EDITORIALS

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THE ALBERTA REPORT

In 1975 the Alberta College of Physicians and Surgeons declared that mega-vitamin therapy was to be considered experimental. This unwise decision caused a vigorous backlash from several thousand residents. They were led by patients whose knowledge of the efficacy of megavitamin therapy was practical and personal; they had recovered when no other treatment had worked. Several well-attended public meetings, a petition signed by many thousands, and excellent news coverage persuaded the government to appoint a committee to examine the medical literature. A joint University Committee was appointed consisting of a pharmacologist as chairman and two others, a pediatrician and a retired professor of psychiatry well known as a vigorous ' opponent of Orthomolecular therapy. The chairman had once publicly declared his skepticism, but when this was pointed out he declared that he would not be biased. Because neither the composition of the Committee nor its mode of operation insured freedom from bias, the Canadian Schizophrenia Foundation did not present a brief. It was my view that by not being involved as a party to this investigation, we would be in a better position to either commend or criticize the report.

The chairman eventually realized he had taken on an unenviable task. If the report appeared to favor Orthomolecular therapy it would encounter hostility and disbelief from the establishment. If it favored the opposition we would undoubtedly respond in the same way. The Committee had seen the APA Task Force Report, had studied the criticism directed against it and had properly concluded they would not fall back upon that misleading and erroneous document.

The final report has appeared. It is obvious that the Committee was persuaded that there was sufficient evidence in favor of Orthomolecular treatment. It recommended that establishment psychiatry should immediately begin a series of studies to examine the various aspects of Orthomolecular medicine. Its conclusions were entirely contradictory to the APA Task Force Report which it rejected.

There is very little reference to it in strong contrast to the Canadian Psychiatric Association which did its homework before issuing its critical report by reading the conclusions of the APA Task Force Report.

This is the first time any committee has recommended a course of action which we have been promoting for so many

years. Will it be taken seriously?

In order not to antagonize the establishment too much, a number of negative comments are made about orthomolecular therapy. These are biased or taken out of context. However, these are minor and should not deter one from realizing that this report will be very useful. It has disarmed our main critics. I consider these errors to be similar to the courtesy one would give to a critic one wishes to persuade. It is clear that the Committee wishes to persuade establishment medicine to start studies as soon as possible, something which should have been done many years ago.

A report more favorable to orthomolecular therapy could not have been expected in view of the intensity of the hostility characteristic of the establishment. But there is strong evidence that more psychiatrists are becoming interested. This report will increase their interest. In the meantime I hope that establishment medicine will cease to intimidate and harass physicians who wish to practice Orthomolecular medicine.

Here are the conclusions and recommendations of the Committee:

That adequate financial support be provided for well-designed and controlled clinical trials of megavitamin therapy, as judged by a process of scientific peer review.

That strong encouragement be given to research into mechanisms underlying clinical disorders for which megavitamin therapy is now advocated on empirical grounds.

That collaboration between proponents of megavitamin therapy and other investigators, qualified in the field of clinical investigation, be encouraged in the design and execution of future clinical trials of megavitamin therapy.

That scientists in the fields of Nutritional Biochemistry and Clinical Nutrition use their expertise to meet the need for thorough evaluation of newer hypotheses regarding nutritional mechanisms of disease, including the evaluation of Orthomolecular concepts.

That the undergraduate education of physicians and other health professionals include more attention to the role of nutrition in maintaining health and to the critical appraisal of newer concepts such as those embodied in megavitamin therapy and Orthomolecular medicine.

That further research be facilitated into the effects of vitamins on the biochemical mechanisms of the central nervous system.

That future research be directed towards distinguishing different forms of schizophrenic disorder, with their differing biochemical aberrations, among which may exist some forms which are specifically vitamin responsive.

That research be particularly facilitated on the biochemical aberrations in trace metals in certain subgroups of schizophrenics.

That qualified medical investigators who are proponents of megavitamin therapy be welcomed to carry out controlled clinical trials at hospitals under university auspices, in collaboration with other medical investigators not committed to the megavitamin hypothesis.

