

P-695 - COMT AND DRD2 POLYMORPHISMS AND ANTISOCIAL PERSONALITY DISORDER

A.Aluja, J.Fibla, L.F.García

University of Lleida, Lleida, Spain

Marvin Zuckerman's psychobiological personality model states that high levels of Dopamine and Noradrenaline are associated with a sensation seeking and aggressive behaviour. Besides, both catecholamines are regulated by two enzymes: catechol-O-methyltransferase (COMT), and Monoaminooxidase (MAO). Those hypotheses have been partially supported by genetic association studies since an effect of COMT on diverse antisocial and disinhibited personality measures has been reported. On the other hand, some evidences suggest a relationship between polymorphisms of receptor 2 of the dopamine (DRD2) and the inhibition of behaviour. The present study is aimed to explore the role of both polymorphisms (COMT and DRD2) on the differences observed in the Antisocial Personality Disorder (APD). 147 inmates from the Centre Penitentiary of Ponent (Lleida) participated in the present study. The mean age was 33.31 (S.d. 8.6). The APD was assessed by the ETAPA (Escala del Trastorno Antisocial de la Conducta [Antisocial Personality Disorder Scale]; Aluja 1991). Results suggest an effect of the COMT on the APD although the risk allele reported (Val) is different from the one reported in other studies (Met). No association is found for the DRD2 although an expected tendency is observed. Combining two polymorphisms has produced a larger effect in other studies (García, Aluja, Fibla, Cuevas., y García, 2010). So, both COMT and DRD2 were analysed conjointly. In this case, a significant effect is observed. Results are discussed within the framework of the Zuckerman's Psychobiological Personality model.