

# ABSTRACTS

## POSTER SESSION

### Psychopharmacology

*Saturday August 29, 1987 • 3 00 p m - 5 50 p m*

*New York Penta Hotel • Center Mezzanine*

*Chair Michael Pontecorvo, Nova Pharmaceuticals, Baltimore, MD*

**DO EXPECTANCIES MEDIATE FEMALE AGGRESSION DURING ALCOHOL CONSUMPTION?** Vicki A Creamer VA Medical Center, San Diego, CA, Sandara A Brown VA Medical Center and University of CA, San Diego, Loretta J Kratz San Diego State University

The mediating effects of alcohol expectancy on subsequent behavior have generated interest in clarifying domains most impacted by pharmacologic versus expectancy effects of alcohol. With reference to aggressive behavior, sex differences have not been firmly established. Twenty-four women (ages 25 to 40) who scored high or low on the aggression subscale of the Alcohol Expectancy Questionnaire participated. After ingesting either tonic or moderate doses of alcohol, aggressive responses were recorded to a series of hazardous driving scenarios. A significant expectancy effect for anger was noted and in one scenario, alcohol produced significantly less aggressive intentions than tonic.

**MOOD EFFECTS OF ALCOHOL AND EXPECTANCIES DURING MENSTRUAL CYCLE** Vincent J Adesso and Wendy J Freitag University of Wisconsin-Milwaukee

This research was aimed at developing a profile of women's moods across the menstrual cycle and determining alcohol's effects upon these moods. The Profile of Mood Stages was used to measure mood. The 96 volunteer, female, heavy drinkers were randomly assigned to the cells of the balanced placebo design with equal numbers in each of the three menstrual phases. Alcohol subjects received enough to raise their blood alcohol level to 0.07 mg%. Preliminary results indicated that women's baseline moods did not differ regardless of menstrual phase. During drinking, mood was influenced by alcohol, menstrual phase, and degree of intoxication but not by expectancies.

**ASSESSMENT OF AIDS RISK AMONG TREATMENT SEEKING DRUG ABUSERS** John L Black and Michael P Dolan Dallas VA Medical Center, John R Skinner Terrell State Hospital, James Shore and Horace A DeFord Dallas VA Medical Center

We investigated needle sharing and sexual behavior among 168 treatment seeking drug abusers. The majority of IV drug users (56%) reported needle sharing during the past year, while 17% reported sharing in the past but stopping over a year ago. The majority of sharers reported restricting sharing to few people and familiar settings. The majority of subjects reported three or fewer female sexual partners, tended to deny homosexual contact, but 14% reported contact with female prostitutes. Only one subject tested positive for AIDS exposure, while 31% tested positive for hepatitis B exposure. Predictors of hepatitis B exposure are discussed.

**COMPARING DIFFERENCES BETWEEN OPIATE COCAINE AND SPEEDBALL USERS** Michael P Dolan, John L Black, John R Skinner and Ralph Robinowitz Drug Dependence Treatment Program, VA Medical Center, Dallas, TX

The purpose of this study was to compare the characteristics of drug users according to their drug of choice. The characteristics studied were divided into three categories: demographic, personality and drug use history. Subjects were 63 male drug users admitted to a 30 day inpatient treatment program. Subjects were categorized into three groups: opiate users, cocaine users and speedball (heroin and cocaine) users. Three variables, severity of drug use, the MMPI 0 scale and type of discharge, differentiated the groups. The relationship of drug of choice to the assessment and treatment of drug abusers was discussed.

**EFFECTS OF SECOBARBITAL ON HUMAN AGGRESSIVE BEHAVIOR** Don R Cherek, C Simon Sebastian Department of Psychiatry, Louisiana State University School of Medicine, and Joel L Steinberg Department of Psychiatry, VA Medical Center, Dallas, TX

Male subjects were administered placebo and three doses (50, 100 and 200 mg per 70 kg of body weight) of secobarbital in a laboratory situation which provided both aggressive and non-aggressive response options. Aggressive responding was the ostensible subtraction of points (money) from a fictitious person. The non-aggressive option was responding to accumulate points exchangeable for money. Aggressive responding was established by provocations (point subtractions) which were attributed to the other person, and maintained by escape from scheduled provocations for a specified period of time. Secobarbital decreased non-aggressive responding, while increasing aggressive responding.

**AN EVALUATION OF CARBAMAZEPINE (TEGRETOL) IN CHRONIC TREATMENT-REFRACTORY SCHIZOPHRENIA** J Herrera, J Sramek, J Costa, C Heh and C Wernberg Clinical Research Unit, Metropolitan State Hospital, Norwalk, CA

Many schizophrenics who appear refractory to neuroleptics represent a segment of the disorder in which the symptomatology is characterized by a defect state with few or none of the good-prognosis symptoms (positive symptoms) such as hallucinations and delusions. Instead, the so-called negative symptoms (apathy, poor affect, social withdrawal) predominate. In a recent study, Herrera, Sramek and Costa (1986) reported that the adjunctive use of carbamazepine resulted in a significant improvement on the negative symptoms of schizophrenia. The objective of this single-blind study was to compare the efficacy of carbamazepine alone in the treatment of refractory schizophrenia. Included in the study were 25 male patients who met DSM III criteria for schizophrenia and are proven resistant to previous neuroleptic treatment efforts. Identified study candidates underwent a comprehensive clinical evaluation and then entered a 7 day washout period receiving only placebo cap-

sules This was followed by a 6 week single-blind clinical trial of carbamazepine and after this period, subjects returned to a 7 day placebo washout The results of the study revealed that carbamazepine may be an important antipsychotic agent in the treatment of refractory schizophrenia

