,84 \pm 0,100$ $0,76 \pm 0,113$ $p < 0,001$.

CGI-SI: $4,37 \pm 0,84$ $6,305 \pm 0,754$ $3,37 \pm 0,720$.

CGI-GI : $3,70 \pm 0,64$ $0,177 \pm 0,895$ $2,23 \pm 1,455$.

Conclusions: Our results point to the fact that serum TAS may be considered as a possible marker of psychopathological descompensation worsening.