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Physician's Alcohol NEWSLETTER



JULY 1975

Grant recipients report to National Alcoholism Forum

The recipients of the 1974-75 NCA Bio-medical research grants reported on the results of their work at the National Alcoholism Forum in a session chaired by R. Keith Simpson, D.O., Chairman of the NCA Research and Evaluation Committee.

Neil H. Raskin, M.D. of the University of California School of Medicine reported on investigations of the toxicological role of alcohol dehydrogenase (ADH), the catalyst of ethanol oxidation, with the eye as a model for studies of the hypothesis that retinol is a substrate of ADH *in vivo*. He presented evidence in support of the idea that ADH catalyzes the oxidation of retinol to retinaldehyde.

Richard A. Deitrich of the University of Colorado School of Medicine presented a progress report on plasmalogens in alcohol-related brain damage. The initial results of his work indicate that perhaps there is a decrease in plasmalogens which are structural components of brain cell membrane and myelin sheaths. Whether or not this lesion is a cause or only a result of cerebellar degeneration remains to be seen.

The inhibitory effects of ethanol on the kinetic parameters of brain ($Na^+ + K^+$) ATPase of mice were consistent with competitive kinetics with respect to K^+ and with noncompetitive kinetics with respect to Na^+ or MgATP, reported David C. Lin of the Research Institute on Alcoholism in Buffalo.

Studies attempting to ascertain the causes and results of difference in initial sensitivity to the depressant actions of alcohol were reported by A. C. Collins, M. E. Lesback, and T. N. Yeager of the Institute for Behavioral Genetics of the University of Colorado. Experiments on mice provide evidence that alcohol's depressant actions involve an alteration in the turnover rate of the amine neurotransmitters. In addition, the team obtained evidence for sex differences in the effects of alcohol attributable to differing rates of metabolism.

(Continued on page 3)

NCA-AMSA Medical-Scientific Session

New material on fetal alcohol syndrome, other work in progress featured at stimulating Milwaukee meeting

The newly recognized fetal alcohol syndrome, alcohol problems around the world, and the goals and plans of research institutes were highlights of three plenary sessions at the Medical-Scientific sessions of the National Alcoholism Forum held in Milwaukee April 27-May 2. Over 90 papers on "Work in Progress in Alcoholism—Research and Treatment" were presented at the sessions, which were sponsored by NCA and AMSA, in cooperation with the International Council on Alcohol and Addictions and the De Paul Rehabilitation Hospital and its affiliate institutions, Southeastern Wisconsin Medical Center and the Medical College of Wisconsin.

Fetal alcohol syndrome

About one-third of the offspring of chronically alcoholic women have the fetal alcohol syndrome and closer to one-half have varying degrees of mental deficiency, said David W. Smith, M.D., Kenneth L. Jones, M.D., and James W. Hanson, M.D. from the Dysmorphology Unit of the Department of Pediatrics, University of Washington School of Medicine. They feel that the disorder has not been recognized and therefore not reported in many areas of high endemic incidence of chronic alcoholism. They recommend that chronically alcoholic women be given effective birth control measures and that if they become pregnant be informed of the high risk and given the option of abortion.

Henry L. Rosett, M.D. and Eileen M. Ouellette, M.D. of the Boston University School of Medicine and Boston City Hospital described a pilot prospective study of the fetal alcohol syndrome.

The Maternal Drinking and Child Development Program surveyed 200 women with an average age of 23.6. They were mainly poor, inner-city residents. There was a relationship between the mother's heavy drinking and the drinking pattern of the baby's father. The etiologic role of alcohol is confounded by the fact that most of the heavy drinkers were also smokers and had an inadequate diet. These factors probably have a cumulative effect on the fetus. Offspring of alcoholic women should be observed for functional, developmental, and behavior.

(Continued on page 4)

Effects of alcohol and glucose differ in rhesus monkeys

The metabolic effects of alcohol on rhesus monkeys are not reproduced by glucose, a team led by B. H. Ruebner from the University of California at Davis told the meetings of the Federation of the Society for Chemical Investigations in Atlantic City in May.

