Lausanne symposium hears biomedical advances in alcohol

The action of alcohol on the pancreas is different in "alcoholic" and "nonalcoholic" dogs, H. Sarles of France told the Third Biennial International Interdisciplinary Symposium of the Biomedical Alcohol Research Section held in Lausanne, Switzerland, June 7-11. The conference was cosponsored by the International Council on Alcohol and Addictions and the World Health Organization.

In chronic alcoholic dogs, said Sarles, alcohol doesn't act directly on the pancreatic cells but through modifications of cholinergic nerves (and gastrointestinal mucus), explaining the inadequacy of in vitro models.

Other reports

- A seven-point Desire to Drink Scale proved to be a reliable clinical instrument in a 16-day study of experimental alcoholization and withdrawal in seven alcoholics, said Milton M. Gross et al. of Downstate Medical Center Brooklyn, the conference organizer.

- There is now abundant electrophysiological evidence showing that both alcohol and opiates act at multiple sites in the neuraxis rather than a single one, and that the supposed "specific" sites of action depend on our choice of those actions (such as analgesia, ataxia, "running fits") which we deem important, said Eduardo Eidelberg, M.D., Barrow Neurological Institute of St. Joseph's Hospital and Medical Center, Phoenix, Arizona.

- Several reports discussed the relationship between ethanol-induced increases in slow wave sleep (SWS) followed by marked suppression of SWS during abstinence with a very slow recovery function toward normal. R.F. Allen et al. reported on experiments comparing alcohol versus lithium withdrawal treatment programs. In one experiment subjects treated with ethanol showed higher levels of SWS with some indication of earlier recovery than the lithium group. A model relating SWS state to addiction is needed.

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Current work in progress featured at AMSA-NCA Medical-Scientific sessions

All aspects of current research in alcoholism were covered in the 150 papers delivered at the Medical-Scientific sessions of the National Alcoholism Forum, May 6-8, 1976, at the Shoreham Americana Hotel in Washington, D.C. Titled "Work in Progress on Alcoholism II," this meeting, the seventh in a series, is now sponsored jointly by AMSA and NCA and organized by Dr. Frank Seixas and an AMSA program committee. The meeting presented major new data which will be incorporated into identification, treatment and evaluation programs as well as further research projects during the coming year.

Scientists challenge Rand study on controlled drinking

Research scientists who have reviewed the recently released Rand Corporation study which suggests that some alcoholics may return to "normal drinking" challenged its scientific basis during a news conference held by NCA in Washington July 1. Spokesmen for labor and management and clinical alcoholism programs also gave their views. The group labeled the report "biased" and "dangerous" and questioned the methodology employed by Rand.

Dr. Luther A. Cloud, Vice Chairman of the Board of Directors of NCA, said: "We are compelled to respond to the Rand Report at the public level because of our grave concern that the misleading publicity generated by this study could have tragic consequences."

Dr. Frank A. Seixas, Medical Director of NCA, said: "Any suggestion, based on this report, that an alcoholic should return to 'normal drinking' is unsupported by the data in the study itself. The major conclusion of the study was based on only 8 cases, not over 1,000, as widely assumed."

Dr. Herbert Barry III, Professor of Pharmacology, University of Pittsburgh, said: "Conclusions from this study should be viewed with particular caution because: 1) An 18-month follow-up is not sufficient time to judge potential for relapse in so-called 'normal drinkers'; 2) Conclusions by the authors which are not supported by the extremely small number of cases on which they are based; 3) The definition of remission is too loose for accurate interpretation."

Alcoholic brain damage

Feared at the conference was a plenary session on the subject of brain damage in alcoholism. Dr. Oscar Parsons of the University of Oklahoma, who chaired the panel, called attention to the fact that 50-70% of unselected alcoholics have cortical or subcortical atrophy. The magnitude, plus the fact of neuropsychological deficits correlated with this, is not presently completely known, nor is the degree of recovery which can be attained. "We desperately need a large-scale follow-up study examining neuropsychological functioning over a three-year period," said Dr. Parsons. "Organic or mental deterioration among alcoholics carries a poor prognosis and is over-represented in clinic dropouts." These introductory remarks ushered in a session which, for the first time, demonstrated a chemical defect in the brains of human alcoholics which apparently is not nutritionally related.

