The "Symposium On Multiple Chemical Sensitivities: State of the Science", was held in Washington, D.C. November 19-20, 1992. Multiple Chemical Sensitivity (MCS) is receiving increased attention from State Legislatures and regulatory agencies. It was stated that eight states have enacted legislation recognizing MCS as a disease and some workman compensation claims have been made under the umbrella of the American Disability Act (ADA). "MCS" advocates are specifically targeting the following industries: tobacco; agriculture chemicals; food additives; paper and pulp; hazardous wastes; fragrances; and carpet manufacturers. The purpose of this symposium was to review the state of the science and specifically to attempt to define causality for "MCS".

Ronald E. Gots, M.D., Ph.D., founder and President of National Medical Advisory Service (NMAS) and chairman of the science advisory board of the National Environmental Quality Associations's Total Indoor Environmental Quality Association (TIEQ) began the discussion with a historical review of causal attributions in medicine. Dr. Gots compared the emergence of "MCS" with medical phenomenons he characterized as "medicine practiced by hypothesis". He compared "MCS" to "intestinal autointoxication", a popular medical prognosis in the early 1900's. The characteristics of "autointoxication" and "MCS" are identical with the symptoms identified as: fatigue; feeling "dopey"; headaches; abdominal pain; and decreased appetite. "Autointoxication" was believed to be caused by an abnormal position of the intestines which resulted in the accumulation of toxins while "MCS" is believed to be caused by toxins in the environment. Controlled studies conducted in 1928 lead to the demise of "autointoxication" and similarly, Dr. Gots believes that well conducted controlled studies may do the same for "MCS". Dr. Gots believes the reason for the popularization of "MCS" are: empowerment of patient for holistic medicine; chemical/technological fears; victimization movements; physician validation; and reimbursement (workman's compensation and tort litigation).

William J. Waddell, M.D. and Chairman of the Department of Pharmacology and Toxicology, University of Louisville, Kentucky reviewed the science of toxicology and its relevance to "MCS". Dr. Waddell stated that in order for a substance to have an association with a causation for a specific disease, it must meet the following criteria: there must be strength of evidence; consistency; specificity; biological plausibility and animal verification. In his review of "MCS" literature; he has been
unable to identify a specific disease, a dose response or a specific cause. In fact, he claims the specific terminology used in the literature connotes emotional bias because the terms often referenced are: "industrial chemicals"; "synthetic alcohol"; "synthetic material"; "chemical contaminant"; and "toxic substance". Dr. Waddell believes a chemical is a chemical be it "naturally occurring" or "synthetic" and exposure to any chemical may produce an effect depending on the dose. Based on his review of the literature, he stated: "currently, there is no scientific evidence of 'MCS'; the science of 'MCS' exhibits the symptoms of pathological science." That is, the measurements are subjective; effects are barely detectable; effects are independent of dose; proponents claim great accuracy; and criticism is met by ad hoc excuses. In order to accept "MCS" as a disease, Dr. Waddell believes that one would have to dismiss the fundamental principles of toxicology.

Abba Terr, M.D. a specialist in allergy and immunology and Clinical Professor of Medicine at Stanford University Medical School discussed the immunological issues in "MCS". He has evaluated 100 patients who claim to be suffering from "MCS" and has made the following observations. "MCS" is claimed by 50% more women than men and is predominantly a white collar "disease". His evaluations detected no immunological abnormalities. Provocation tests were inconclusive. (A provocation test is performed by eliminating a patient's exposure to a "toxic chemical" and then administering small doses of the suspected chemical followed by recording all subjective changes. The patient is then allowed to detoxify followed by a placebo dose which is again followed by dosing with the questionable "toxic chemical".) Dr. Terr believes the following questions need to be answered by appropriate scientific studies: are there chemicals in air, food and water which cause illness through low-level, long-term exposure? and can psychiatric illness be caused by environmental chemical toxicity?

Dr. Howard Kipen, Medical Director, Environmental and Occupational Health Clinical Center, Robert Wood Johnson Medical School has also evaluated numerous patients claiming "MCS". Dr. Kipen evaluated 23 subjects, none of whom were involved in any tort litigations. His findings, based on physical exam, neuropsychological testing, attention/concentration testing and immunological assessment were inconclusive. Explanations for the patients obvious discomfort may be psychiatric or neuropsychological in nature. Dr. Donald Black, professor of Psychiatry at the University of Iowa College of Medicine believes that many symptoms in patients diagnosed as having "MCS" can by caused by psychiatric disorders.

Herman Staudenmayer, Ph.D. is a licensed psychologist and has worked for the past 12 years at the Allergy Respiratory Institute in Colorado. He has attempted to bridge the gap between physician and psychiatrists in dealing with "MCS" patients with no success. He has performed double-blind challenge testing followed by a single blind challenge of suspected "toxic chemicals" on these patients. Invariably, the test outcomes could not be reproduced. Dr. Staudenmayer describes these patients as having a "morbid absorption with bodily functions with the illness being
The presentations were followed by a panel discussion with questions and comments from the audience. An attempt was made to define "MCS". The majority of panelists were reluctant to do so because they feared doing so would legitimatize a condition which has no scientific basis. The following was one of the proposed definitions: "a condition or phenomenon claimed by individuals having multiple symptoms to many body sites who relate it to a perceived exposure." In summary, it was agreed that causality for "MCS" needs to be established by challenge and control studies after the acquisition of baseline data. There was an apparent frustration by the scientists at this symposium with a term they did not invent and which they claim resulted from legislative and policy decisions. It should be noted that this symposium did not present a balanced perspective on this controversial issue.

Attachment

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