The Prevention Of Tardive Dyskinesia with High Dosage Vitamins

A Study of 58,000 Patients

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Tardive Dyskinesia is a critical clinical problem in psychiatry today and almost every issue of every professional journal carries at least one article devoted to the subject. In general, the incidence is reported to be on the average of between 10 and 25% of patients on neuroleptics, and the recovery rate is reported to be about 50% of patients who develop this neurological disorder.

T.D. has presented the profession with a whole variety of practical as well as theoretical problems. It also presents an ethical as well as a medico-legal dilemma for the practitioner. If he withholds neuroleptic medication the patient's psychosis may progress or re-emerge, and psychotic behavior and self-destruction in all its forms may occur. If the patient commits a crime, or suicide, or is overtly destructive, the physician may be sued for malpractice for failing to institute proper treatment. If he places the patient on medication and T.D. develops, he may be sued for causing the T.D. Many private clinicians are currently solving the problem by refusing to treat patients who require anti-psychotic drugs, but physicians such as those who work in hospitals and state institutions are caught in an insoluble conflict situation. Even if a truly effective treatment eventually is found, the illness will still have already been present with all its risks. Until recently, knowledge about T.D. was limited primarily to the profession and to the unfortunate victims of the disorders. Recently, however, in November of 1983, there was a three day nation-wide documentary program devoted to T.D.

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Orthomolecular psychiatry aired on CBS television and the public was exposed to viewing some severe cases plus the news that one million dollar malpractice awards were being won by T.D. victims.

The program included a moralistic denunciation of the profession which "should have known better than *to* prescribe anti-psychotic drugs" by a Monday morning quarterback critic. The program deliberately promoted emotionalism and sympathy in the viewer and indignation at the guilty culprit, the practicing physician, together with the strong suggestion to sue for a million dollars. The full impact of this widely televised program is yet to be felt by the profession, but numerous lawsuits are currently in preparation as an immediate aftermath. Once the legal precedent has been set, the door is open to a mass of lawsuits. The TV documentary estimated, based on incidence and prevalence, and the number of patients who need anti-psychotic drugs, that within a year *one million Americans* will have developed T.D. The medico-legal potentiality of this is awe inspiring, to say the least.

Over the past 20 years there has been much work done to clinically investigate the value of high dosage vitamins as an adjunct in the treatment of schizophrenics and other perceptually disordered psychotic conditions. There was much discussion, argument and political dissension about this approach, which first arose at a time in the 1950s and '60s when psychiatry was previously psychoanalytically oriented and there was little knowledge about the relationship between nutrition and brain chemistry.

developed out of the inquiry as to whether therapeutic nutrition favorably affected psychotic disorders or not. There were conflicting reports in all the literature and the issue was never settled to general satisfaction. The end result was that those who believed that nutrition helped their patients continued to use high dosage vitamins in treating their schizophrenic patients.

During the late 1960s, the 1970s and early 1980s, well over a hundred thousand psychotic patients were on high dosages of vitamins as well as the standard treatment of anti-psychotic drugs. These were primarily long term patients who were on neuroleptics and on mega-vitamins for years, many for as long as 20 years and more. There is thus a very large patient population group that has been treated by a large number of physicians over a period of many years distributed throughout the entire country under very diverse family, ecological and socio-economic conditions.

By the late 1970s it was clear from the psychiatric literature and professional meetings that T.D. was becoming an increasingly frequent clinical development in patients who were solely on neuroleptic drugs. At the North Nassau Mental Health Center in Manhasset Long Island, New York, we had been treating large numbers of schizophrenics since the mid-1960s with anti-psychotics, plus megavitamins and sugar free diets. (We reported our results and techniques primarily in the book *Orthomolecular Psychiatry* published with Prof. Linus Pauling as Co-editor.) We noticed that *none* of our patients either in private practice, the hospital or the clinic had developed overt T.D. We searched through our caseloads over the years and there was not a single case of clinically apparent T.D. amongst the 15,000 schizophrenic patients we had treated over the past 15 years. Together with Dr. Charles Tkacz we presented a report at the Academy of Orthomolecular Psychiatry Meeting in May, 1981, and published it in the Journal of Orthomolecular Psychiatry in 1981.[1] We thought that it would be overlooked in a sub-specialty journal of limited circulation so notices were placed in *Psychiatric News* to bring it to the attention of the profession at large. Perhaps the fact that we had *NO* cases of T.D. in 15,000 patients presented a credibility problem, as many clinicians probably thought that we ought to have some, at least!