Plasmalogens, a group of lipids found in myelin, were discovered by Dr. Richard Delitch of the Colorado University School of Medicine, to be decreased in the vermis but not the hemispheres of the brains of 32 who had significant alcoholic cerebellar disease before death. Since malnutrition would cause a more uniform decrease of substances in both parts of the cerebellum, the role of nutrition in causing the lesion, characteristic of alcoholic cerebellar disease, was called into serious question. Previously, neurologists have strongly asserted that malnutrition, particularly of thiamine, was the sole cause of alcoholic brain disease.

Using a new tool, computerized axial tomography, which provides a non-
Walsh research fund established

The Michael J. Walsh Research Fund has been established to honor the late Dr. Michael J. Walsh, who was at his death on June 16, 1976, an Associate Professor of Pharmacology at Eastern Virginia Medical School in Norfolk, Virginia. Dr. Walsh was working on research on the alterations of brain biogenic amine metabolism caused by alcohol and acetaldehyde.

Contributions to the research fund may be addressed to Research Department, NCA, 733 Third Avenue, New York, N.Y. 10017.

Hoff, Fox receive alcoholism awards

The American Medical Society on Alcoholism's medal of honor was presented to Ebbe Curtis Hoff, M.D., at the Medical luncheon of the NCA/AMSA meeting in Washington.

Dr. Hoff will be retiring as Professor of Psychiatry and Physiology from the Virginia Commonwealth University, Health Sciences Center Medical College of Virginia and as Medical Director of the Bureau of Alcohol Studies of the Virginia State Health Department.

He began a long interest in psychoanalytic illnesses and alcoholism at the Medical College of Virginia, where he initiated the Division of Neurological Science (later Psychiatric Research). His overlapping concerns in both neurology and psychiatry led him into studies, among many others, of the relationship between the prefrontal and limbic areas of the brain and anxiety in alcoholic patients.

Also at the meeting Dr. Ruth Fox, a psychiatrist who pioneered in alcoholism treatment and previous Medical Director of NCA, was awarded NCA's Gold Key.

Vigo meetings stress prevention, treatment

Alcoholism, and its social and legal implications, was discussed by experts at the 22nd International Institute on the Prevention and Treatment of Alcoholism, held in Vigo, Spain, June 7-11.

Dr. Jo Casselman, Lecturer in Community Psychiatry, at the University of Louven, Belgium, presented a design of ongoing research comparing a prison and hospital population of alcoholics. He stated that although many alcoholics entering a prison present similar personal problems to alcoholics admitted to a psychiatric hospital, they differ on social variables, with more lower-class alcoholics entering prisons. Traditional treatment centers are not well prepared to treat alcoholics with the characteristics of prison alcoholics.

Charles P. Frazier, Director of Education of the Christopher D. Smithers Foundation, Inc., New York, described the five years following 1970, when Congress passed a major bill to fund alcoholism activities, as "a five-year journey with many misdirections." He said that although many good things have been accomplished with federal support, the overall problem still remains largely untouched. He called for increased unity among agencies and better efforts at prevention of alcoholism through education.

BOOKS


The proceedings of two satellite symposiums to the Sixth International Congress of Pharmacology, held in Helsinki, Finland, July 26, 1975.


Compilation of information about 500 education and training resources in the East.

The Woman Alcoholic. By Vera Lindbeck (Public Affairs Pamphlet No. 529). Distributed by NCA, 733 Third Avenue, N.Y. 10017. 28 pp. $3.50.

A discussion of patterns in alcoholism among women, case histories, how to help, and resources for recovery.

MEETINGS


FEBRUARY 25-MARCH 5, 1977—Medical Seminar and deluxe cruise, sponsored by University of North Carolina Center for Alcohol Studies, in cooperation with NCA and Caribbean Institute. Lecturers (Category I AMA Continuing Education Credit), visits to alcoholism facilities on five Caribbean islands. For more information, write John A Ewing M.D., Professor of Psychiatry, Center for Alcohol Studies, University of North Carolina, Chapel Hill, N.C. 27514
invasive method of determining cerebral atrophy. Dr. Philip Epstein et al. of Rush Medical Center, Chicago, found that of 52 chronic alcoholics, 27 had evidence of cerebral atrophy. Longer duration of alcohol and higher average consumption of alcohol, as well as withdrawal symptoms, were positively correlated with the presence of atrophy.