A comparison of rhesus monkeys fed a diet in which 41% of the calories were derived from grain alcohol with animals fed control diets with isocaloric amounts of glucose showed that ethanol animals after 28 days developed hepatic fatty change and elevated serum L.D.H. levels. In these animals the half life of ethanol injected peritoneally and of C_{14} antipyrone injected intravenously appeared to be shortened. While there was no change in serum cholesterol, there was a change in serum lipoprotein pattern. The ethanol animals lost approximately 7% of their body weight, while the carbohydrate animals gained very slightly.

Benzyl alcohol inhibits LMC *in vitro*

Benzyl alcohol, as contrasted to ethyl or methyl alcohol, is an effective inhibitor of lymphocyte-mediated cytotoxicity (LMC) *in vitro*, say Andrew Kemp and Gideon Berke of the Division of Immunology at Duke University, Durham,

(Continued on page 3)

EDITORIAL

Dr. Chafetz leaves NIAAA a major force in alcoholism

As we go to press, we have learned of the resignation of Dr. Morris Chafetz as Director of NIAAA. As he goes into other pursuits, we can thank him for addressing his job with a fierce energy, for getting alcohol concerns in the news, and for generating innovative programs and directions for the institute. His imprint has been firmly placed on the alcohol scene in this country.

Though Dr. Chafetz has said he would like to give some of his attention to other problems in the future, we can safely guess that his opinion and consultation will be made available to those in the field of alcohol problems and alcoholism.

Thanks, Dr. Chafetz, for your willingness to do the job you did. Thanks for the flair with which you did it. We hope your successor will be able to bring to the job as ready as wit as yours, and that he will be able to command an equivalent amount of dollars to pursue the programs that people with alcoholism need.

—FAS

BOOKS

Medical Consequences of Alcoholism. Edited by Frank A. Seixas, Kenneth Williams, and Suzie Eggleston. New York: New York Academy of Sciences, Vol. 252, 1975. 399 pp.

This series of papers is the result of a conference held by NCA on April 28-30, 1974.

Alcohol and Aldehyde Metabolizing Systems. Edited by Ronald G. Thurman, Takashi Yonetani, John R. Williamson, and Britton Chance. New York and London: Academic Press, Inc. 1974.

Research on Methods and Programmes of Drug Education. Edited by Michael Goodstadt, Ph.D. Toronto: Addiction Research Foundation, 1975. 190 pp. Paper. \$6.25

Vol. 3 of the published proceedings of the International Symposia on Alcohol and Drug Problems, Toronto, 1973.

The Treatment of Alcoholism: Theory, Practice, and Evaluation. By E. J. Larkin, Ph.D. Toronto: Addiction Research Foundation, 1975. 73 pages. Paper. \$2.95.

A summary of the literature related to current trends in the treatment of alcoholism.



A Memorandum of Understanding between the U.S. Department of Transportation and the National Council on Alcoholism, Inc. was signed June 12, 1975. Present at the signing were John K. MacIver, President, NCA (seated left); U. S. Secretary of Transportation, William T. Coleman, Jr. (seated, right); Honorable Eugene Mangum, Co-Chairman, NCA Traffic & Highway Safety Committee; Thomas G. Terbell, Chairman of the Board, NCA; Frank A. Seixas, M.D., Med. Director, NCA (standing, left to right).

MEETINGS

JULY 21-26—The Casriel Institute of Group Dynamics' intensive one-week workshops for professionals actively engaged in therapy. AUGUST 4-9, workshop for paraprofessionals. Information from the Institute, 47 East 51st Street, New York, N.Y. 10022.

JULY 30-AUGUST 3—Annual Meeting, International Doctors in AA. The Breakers, Palm Beach, Florida. Contact Information Secretary, IDAA, 1950 Volney Road, Youngstown, Ohio 44511.

SEPTEMBER 1-5—Fifth International Conference of the International Association for Accident and Traffic Medicine and the Third International Conference on Drug Abuse. Royal Lancaster Hotel, London. Information from Professor A. Keith Mant, Guys Hospital, London SE 1 9RT.

OCTOBER 26-NOVEMBER 1—International Conference on Alcoholism and Drug Dependence, Sao Paulo, Brazil. Information from ICAA, Case Postale 140, 1001 Lausanne, Switzerland.

NOVEMBER 29-DECEMBER 5—International Symposium on Alcohol and Drug Dependence. Bahrain, Arabian Gulf. Information from ICAA.

