

We identified 2 subgroups: early onset subgroup (<18 years); 5 subjects, mean onset at 16.6 years, mean duration 9.5 years; 3 unmarried, 2 divorced subjects; lower education level (1 primary school, 4 secondary school), 1 subject in part-time employment, 3 subjects with poly drug abuse and later onset subgroup (>18 years); 5 subjects, mean onset at 30.2 years and mean duration 13 years; 3 married, 1 divorced, 1 single; education level higher (2 secondary school, 2 college); 3 fully employed, 1 in part time employment, 1 retired; 1 subject with comorbid alcohol addiction. The subgroups differed in adherence to treatment, too, with all early onset subjects dropping out from the program after few days, while the late onset subjects adhered for at least several months to up to one year.

Our results suggest that pathological gambling may represent a spectrum disorder with different clinical characteristics and prognosis.

## P285

Testing the self-medication hypothesis of depression and aggression in cannabis dependent subjects

M. Arendt<sup>1</sup>, R. Rosenberg<sup>1</sup>, L. Fjordback<sup>1</sup>, J. Brandholdt<sup>1</sup>, L. Foldager<sup>1</sup>, L. Sher<sup>2</sup>, P. Munk-Jørgensen<sup>3</sup>. <sup>1</sup>Centre for Basic Psychiatric Research, Aarhus University Hospital, Risskov, Denmark <sup>2</sup>Division of Neuroscience, Department of Psychiatry, Columbia University, and New York State Psychiatric Institute, New York, NY, USA <sup>3</sup>Unit for Psychiatric Research, Aalborg Psychiatric Hospital, Aarhus University Hospital, Aalborg, Denmark

**Background:** A self-medication hypothesis has been proposed to explain the association between cannabis use and a number of psychiatric and behavioral problems. However, there is little knowledge on reasons for use and reactions while intoxicated, in cannabis users who suffer from depression or problems controlling violent behavior.

**Methods:** We assessed 119 cannabis dependent subjects using the Schedules of Clinical Assessment in Neuropsychiatry (SCAN), parts of the Addiction Severity Index (ASI), and questionnaires on reasons for cannabis use and reactions to cannabis use while intoxicated. Participants with lifetime depression, and problems controlling violent behavior, were compared to subjects without such problems. Validity of the groupings was corroborated by use of a psychiatric treatment register, previous use of psychotropic medication, and convictions for violence.

**Results:** Subjects with lifetime depression used cannabis for the same reasons as others. While under the influence of cannabis, they more often experienced depression, sadness, anxiety and paranoia, and they were less likely to report happiness or euphoria. Participants reporting problems controlling violent behavior more often used cannabis to decrease aggression, decrease suspiciousness, and for relaxation; while intoxicated they more often reacted with aggression.

**Conclusions:** Subjects with prior depression do not use cannabis as a mean of self-medication. They are more likely to experience specific increases of adverse symptoms while under the influence of cannabis, and are less likely to experience specific symptom relief. There is some evidence that cannabis is used as a mean of self-medication for problems controlling aggression.

## P286

Attention deficit and hiperactivity disorder in cocaine addiction

M.L. Barrigon Estevez<sup>1</sup>, A. Fontalba-Navas<sup>1</sup>, M. Ruiz Martinez<sup>2</sup>, J. Joya Redondo<sup>2</sup>, O. Andres Ricoy<sup>2</sup>, A. Sanchez Viñas<sup>2</sup>, G. Jurado de Flores Yepes<sup>2</sup>. <sup>1</sup>Hospital Clínico San Cecilio,

Granada, Spain <sup>2</sup>Centro Provincial de Drogodependencias, Granada, Spain

**Aims:** To study the incidence of Attention Deficit and Hiperactivity Disorder (ADHD) in a patients sample in treatment for cocaine addiction, and the characteristics of this group.

**Method:** We have recruited 43 subjects in treatment to cocaine abuse (DSM-IV-TR : F14) in Adicction Provincial Center in Grandada.

We have registered sociodemográfica and clinical data, habits of abuse, the Cocaine Effects Expectancy Questionnaire, two scales autoadministered for ADHD's diagnosis: in the infancy, Wender Utah Rating Scale (WURS) and in the adult (scale of the list of ADHD's symptoms in DSM-IV).

The sample was divided in two groups according to the presence of ADHD in adult age.

**Results:** In 60,5% of the sample there was history of ADHD in the infancy, with persistence 80,8% (48,8% of the sample) in the adult age.

Patients with ADHD were smokers in 95,5%. 71,4% was consuming alcohol (average 12,6 gr/week), 23,8% was consuming cocaine always together with alcohol.

61,9% of the ADHD group was consuming another illegal drug (cannabis), opposite to 31,8% in control group. (p=0,048).

The first consumption in ADHD group is earlier (17 years vs. 22 years; p=0,001) and most frequent consumption too (22,4 years vs. 27,6 years; p=0,006).

Cocaine doses used is higher in ADHD group (1,39 gr vs 1,07 gr n.s.)

**Conclusions:** There is a high comorbidity in cocaine abuse with ADHD. This group has different characteristics, as the age of beginning of the abuse or of the higher abuse.

## P287

Subjective classification of drug craving cues responses: Comparison of fmri findings to self report study

A. Behzadi<sup>1</sup>, H. Ekhtiari<sup>2</sup>, A. Mokri<sup>2</sup>, H. Edalati<sup>2</sup>, M.A. Oghabian<sup>1</sup>. <sup>1</sup>Research Center for Science and Technology in Medicine (RCSTIM), Tehran University of Medical Sciences (TUMS), Tehran, Iran <sup>2</sup>Psychological Assessment Laboratory, Iranian Center for Addiction Studies, Tehran University of Medical Science, Tehran, Iran

**Background:** In our previous study we designed a visual cue based craving task which reliably induces craving. We investigated that there are two distinguishable groups of heroin addicts: responder and non responder to the cues. In this study we used fMRI to examine this subjective difference.

**Methods:** 30 right handed male heroin IV abusers with IV injection for at least 6 months compared to 15 normal right handed males. DSMIV and Addiction Severity Index (ASI) were administrated. Cue Induce Craving Task was presented during and after imaging. BOLD signal analysis performed by FSL™.

**Results:** A number of cases demonstrate high cortical activation in: cingulate gyrus, rectus gyrus, medial frontal gyrus, nucleus accumbans and cingulum (17/30). No significant activation observed in the control group and in 13 cases. There was shown that these 13 cases had less hunger for drug consumption during the analog presentation. No significant ASI or DSMIV differences were found. They were the same as control group in their FSL feat analysis.