Dr. George Prigatano of the VA Hospital, Oklahoma City, found in a study of 36 recidivist alcoholics that 22 showed impairment when given the Halstead neuropsychological test battery. Most impaired was the ability to learn from environmental feedback. Dr. Nelson Butters et al., of the Boston University School of Medicine, studied the memory defect in Korsakoff's Syndrome extensively and found three parallels between non-Korsakoff long-term (over 10 years) alcoholics and Korsakoff patients. They were impaired in short-term memory functioning and in the utilization of semantic cues to facilitate recall, but they were able to improve short-term memory performance when exposed to manipulations that reduced proactive interference with the learning situation. Dr. David Caster of the Oklahoma City VA Hospital was able to improve results in 63% of previous treatment failures found to have disturbed cortical function, by a program combining disulfiram, weekly counseling session did as well on all variables as the regimen which would probably be offered by most clinics. Toby Levinson of the Donwood Institute, Toronto, Canada, described a follow-up survey of that institution which showed 51% recovered or significantly improved after 18 months and 41% after five years. Dr. Alfonso Paredes of the University of Oklahoma Medical School reported on a new method of quality control and follow-up through a computerized statewide information system developed to monitor the state-funded alcoholism treatment units in Oklahoma. By checking on costs of treatment for individual clients, the computer can uncover areas where improvement is possible. For instance, when reimbursement varies from $3 per client to $2,027, with a mean of $269, investigation can reveal where adjustments in treatment need to be made. Larger expenditures did not correlate with better therapeutic outcome.

Using reported treatment outcomes of many programs as his raw material, Dr. Raymond Costello, of the University of Texas Health Science Center, determined by statistical means the characteristics of programs which reported the best results. The best outcome studies were in programs which refused to take poor risk cases, which had inpatient treatment, a broad range of treatment, and high staff investment. Enthusiastic use of Antabuse was also positively correlated with success. Dr. Robert Pandina, of Rutgers University School of Alcohol Studies, outlined what he considers essential questions to be answered by evaluation: "What clinical syndrome at which stage of development on what kinds of clients respond under what conditions in what short and long range ways to which measures evaluated by whom?"

Psychiatric disorders associated with alcoholism

Dr. Peter Stokes, chairman of the AMSA Program Committee and psychiatrist at the Payne Whitney Clinic, New York, moderated a panel on psychiatric disease coexistent with alcoholism. Dr. Richard C. Fowler of the University of Iowa Medical School showed the definite presence of a small number of schizophrenics, manic depressives, and sociopaths in 100 consecutive admissions for alcoholism. Dr. V.L. Tanna, also of the University of Iowa, showed that among familial depressives—stem disease exhibited by alcoholism in males, lithium appeared to have a more significant effect on the alcoholic than the depressive. Dr. Edward Truitt of The George Washington University Medical Center, citing animal studies, showed good reasons to continue the exploration of lithium as a primary treatment for alcoholism, as did Dr. Alex Coppen of West Park Hospital, Epsom, Surrey, in reported studies, although Dr. Coppen was unable to attend. An evening workshop panel further explored these questions.

Workshop topics

Evening workshops were a new program feature of this conference. One, on the metabolism of alcohol, chaired by Dr. Charles Lieber of the Mt. Sinai School of Medicine, brought new agreement on the induced metabolism of ethanol over and above ADH metabolism.

The workshop on the fetal alcohol syndrome, chaired by Dr. Henry Resett of the Boston University School of Medicine, documented in a prospective study a 63 percent incidence of abnormalities in babies born to heavily drinking mothers. The alcoholic physician was the subject of the workshop chaired by E.M. Steindler of the AMA Department of Mental Health. Twenty-six states have now changed their laws to accommodate identification and treatment of the alcoholic physician, and 26 state medical societies have programs in operation or formation. Details of several state plans were outlined.

In a workshop devoted to ethics and alcoholism, Dr. Sheila Blume, of Central Islip State Hospital, outlined the direc-
More Washington reports
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tion and meaning of the new confidentiality requirements of records for patients with alcoholism.

New test for alcoholism

Perhaps the most spectacular report in the submitted papers was the discovery of a new test for "alcoholism." In the course of exploring another new finding--the previously described fatty liver contains also an overabundance of amino acids--it was found by Drs. Spencer Shaw and Charles Lieber that plasma levels of Alpha Amino n-Butyric Acid are significantly elevated in comparison to leucine in subjects who have been drinking heavily and steadily. The effect is not related to liver injury but to alcohol metabolism, and lasts long after all alcohol has left the body (at least 2-4 weeks). This measurement thus could give a great deal of assurance to people monitoring abstinence statements by follow-up clients.