RESEARCH AND REVIEW

Peyote effective in alcoholism treatment among Indians

A program for alcoholic Indians in Oklahoma includes participation in the services of the Native American Church (peyote meetings). During these meetings participants often ingest peyote (mescaline), which, like LSD, facilitates cathartic expression and enhances suggestibility. Bernard J. Albaugh and Philip O. Anderson of the U.S. Public Health Service Indian Hospital, Clinton, Oklahoma, report that the peyote meeting, while not a cure for alcoholism, offers some specific advantages in the treatment of the unique problems of the Indian alcoholic. (*American Journal of Psychiatry*, Vol. 131, No. 11, November 1974, pp. 1247-1250.)

Cell-mediated immunity to liver in patients with alcoholic hepatitis

Cell-mediated immunity to normal or damaged liver tissue may act to perpetuate alcoholic hepatitis and thereby contribute to the development of cirrhosis, according to a study by A. A. Mihaş, D. M. Bull, and C. S. Davidson, Thorndike Memorial Laboratory, Harvard Medical Unit, Boston City Hospital. (*The Lancet*, April 26, 1975, pp. 951-952.)

Survey fails to identify specific childhood antecedents to predict alcoholism

In a survey of 5,044 U.S. Army soldiers, several childhood antecedents were associated with non-use of illegal drugs and showed as much as a 20% difference in reported occurrence between abusers and non-users. However, no antecedent showed as much as a 20% difference in reported occurrence between alcohol abusers and non-users. The findings, reported by Forest S. Tennant, Jr., M.D. of Community Health Projects, West Covina, California, to the National Drug Abuse Conference held April 4-7 in New Orleans, essentially substantiates the growing body of evidence that it is nearly impossible to predict who will become an alcoholic by assessing any psycho-social variable.

Brief reports from the conference follow:

Polydrug outreach and casefinding for "hidden drug" problems

Great numbers of polydrug abusers are not really "hidden," say Earnest Boston of New York, et al., but are known for other problems to the entire spectrum of health and social institutions, although frequently they are not identified as such. Recent field work has shown that subgroups of polydrug abusers have very different sources of supplies for their drugs which influence the type of health or social service facility that they contact.

Narcotism vs. alcoholism; crossover or overstatement?

According to Kenneth Smith, M.D. and Suck-oo Kim, M.D. of the Metha-

done Maintenance Institute in Chicago, less than 5% of an addicted population of 2,000 studied over the past three years showed a crossover to alcoholism. The majority of the addicts used little or no alcohol. A very small group drank "socially." Serious drinking problems occurred mainly in the older, longer-term addicts. Few in the series made a transition from methadone or heroin to serious alcohol addiction.

Alcoholics and addicts treated in same setting

The Group Confrontation Ward at the V.A. Hospital in Palo Alto, California, has been successfully treating alcoholics and addicts in the same setting, report Michael Flaherty and Marceline Aycock. The treatment of self-destructive behavior in general rather than specific forms of substance abuse is emphasized. The traditional values and concepts which constitute the basic philosophy of the program are more readily accepted by older alcoholics, who in turn are able to assist the younger addicts to accept and adjust to a chemical-free life-style.

Large-scale treatment of polydrug abuse

Harvey Gollance, M.D., Director of the Morris J. Bernstein Institute of Beth Israel Medical Center in New York described the planning and provision of facilities and staff to provide comprehensive care for the treatment of addictive diseases.

Bio-medical research grant winners report

(Continued from page 1)

Robert W. Guynn of the University of Texas Medical School at Houston, after studying the effect of the dose of ethanol upon intermediary metabolism in vivo in 24-hour fasted rat liver, concluded that either there is an alternative pathway of ethanol metabolism in vivo or the rate of NADH production alone cannot explain the effects of ethanol or intermediary metabolism.

The offspring of ethanol-treated rats showed significantly increased enzyme activity, as measured by tyrosine hydroxylase (TH), over controls in experiments conducted by Dr. Laure Branchey and Dr. Arnold J. Friedhoff of Millhauser Laboratories of the New York University School of Medicine.

Reports on metabolism at Federation meetings

(Continued from page 1)

N.C. Their findings show that heparin did not depress LMC, but significantly enhanced it.

