Association between cocaine craving during inpatient cocaine detoxification treatment and Iowa gambling task performance

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The aim of the present study is to compare cocaine-dependent inpatients who did not report craving everyday (non-cravers) and their counterparts who did (cravers) regarding their performance in Iowa gambling task (IGT). Participants were recruited consecutively and completed a 10-14 day detoxification treatment. We assessed 80 cocaine-dependent inpatients using two versions of the IGT, the original (immediate rewards and then delayed punishments) and a variant (immediate punishments and then delayed rewards). Craving presence (cravers) vs. absence (non-cravers) during detoxification treatment was assessed daily using the cocaine selective severity assessment. Cravers included 56 inpatients (Mage [SD]=7.89 [8.37]; 76.8% male) and non-cravers involved 24 inpatients (Mage [SD]=41.36 [7.33]; 83.3% male). Data was analysed in terms of (a) within-group differences (total scores vs. the score of 0) using T-tests, (b) between-group differences regarding total scores of original and variant IGTs, using also T-Tests and (c) between-group differences regarding IGT performance (learning curves) using a between-within ANOVA. Both groups exhibited scores that were significantly different from zero in the variant version of IGT (M_Cravers =23.77, p<.001; M_Non-cravers =15.42, p=.039). Regarding between-group analyses, no statistically significant differences were observed between cravers and non-cravers, neither in the original IGT (M_Cravers =3.52 vs. M_Non-cravers =5.58) nor in the variant version (M_Cravers =23.77 vs. M_Non-cravers =15.42). Finally, the results of the between-within ANOVA did not show statistically significant differences between cravers and non-cravers. In all, our results showed that both groups had advantageous (non-impaired) performances in IGTs. However, cocaine craving status during detoxification treatment was not able to detect between-group differences regarding IGT performance.

Biography

J Pérez de los Cobos received his MD in 1978 from the Universidad de Valencia and became a Psychiatry Specialist in 1984 from the Universidad de Alcalá de Henares, Hospital Ramón y Cajal (Madrid). In 1985, he obtained his PhD in Psychiatry from the same University. In 1990, he began working as a Psychiatrist at Hospital de la Santa Creu i Sant Pau, becoming the Head of its Drug Addiction Unit in 2001. He has also been Professor in Universidad de Alcalá de Henares from 1983 to 1989, and in the Universitat Autónoma de Barcelona, since 2001 to present. He combines his healthcare activity with the leadership of the Addictive Behaviours Research Group (IIB Sant Pau). His main areas of healthcare and research activity are opioid and cocaine dependence, focusing his lines of research on pharmacogenetics of methadone, satisfaction with treatment and cocaine craving.

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