That authoritative medical information be disseminated publicly to the effect that megavitamin therapy is yet an unproven remedy; that, though un-proven, large doses of vitamins may possibly be beneficial for some schizophrenics as an addition to regular treatment, but should not be considered as a substitute for or alternative to it, and that some addition of megavitamin therapy to existing therapy should be done under a physician's direct supervision.

That the Canadian Schizophrenia Foundation and the Canadian Mental Health Association join forces to work together for the improved treatment of schizophrenics, who comprise so large a proportion of the mentally disabled.

That the development be sought of suitable methods for detection of subtle vitamin deficiencies in children with behavior and learning disorders.

That clinical trials of the megavitamin

therapy protocols described by Cott and Rimland should be done using controls which can be implemented in a design such as that described in Appendix A. Collaboration between megavitamin therapy proponents and clinical investigators should take place to determine the diagnostic criteria which are of greatest predictive value. (See Rimland, B: High-Dosage Levels of Certain Vitamins in the Treatment of Children with Severe Mental Disorders. In: Orthomolecular Psychiatry. Ed.: Hawkins, D., and Pauling, L., W. H. Freeman and Company, San Francisco, 1973.)

THE PERILS OF TOXIMOLECULAR PSYCHIATRY

Penfluridol, a tranquilizer of the haldol class of drugs, is a long-acting drug when taken by mouth. One dose is given each week. It is already on the market in some European countries because of the attractive dosage schedule. A serious question was raised about its safety at a conference in New Orleans of the American Society of Pharmacology and Experimental Therapeutics. After a 24-month dosage in rats, tumors were discovered in the breast and pancreatic tissues. Following this finding the FDA halted all human studies with this drug.

It does not follow that all tranquilizers including the phenothiazines would behave in a similar way in rats or other animals, or in man. But these substances can elevate secretion of prolactin from the pituitary gland, thus stimulating growth of breast tissue. In some patients, tranquilizers have stimulated secretion of fluid from the breast.

It is certain this worrisome finding will stimulate a large number of studies to determine whether other tranquilizers have similar carcinogenic properties. Recently a poorly conceived and executed study showing that ascorbic acid destroyed by being oxidized with oxygen in the presence of copper salts led to the conclusion that it would be mutagenic on cells in vitro. Pure ascorbic acid was innocuous. This report received worldwide attention after being reported in the New York Times, i.e., the potential carcinogenic effect of ascorbic acid with no reference to the correct conclusion. It was suggested that ascorbic acid should be used with great caution. The report where a tranquilizer close to being released for clinical use caused cancer in rats appears to have excited little interest in the same media.

But if the carcinogenic properties of penfluridol are established it will never be released and many, if not all, of the others may be removed from the market. What then happens to toximolecular psychiatry whose only class of drugs are these tranquilizers? Community psychiatry would collapse, and a tremendous indrawing of chronic schizophrenics from all the mental hospital enclaves in the community would result; an implosion of sick patients into institutions from which they had been ejected by the vigorous use of tranquilizers.

Orthomolecular clinicians generally use the tranquilizers as adjuncts to nutrient therapy. It is possible to use lower doses for shorter periods of time. This decreases the danger of toxicity, including tardive dyskinesia and, theoretically, of cancer. This potential new hazard shown by the penfluridol study should reinforce this caution. It would also be wise to use ascorbic acid with tranquilizers since its anticarcino-genic properties were demonstrated by Cameron and Pauling.

For many years it has been general knowledge that most schizophrenic patients tendecfto cancer less often than the general population. Studies in New York State between 1955 and 1961 showed that the mortality from cancer was 5 percent of all deaths among patients, compared with 17 percent in the general population. However a recent study by Ananth and Burnstein, in the June issue, 1977, of Psychosomatics reported data relating cancer to schizophrenia and tranquilizers which raises the disturbing possibility that chronic use

of tranquilizers increases the risk of dying from cancer. These authors concluded on the basis of studying over a thousand patients resident at the Douglas Hospital, Montreal, in 1971, "our studies reveal that patients admitted to the Douglas Hospital suffer and die of cancer more often than do members of the general population." They found that 7.3 percent of their patients died of cancer, compared to 17.8 percent of the general population.

