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Ultrasounds (US) in rats may serve a communicative purpose or indicate affective state as they occur only in highly significant situations, such as sex and aggression. Sixty male Long-Evans rats with differential social experience were withdrawn from morphine or placebo pellets; equally treated pairs were observed for 10 min and while solitary at 6, 24 and 96 hr after pellet removal. Withdrawn rats lost weight, displayed "wet dog" shakes, hyperactivity and US, peaking at 24 hr. Defeat experienced withdrawn rats markedly increased their rate and duration of US. Opioid involvement in US generation is demonstrated and is influenced by previous behavioral experience.

**ANTAGONISM OF THE PROAGGRESSIVE EFFECTS OF ETHANOL IN SQUIRREL MONKEYS.** E. M. Weerts and Klaus A. Miczek. Tufts University, Medford, MA.

Dominant male squirrel monkeys treated with 0.1, 0.3 g/kg ETOH threatened rival males more frequently, whereas 1.0, 1.5 g/kg ETOH reduced these behaviors and produced ataxia. A beta-carboline benzodiazepine receptor antagonist, ZK 93426 (3 mg/kg) antagonized only the aggression-enhancing effects of ETOH as well as the frequency of ETOH-induced staggering. ZK may possess mild agonist and inverse agonist properties. ZK (1, 3, 10 mg/kg) administered to animals in the social group significantly decreased the duration of being the target of aggression, and 10 mg/kg ZK decreased aggressive threats. Blockage of the benzodiazepine receptor attenuates the proaggressive and motor incoordinating effects of ETOH.

**CONTACT TRACING IS NEEDED, MANDATORY HIV TESTING IS NOT.** Dominic A. Phillipis, David S. Metzger, George E. Woody and Helen Navaline. University of Pennsylvania, Veterans Administration Medical Center, Philadelphia, PA.

Central to both HIV testing and contact tracing issues is the need to achieve a balance between the individual's right to privacy (and, if necessary, treatment) and the public health. The success of any legislation designed to achieve this balance depends on the compliance of those groups most affected by such legislation. With this in mind, an opinion survey on the two aforementioned issues was conducted on one such group—196 methadone clients from two Philadelphia clinics. We conclude that voluntary testing is preferable to testing mandated by law, especially in light of the success of voluntary testing initiatives. However, contact tracing of partners (sexual and/or needle sharing) of infected individuals is endorsed as a means of introducing these individuals most at risk for contracting HIV in the health care delivery system.

**TREATING ISRAELI OPIATE ADDICTS WITH METHADONE MAINTENANCE VS. CLONIDINE DETOXIFICATION.** Y. ShamHam, E. Shufman, Y. K. Bar-el, J. M. Scher, Z. Zlotogorski and E. Cohen. Uniformed Services University of the Health Sciences, Bethesda, MD.

This 13-month longitudinal study compared the effectiveness of two treatment programs, Methadone Maintenance (MM) with adjunct long-term psychotherapy and Clonidine Detoxification (CD) with adjunct long-term psychotherapy and antidepressants in Israel. One hundred and five heroin addicts participated in the study. The results showed that the combined treatment of CD, antidepressants was more effective than the traditional MM

treatment in reducing the heroin use and dropout rate. The fact that the Israeli drug addicts use low dosages of heroin, and that methadone is a popular illegal drug in Israel may explain the greater efficacy of the clonidine detoxification approach.

**ALCOHOL DOSE EFFECTS ON THE CARDIOVASCULAR STRESS RESPONSE OF MEN AT DIFFERING RISKS FOR ALCOHOLISM.** Sherry H. Stewart, Peter R. Finn, Robert O. Pihl. McGill University, Montreal, Quebec, Canada.

The cardiovascular hyperreactivity to stressors observed in males with multigenerational family histories of alcoholism (i.e., high-risk MFH men) has been found to be significantly dampened by high doses of alcohol (Finn and Pihl, 1987, 1988; Finn, Zeitouni and Pihl, 1990). The present study examined the effects of different doses of alcohol on cardiovascular reactivity in MFH men versus FH controls. Subjects were assigned to one of five alcohol doses (active placebo, 0.50, 0.75, 1.00, or 1.32 ml/kg body weight). Cardiovascular reactivity to a shock stressor was examined in these men while sober and after consuming alcohol. The cardiovascular reactivity dampening effect in MFH males was evident only at moderate to high doses of alcohol, suggesting that these men must consume moderately high doses in order to obtain the potentially reinforcing effects of alcohol.

**BEHAVIORAL PERFORMANCE IN AN MPTP-PARKINSONIAN CO-GRAFTED MONKEY.** J. E. Ellis and L. D. Byrd. Yerkes Primate Research Center; and R. A. E. Bakay. Emory University School of Medicine, Atlanta, GA.

In order to characterize an animal model of MPTP-induced hemiparkinsonism and the recovery of motor function following transplantation of adrenal tissue into the lesioned area, a rhesus monkey (*Macaca mulatta*) was trained to perform a discrete-trial, operant task which resulted in food presentation. After behavioral performance had stabilized on the task and a high level of accuracy was maintained, MPTP (2.0 mg/kg) was injected via the left carotid artery to produce marked impairment of movement of the right arm. Subsequently, medullary tissue was removed from the left adrenal gland and transplanted along with peripheral nerve to the left caudate nucleus. Right and left hand performances were comparable on all dependent measures in the baseline condition, including response time, response accuracy and trials completed. Performance with the right hand was severely impaired following unilateral MPTP treatment, however, and the dependent measures reflected decreased motor control with the right hand. When adrenal medullary tissue was transplanted along with peripheral nerve into the brain, right hand performance exhibited a recovery of function over time. The data indicate that the rhesus monkey and the behavioral task developed during this study can be efficacious in characterizing the effects of MPTP, a neurotoxin, on the CNS and on motor function and in assessing the recovery of function following transplantation into lesioned areas of the brain. (Supported by the American Parkinson Disease Association, Veterans Administration, and USPHS Grants NS-24340, DA-01161 and RR-00165.)

**PANCREATIC INSULIN PARTIALLY MEDIATES THE NICOTINE-BODY WEIGHT RELATIONSHIP.** Margarita Raygada, Stephanie M. Nespor and Neil E. Grunberg. Uniformed Services University, Bethesda, MD.

The inverse relationship between nicotine and body weight is