Estrogens and alcohol interfere with vitamin B₆ metabolism

Urinary excretion of tryptophan metabolites is abnormal in oral contraceptive users and synthesis of pyridoxal-5'-phosphate (PLP) from B₆ is decreased in alcoholics during alcohol ingestion. L. Lumeng, R. E. Cleary, and T. K. Li of Indiana University Medical School and the Indianapolis VA Hospital compared plasma PLP of contraceptive users and alcoholics free from liver and blood diseases with those of age and sex-matched controls. 35 of 66 male alcoholics had plasma PLP less than 5 ng/ml, the lowest value encountered in the control group. In other experiments in vitro, acetaldehyde, the metabolic product of alcohol oxidation, interfered with the net synthesis of PLP, apparently by promoting the hydrolysis of phosphorylated B₆, providing a mechanism of conditioned deficiency of PLP in alcohol abuse.

● Power Motivation Training is a new short-term intensive group treatment modality which works toward helping the individual understand the connection between his drinking behavior and his experience of powerlessness. According to Richard E. Boyatzis of McBer and Company, the treatment complements the efforts of other treatment modalities.

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WORK IN PROGRESS REPORTED AT MILWAUKEE

(Continued from page 1)

oral disturbances in addition to gross morphologic anomalies, said Dr. Rosett.

Dr. Ouellette reported on the infants born during the study period. Only one of the nine babies born to heavy drinking mothers was normal. Single minor congenital anomalies were found in all groups but were present in four out of nine babies born to alcoholic women. Twice as many offspring of alcoholic women showed hypotonia or jitteriness as those of abstainers. These babies were also shorter, lighter, and had smaller brain weights.

It is likely that these infants represent the most severely afflicted at one end of a bell-shaped curve and that a spectrum of structural, growth, and functional abnormalities can be found in offspring of alcoholic women.

Brief reports from the conference follow:

CLINICAL STUDIES

Acute alcoholism affects electrocardiogram

Only three of 39 patients studied at the Clinic Investigation Unit of the Addiction Research Unit of the Addiction Research Foundation and Toronto Western Hospital were completely free of electrocardiogram abnormalities. None of the patients had any prior history of cardiovascular disease, said Stuart M. MacLeod, M.D. Further studies will be needed to determine whether these arrhythmias are related to acute effects of ethanol on the myocardium or to other factors such as acetaldehyde concentration, changing pyruvate: lactate ratio, or catecholamine release.

Desire to drink related to BAC

A new 7-point scale ranging from intense desire to intense disgust has been developed for evaluating the reported level of the desire for a drink. Of 200 patients admitted for detoxification at the Downstate Medical Center in Brooklyn, those who reported an intense desire to drink had a higher mean blood alcohol level than those who reported a neutral or negative attitude. The effect was greatest among the younger patients (ages 20-30). The report was prepared by a team led by M. M. Gross, M.D., and reported by H. Kierszenbaum, M.D.

Alcohol-induced ring sideroblastosis and Vitamin B₆ metabolism

A study of 60 alcoholic subjects at the University of Washington School of

Medicine revealed that sideroblastic changes were found to be far more prevalent in those subjects with a more chronic history of alcohol abuse, malnutrition, and the major complications of alcoholism than in binge drinkers who were generally in good health, said L. Solomon, M.D. The finding in the study of increased erythrocyte pyridoxine kinase activity with normal saturation of EGOT, when considered in conjunction of the finding of Lumeng and Li of increased erythrocyte PLP phosphatase activity suggests a balanced increase in PLP turnover without impairment of PLP dependent cellular functions.

Alcoholism precipitates life crises

Abnormal drinking behavior precipitates life crises and therefore increases psychiatric impairment, Roger A. Bell, Ed.D. and Kim A. Keeley, M.D. of the University of Louisville School of Medicine conclude after a survey of 2,029 randomly selected alcoholic respondents over the age of 18, compared with a random sample of control patients. Alcoholics reported abnormal drinking behavior 3 to 5 years prior to the present. 85% of all life crisis events occurred within the past two years.

Successful alcoholism program in a general hospital

The Southern Tier Alcoholism Rehabilitation Service, after one year of operation in St. Joseph's Hospital in Elmira, New York, has been successful, said Brian R. Nagy, M.D. Detoxification is followed by educational and psychosocial diagnostic and supportive services through a team approach. Families are involved in the program. A special problem has been the emergency room, where the staff that first sees the patients often does not see the results of their work, and consequently has negative and hostile attitudes toward the patients.