It is well known that the Douglas Hospital, where the studies were done, was one of the pioneer hospitals to use tranquilizers and probably has been using them longer than any other hospital. These patients with cancer all received huge quantities of chlorpro-mazine according to these authors. It therefore seems possible that the use of chronic tranquilizers has changed schizophrenia from a disease which protected their patients against cancer, and that the tranquilizers themselves might have increased the potential for developing cancer. This is not a firm conclusion, but it is one which will have to be seriously examined.

Dr. H. Osmond considered the implications of this potential hazard. His discussion follows.

"Even the suspicion that the long-term use of major tranquilizers predisposes to tumors of the breast and pancreas raises very serious ethical, administrative, legal, and political issues. Unlike the tardive dyskinesia affair, the dangerous possibilities have been recognized first in animal experiments rather than in human long-term follow ups. There are many possible reasons for this, one being the apparent anticarcinogenic effect of schizophrenia which has frequently been reported and is one of the many mysteries attaching to this strange illness.

"There is strong evidence that the megavitamins do not produce dyskinesia and some evidence that some of them may be anticarcinogenic in some circumstances. There is evidence that they benefit some schizophrenics more than tranquilizers and can prevent relapses in patients whose tranquilizers have been withdrawn. There is much evidence they benefit acute schizophrenics. The side effects of the megavitamins, whether used in psychiatry or in internal medicine as a cholesterol-lowering agent, are generally agreed as being much less than those of the tranquilizers or the other anticholesterol agents. These considerations ought to receive very careful attention from the American Psychiatric Association (and of course the Canadian Psychiatric Association and Royal College of Psychiatrists), National Institute of Mental Health, and the Federal Drug Administration. The APA and NIMH have been hostile and biased toward megavitamins. It is very odd that one of the supposedly telling points made against our ways by the APA has been that they are too broad in spectrum. Apparently in order to secure the approval of metho-dologists, amateur and professional, patients are to be treated like guinea pigs. This latest long-term hazard whose magnitude we do not know underscores the fact which has been evident for more than a decade that the tranquilizers appear to have shot their bolt. We know about the best that they can do, but we still do not know just how great the cost is likely to be.

"I am sure that our old friend Bernard Rimland will ask this question should I refrain from doing so. it is, what is the responsibility of an ethical toximolecular psychiatrist confronted with this disquieting news? Unless Dr. J. H. Abeles (author of a report on penfluridol for Kidder Peabody September 1, 1976), McNeil Laboratories, and the FDA have made a grave blunder, for at least two to three years a question mark must be raised regarding the possible carcinogenicity not only of penfluridol, not currently marketed in the U.S.A., but of all other major neuroleptics.

"It appears to me that patients certainly have a right to be informed about this potential danger. Does this right depend on their soliciting information, or should they and their families be

given the bad news whether they ask about it or not? I am not clear in my own mind about the principles involved here.

"Then suppose the conscientious toxi-molecular psychiatrist does inform all his patients and their families, as it is at least possible that he has a duty to do so. What then? What should he say or do if patients and families raise the matter of megavitamins, etc?

"As things stand, the gravest critics of the Orthomolecular approach have based their attacks upon the fact that it is no better than the standard treatment, combined with suggestions that it might be hazardous. So far these various hazards have been discounted. Parsons of the Mayo Clinic and now Medical Director of Armours, wrote recently that in his opinion niacin was the safest cholesterol-lowering agent in existence. He no longer believes that its use is contraindicated in ulcer patients. He discounts reports of liver damage. In 1960 he warned against both these possibilities.

"If the megavitamins are as effective* as tranquilizers, although not immediately as effective and over the long hand much less likely-to produce either dyskinesias or to be possible carcinogens, then patients and relatives have a right to have them available as an alternative treatment. Since tranquilizers can be combined with megavitamins, often resulting in a reduction of the tranquilizer used, patients and relatives have a right to know that this is a possibly less hazardous course of action than years of massive drugs."

*** To avoid any misunderstanding, in my view they are often more effective, but in the circumstances being discussed here that controversial issue need not be raised.**