**SITUATIONAL, TEMPORAL AND SUBJECTIVE CONTROL OF SMOKELESS TOBACCO USE** Dorothy K Hatsukami, Robert M Keenan and Deborah J Anton University of Minnesota, Minneapolis

The present study is concerned with determining if situational, temporal and subjective factors are associated with smokeless tobacco use In this sample, approximately 72 percent of the chews were associated with feelings of relaxation, boredom, tiredness and/or happiness, whereas 66 percent of the onset of chewing behavior occurred in the situations of after a meal, socializing, driving and/or watching TV or relaxing The temporal pattern of smokeless use showed a positively-accelerating rate of use associated with the morning hours, a constant high-rate of use associated with the afternoon and evening followed by a sharp decline in use at around bedtime These data support the notion that there appear to be situational, subjective and temporal factors associated with the use of smokeless tobacco

**THE SELECTIVE EFFECTS OF ALCOHOL ON COGNITIVE PROCESSES** Jill Fischer Cleveland Clinic Foundation, Timothy B Baker and Arthur M Glenberg University of Wisconsin-Madison

We report on two experiments designed to identify the locus of alcohol's effects on information processing stages, using the Sternberg (1969a,b) short-term memory search task and its long-term memory search modification (Atkinson and Juola, 1974) Free recall and coding tasks were included for comparative purposes in Experiment 1, Daneman and Carpenter's (1980) word/reading span task was included in Experiment 2 to examine alcohol's effects on "working memory" We replicated previous reports of alcohol-induced disruption in long-term free recall and coding but found that alcohol did not affect short-term or long-term memory search or "working memory"

**PIRACETAM EFFECTS ON READING ACHIEVEMENT AND EVOKED POTENTIALS IN DYSLEXICS** C Keith Connors Behavioral Medicine, Childrens Hospital National Medical Center, DC, Mark Reade Johns Hopkins University School of Medicine, Colin Wilsher British Siclac Ltd, Watford, England

Piracetam, a nootropic which is structurally similar to gamma-aminobutyric acid, has been shown to enhance learning, particularly for linguistically-based tasks In the present poster, two studies which evaluated the efficacy of piracetam on reading achievement and/or visual event related potentials will be presented In the first study, 225 dyslexic children were randomly assigned to the medication or placebo group for a 36 week trial period Monthly physical exams and achievement testing was conducted Results indicated that piracetam led to significantly greater academic gains as measured on several standardized tests of reading

achievements Evoked potentials conducted on 29 children at one site indicated that piracetam improved cognitive performance on a task of attention/short-term memory and that differences in ERPs were noted, particularly in the left hemisphere for later components In the second study, children received 1 of 4 dosages of piracetam or placebo over 5 days of testing On each day, a baseline ERP session and 3 additional sessions were conducted A principal components analysis will be conducted to evaluate the impact of piracetam on the ERP data

**PHARMACOLOGIC MANIPULATION OF VISUAL VIGILANCE IN THE NON-HUMAN PRIMATE EXTRAPOLATION TO MAN** J Dean Taylor Institute of Environmental Medicine, New York University Medical Center (Sponsor Hugh L Evans)

A forced-choice visual discrimination task was developed and tested in both human and non-human primates Dependent measures were directly comparable between the two species and included sensory discriminability (A'), bias (B''), response time, response probability, and hit rate as a function of interfering stimuli Monkeys were treated with scopolamine, physostigmine, aniracetam, and scopolamine plus aniracetam Scopolamine injections degraded performance, while physostigmine and aniracetam enhanced some measures of performance Aniracetam offset the decrement induced by scopolamine This model is capable of assessing chemically-induced alterations in higher cognitive function, the results from which can be directly extrapolated to man

**MOTOR EFFECTS OF PIMOZIDE ON DISCRIMINATED LEVER RELEASE IN RATS** Stephen C Fowler and Paul Skjoldager The University of Mississippi, University, MS 38677

This experiment examined the effects of pimozide (0.125, 0.25, and 0.5 mg/kg) on a discriminated lever release task which required the rat to wait with the lever depressed through one of five randomly selected foreperiods (2-6 sec in duration), and release the lever within 0.5 sec of a signalled payoff band to receive food or water reinforcement Results indicate that pimozide produced a dose-dependent increase in the proportions of both anticipatory (premature lever release) and extended (lever release after payoff band) responses The increased proportions of extended responses were hypothesized to parallel the motor disruption observed in the discriminated active avoidance paradigm, while increases in proportions of anticipatory responses were thought to be analogous to akathisia

**THE EFFECTS OF CHRONIC DIAZEPAM ON REPEATED ACQUISITION IN HUMANS** Warren K Bickel Albert Einstein College of Medicine, Stephen T Higgins University of Vermont College of Medicine, Roland R Griffiths Johns Hopkins University College of Medicine

The present study examined the effects of chronic-high doses of diazepam on the acquisition and performance of response chains in humans Diazepam (80 mg) was administered on three consecutive days The effects of diazepam on the acquisition and performance of behavioral chains was