Staff attitude changes after alcohol rehabilitation unit developed

The establishment of an inpatient Alcohol Rehabilitation Unit within a psychiatric ward of a military general hospital resulted in an increased staff willingness to work with alcoholics, more positive attitudes toward the patients, an increased knowledge about the disease, and abandonment of stereotyped responses. George S. Glass, M.D. of the University of Texas Medical School at Houston reported on the results of a questionnaire completed by an experimental group of staff (working on the new unit) and a control group (working on a ward without the unit).

Drinking and socializing among "extrover" and "introvert" alcoholics

Both the tendency toward extroversion and alcohol consumption facilitate social interaction among chronic male alcoholics, although these factors apparently operate independently, said Charles C. Thornton, Ph.D. reporting on a team study at the VA Hospital at Coatesville, Pa. The facilitating effects of alcohol are short-lived. Drinking may persist because the early effects, occurring at a lower alcohol level, might be more likely to be remembered and thus to influence subsequent behavior. The effect of drinking on social interaction was essentially the same for "introverts" as for "extroverts." Though the extroverts socialized at a higher level than did the introverts, this difference was independent of drinking.

METABOLIC RESEARCH

Ethanol induces alterations in dopamine metabolism

Henry Weiner and A. William Tan of Purdue University, reporting on their work in the enzymology of the neurotransmitter metabolism, said that the alteration of metabolism in the presence of ethanol can be due to a change in the alcohol dehydrogenase-coenzyme complex and not just to an increase in the cellular NADH/NAD ratio. If alcohol dehydrogenase is involved in the metabolism of other compounds such as steroids, the presence of ethanol could alter their metabolism by the same proposed mechanism.

DOPA inhibits acetaldehyde metabolism

Alcohol consumption in patients during treatment with DOPA and Ro44602 (a dopa decarboxylase inhibitor) might be expected to result in abnormal acetaldehyde (ACH) levels, leading to alterations in the effectiveness of DOPA and attenuation of Ca concentrations, said Michael Collins, Ph.D., et al. of the Loyola Medical School and Chicago Medical School. Pyrogallol inhibits the oxidation of ACH in rats, also depleting endogenous catecholamines and forming tetrahydroquinoline (TIQ) alkaloids. The dopa decarboxylase inhibitor, Ro44602 also inhibits the oxidation of ACH but to a lesser extent. The TIQ alkaloid tetrahydropapaveroline would be the result of the reaction.

Further NCA-AMSA Medical-Scientific session reports

Ethanol, serotonin metabolism, and body temperature

The effects of ethanol on rectal temperature in mice were additive with those of serotonin (5-HT), said Dr. Boris Tabakoff of the University of Health Sciences, Chicago Medical School. Considering the possibility that ethanol may block the transport of amine from the brain as well as transport of its acid metabolite, the effects of ethanol were compared with those of probenecid. Probenecid alone produced a drop in temperature which was found to be additive with the effect of 5-HT.

Selective action of alcohols on cerebral calcium levels

There may be a common mechanism by which alcohol and opiates act to alter calcium-neuronal membrane associations, said David H. Ross and H. Lee Cardenas of the University of Texas Health Science Center. The changes in calcium binding to specific neuronal sites on the membrane may be responsible for the induction of cellular adaptation of these addictive agents. In addition, the ability of naloxone to cause selective replacement of calcium may have therapeutic effectiveness in treatment of acute alcohol toxicity.

Effect of ethanol upon human catecholamine metabolism

S. E. Gitlow, M.D. et al. of Mount Sinai Hospital in New York City reported on work in which the excretion of the major catecholamine metabolites was measured during ethanol ingestion as well as withdrawal and control periods. Changes in the relative specific activities of vanillylmandelic acid and 3-methoxy-4-hydroxy-phenylethylglycol suggested that ethanol modified the metabolism of the central neurotransmitter, norepinephrine. Ethanol increased and withdrawal decreased norepinephrine synthesis and turnover rate, whereas increased epinephrine synthesis was only observed during withdrawal.