Other reports

Many withdrawal methods were assessed in different papers, and the exclusive use of magnesium sulphate was championed by Dr. Oded Skulsinger et al. of the Los Angeles County/USC Medical Center. Dr. Boris Tabakoff, of the University of Illinois Medical Center, demonstrated in mice that hypothermia during withdrawal was diagnostic of physical dependence and correlated with the severity and time course of the withdrawal syndrome. Dr. Richard Rada, of the University of New Mexico School of Medicine, showed that with the use of the Porch Index of Communicative Ability, used for the first time in alcoholics, important communicative defects could be ascertained, particularly in the first period of sobriety, which must be taken into consideration in treatment efforts. Drs. E.S. Parker, R.L. Alkana, T.A. Willingham and E.P. Noble, of the University of California at Irvine, used a battery of tests similar to that of Caster et al. on social drinkers, determining the extent to which cognitive defects extend to this group.

Using six measures, Dr. Ann P. Streisguth of the University of Washington School of Medicine found them to correlate well in determining intake of low and moderate volume drinkers, but they failed to correlate in high volume drinkers. This study may have a large impact in assessing interpretations of questionnaire surveys in alcoholism. Both Drs. Harold Ginzburg (NIDA) and Harriet Lynton Borr (Eagleville), in separate papers, found that the methadone patient with alcoholism was, surprisingly, an alcoholic before he became a heroin addict. Thus, it is hard to say that a new dependence on alcohol as a heroin substitute was engendered.

In St. Louis, Missouri, 214 murder victims were measured for alcohol levels. Half of these victims had significant alcohol levels in their blood, as reported by Dr. Marjan Herjanic of the Washington University School of Medicine. Thus, despite the huge increase in murder rate, the alcohol relatedness of this crime has not stayed the same as in prior studies before the acceleration of murder statistics.

A highlight of the National Alcoholism Forum was a banquet honoring 53 prominent recovered alcoholics. Composed of government officials, stars of stage, screen and television, writers, lawyers, doctors, the ministry, military, industry leaders and an Indian chief, these persons had the courage to publicly reveal their alcoholism and their recovery at this time as a message of assurance to those who are still suffering from alcoholism that they, too, can recover.

Announcement was made, at the conference, of a forthcoming new addition to the literature in the alcoholism field.


current edition of ALCOHOLISM--Clinical and Experimental Research, a quarterly journal to be published by Grune & Stratton, will be issued quarterly starting in January 1977. The editor will be Dr. Frank A. Seixas; Dr. Charles S. Lieber will be chairman of the Editorial Board and Dr. Ernest P. Noble is Chairman of the Editorial Advisory Board. It will be the official journal of the American Medical Society on Alcoholism and the Research Society on Alcoholism, now in formation.

Lausanne reports
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along with consideration of the implication of continuing the SWS suppression by use of sedative-hypnosis in withdrawal treatment or continued abstinence.

- Evidence that ethyl alcohol has a mutagenic effect on male mice was presented by F.M. Badr, et al. of the Kuwait University.

- David Lester of the Center of Alcohol Studies of Rutgers University reported on characteristics of rat strains selectively bred for differing reactivity toward alcohol. Both a "most affected" and "least affected" strain are being bred to advance the development of an animal model of human alcoholism.

- The baboon model closely mimics the clinical course of a majority of alcoholics who develop cirrhosis without displaying an apparent stage of severe alcoholic hepatitis, said Charles S. Lieber, Bronx VA Hospital and Mt. Sinai School of Medicine.

- During the ingestion of alcoholic beverages, the upper gastrointestinal tract is exposed to much higher concentrations of ethanol than any other tissues, according to J. Lindenbaum, M.D. Chronic ethanol feeding in man in the absence of nutritional deficiency interferes with jejunal electrolyte and water transport and impairs the absorption of intrinsic factor-bound vitamin B12 by the ileum. Fat and xylose absorption are not depressed, however.

- In comparison with a normal population, a group of male addictive alcoholics in Yugoslavia showed increased occurrence of whorls and arches on the fingers, decrease in the total finger ridge count, and other palmar and fingerprint characteristics. There were also greater frequencies of certain genetic blood markers. These findings, say T. Kojic, et al., of the Special Hospital for Psychiatric and Nervous Diseases, in Beograd, may lead to detection of predisposition of alcoholism caused by genetic malformations.