SOCIAL AND CULTURAL STUDIES

Rural alcohol abuse needs study

Studies of alcohol abuse in rural America have not been pursued on the same scale as urban studies, said William R. Smith, Ph.D. of Texas A & M University. He reported on a study of 160 rural male subjects.

Beneficial effects of early treatment questioned

According to data presented by Paul Moberg, of the De Paul Rehabilitation Hospital, the basic assumption that early case alcoholics are more amenable to treatment than are chronic cases is open to question. Preliminary analysis of three-month follow-up data on first admissions of 293 subjects indicates that early and crucial phase alcoholics are significantly less successful than chronics in terms of the abstinence criteria of treatment success.

Alcoholism and the child molester

A study of over 200 pedophilic sex offenders committed to Atascadero State Hospital for child molesting showed that 49% of the child molesters were drinking at the time of the commission of the offense and 33% were considered alcoholic. The study was reported by Richard T. Rada, M.D. of the University of New Mexico School of Medicine.

Unrecognized alcoholism in geriatric patients

Psychiatric illness was missed in admissions diagnosis for almost 80% of mentally ill surgical elderly patients and slightly more than 25% of mentally ill medical patients admitted to an acute ward of the La Jolla VA Hospital, said Marc A. Schuckit, M.D. of the University of California San Diego Medical School. The most frequently overlooked psychiatric problem was alcoholism.

Ethnic preferences vary in alcohol treatment in Hawaii

In a random sample of an ethnically diverse neighborhood of Honolulu, the Caucasian group was readier to ignore mild alcohol problems but would turn to specialized alcohol agencies with problems perceived to be more severe. The Oriental group favored an informal—personal or familial—approach to the milder problems, but would turn to doctors or ministers for more severe problems. The third, predominantly Polynesian group leaned toward the Caucasian position on some problems and toward the Oriental on others.

The results, according to Roberta V. Sanders of the Alcohol Treatment Facility, indicate that reluctance to make use of specialized alcoholism agencies is not due to indifference or failure to perceive problems but is due at least in part to consistent group preferences with regard to different forms of alcoholism treatment.

Other reports

● Tarahumara Indians do not show a large autonomic response to ethanol, as do Chinese, Japanese, and Koreans, said Arthur Zeiner, Ph.D., Alfonso Paredes, M.D. and Lawrence Cowden of the University of Oklahoma.

● High levels of dopamine beta hydroxylase (DBH) activity are related to higher feelings of euphoria and well-being and might determine or reflect susceptibility to the effects of alcohol, said John A. Ewing, M.D. of the University of North Carolina School of Medicine.

● Sinclair (S-1) miniature swine are practicable as models for the study of human alcoholism because of the presence of self-selection of dietary ethanol, spontaneous consumption of ethanol to a state of intoxication, physical dependence as expressed by withdrawal signs, and tolerance exhibited as increasing consumption without marked increases in frequency of severe intoxication, according to J. D. Dexter, et al. of the University of Missouri.

● According to John T. Thompson and Ronald C. Reitz of the University of North Carolina School of Medicine, the acute effects of alcohol on choline oxidation could be strictly related to the production of NADH, while the chronic effects could be related to mitochondrial membrane damage or alteration as well as NADH.

● Studies of rats, reported Jack Wang of St. Luke's Hospital Center in New York City, suggest that caloric malnutrition affects growth (weight increase) less than alcohol; recovery from caloric deficit is faster than recovery from alcohol; and alcohol inhibits appetite.

● A team from the University of Texas Health Science Center, led by Kenneth Blum, Ph.D., reported on mice studies that suggest a hyperexcitable role for catecholamine-derived TIQs in alcohol withdrawal states.

● Dr. Denes de Torok of Mayview State Hospital in Bridgeville, Pa., speculates that higher levels of haptoglobin observed in an alcoholic group existed prior to the onset of heavy drinking, for heavy drinking typically causes liver damage which results in a reduction of haptoglobin levels.

● Serotonin depletion in the mouse blocks the respiratory depression induced by a homologous series of simple alcohols, methanol, isopropanol, or propanol, said Alfred A. Smith of New York Medical College.

Brief Reports from NCA-AMSA Meetings

● Data presented by S. W. French et al. of the Faculty of Medicine of the University of British Columbia fit the subsensitivity hypothesis of ethanol dependency, i.e., while rats are ingesting ethanol there was a shift to the right of the dose response curve of cerebral cortical slices to NE. This finding could explain tolerance and the evoked seizures observed during the first day of ethanol withdrawal.

● Work reported by A. Y. Sun of the Sinclair Comparative Medicine Research Farm, indicates that ethanol may alter the fine arrangement of lipid molecules and consequently hinder the transmembrane process which presumably involves a conformational change of the carrier protein. ^{14}C -ethanol was used to demonstrate that the inhibition of membrane-bound Na-K ATPase by ethanol was a readily reversible process.

● S. Cohen, M.D. of the Alcoholism Commission of Saskatchewan reviewed several groups of hypoglycemic patients studied at the Alcoholism Clinic: the unfed alcoholic who has been on a drinking binge from 7-10 days; patients who are on the recovery program 48-96 hours after stopping drinking who show evidence of hepatic disease; outpatients who have been abstinent for 4-6 weeks; diabetic and elderly alcoholic patients who have been taking hypoglycemic agents; and cases of patients with hypoglycemia being mistaken for alcoholics.

● Chronic ingestion of ethanol triggers processes that allow a normal management of water by enlarging the neurohypophysis to facilitate ADH release and increasing kidney sensitivity to circulation ADH but the neurohypophysial system response to acute stimulation (hypertonic saline, nicotine) has been altered, said Guillermo A. Zaballos et al. of the New York Medical College.

● Electrodiagnostic studies of 250 patients at the UCLA School of Medicine showed a very high incidence of both myopathy and neuropathy, and in a high percentage of detoxification cases, an inhibition of the normal ability to continuously fire voluntary motor units upon maximal contraction. The silent period, said Ralph E. Worden, M.D., lasts from 50 to 100 m.s. and may or may not have a relationship with the voluntary or involuntary tremors seen in D.T.'s.

● Lithium treatment reduces ethanol preference in rats, but has no effect on the withdrawal symptomatology, reported

A. K. S. Ho and C. S. Tsai of Wayne State University.

● Primidone used in withdrawal seizures nearly eliminates "rum fits," but this agent can continue sedative dependence and precipitate withdrawal if it is suddenly discontinued, reported Russell F. Smith, M.D. and Richard Morin, M.D. of Brighton Hospital in Whitmore Lake, Michigan.

● Chronic alcoholics who continue to be involved in a counseling program do not abuse Librium, said Emil Rothstein, M.D. of the VA Hospital in Brockton, Mass.

● A statewide survey in Wisconsin suggested that 5-6% of the inpatients in the state on any one day are hospitalized at least in part because of some drug abuse problem. According to Joseph M. Benforado, M.D. of the University of Wisconsin School of Medicine, the most abused drug is alcohol (76% of such patients).

● The proportion of AA members utilizing professional help both before and after affiliation with AA is larger than many professionals would estimate, reported Milton A. Maxwell, Ph.D., Center of Alcohol Studies of Rutgers University, in a study based on interviews with AA members.

● Detoxification units which offer only tertiary prevention may become just as stereotyped as their patients, said Kim A. Keeley, M.D. and Roger Bell of the University of Louisville School of

Medicine. They suggest that detoxification units can assist in the recognition of patients who may benefit from secondary prevention programs.

● Drinking as a form of escapism now affects all Soviet social groups, said Boris M. Segal, M.D. of the Russian Research Center, Harvard University.

● An education and treatment program for problem drinking offenders is now being established by the Bureau of Clinical Services, Division of Corrections, in Wisconsin. The program, described by David Goodrick, Ph.D., is a voluntary, pre-release project utilizing a functional approach to problem drinking and incorporating individualized treatment for the participants.

● A pilot study of interpersonal perceptions between alcoholic husbands and their spouses in different states of intoxication showed that the ability of an individual to predict his or her own experience of the intoxicated condition is highly variable, not only from couple to couple but also between husband and wife and even between one dimension and another for a given individual. The study was reported by Donald I. Davis, M.D. of the George Washington University School of Medicine.

● The Peyote Ritual of the Native American Church is a valid psychotherapeutic structure for the treatment of alcoholism among the Caddo and Arapaho Indians of Oklahoma, according to a study by Paul Pascaros, M.D. who lived among the Indians.

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PHYSICIAN'S ALCOHOL NEWSLETTER
Two Park Avenue
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