It was decided to enlarge the study to include a much wider patient population so as to include the clinical observations of many more physicians and institutions. This was done in December, 1983.

One hundred clinicians were contacted who were known to have large practices which included prescribing megavitamins along with neuroleptics in the treatment of schizophrenic patients. They were scattered throughout the United States and Canada and had been using megavitamins in their practice for an average of at least 10 years or more. Twenty hysicians stated that they did not use neuroleptics and the remaining 80 physicians reported on the number of cases they had treated over the last 10 years and the incidence of overt T.D. in their practices.

The average dose of megavitamins was 3 grams daily of Vitamin B3 (of either Niacin or Niacinamide) plus 3 grams of Vitamin C, plus 600 mgm of B6 and often Vitamin E 600 LU. was included. (Nutramega was the brand formulation most often prescribed which contained the megadoses in capsule form). This was divided into 1/3 the daily dose at each meal (3 capsules 3 times daily of the most frequently used formulation.)

The results of the study were as follows: 69 physicians treated a total of 41,972 patients without a single case of T.D.

11 physicians treated a total of 16,070 patients and reported collectively 26 cases.

Thus, 80 clinicians treated a total of 58,042 patients with an incidence of 0.045% T.D.

(In this reporting, only cases of overt clinically observable T.D. are reported.) The 26 cases of T.D. who were reported among the 58,000 patients have as yet not been studied and so it is still unknown whether they were bona-fide T.D. or not. (As one clinician put it "Everything that shakes is now called T.D. — but we saw

movement disorders years before the anti-psychotic drugs".) Also, it is not known whether those 26 patients actually took the prescribed megavitamins or not.

It could also be argued that the cases of T.D. were under reported. This would mean that the symptoms were not noticed by the patient or his family nor by the treating physician or his assistants (many of the reporting physicians practice in groups and clinics with large staff and patients are seen by a multiplicity of professionals).

To help clarify this problem, there is amongst this large patient population a sub-group of 1,000 patients whom I personally treated over a 10 year period in the hospital and all of whom had a neurological examination by an attending neurologist on the staff of the Brunswick Hospital. All of these patients were on neuroleptics, all were markedly psychotic and the majority were consequently on high doses of antipsychotics. All of these patients had a neurological work-up, including EEG and psychological testing, and were examined by an internist as well as at least one other psychiatrist. Over the ten year period no patient developed clinical T.D.

With evidences of T.D. being reported of 10% to 50%, we should have expected between 6,000 to 20,000 cases of T.D. in this study of 58,000 patients. Even if there were a 100% error in the reporting of cases (i.e. 52 cases instead of 26), there would still only be a remarkably low incidence of 0.1%!

Summary

A study of the practices of 80 physicians over a 10 year caseload of 58,000 patients treated with anti-psychotic drugs plus high dosage vitamins, reveals a total of only 26 patients developing Tardive Dyskinesia. This is an incidence of less than 0.05%. This is a remarkable finding in view of currently reported rates of 10% to as high as 60%. The data are strongly suggestive that the prescribing of high dosage Vitamins B3, C and B6, along with neuroleptic drugs, provides almost 100% protection against the development of this dread neurological disorder which is reportedly ir-reversible in 50% of those patients in whom it develops.

References

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Freeman and Co., San Francisco, 1973.

[2] Tkacz, C. and Hawkins, D.: A preventive Measure for Tardive Dyskinesia. Journal of Orthomolecular Psychiatry 10, 2 pp. 119-123, 1981.

Letters

To the Editor

Case Report: Beneficial Response in Chronic Arthritis to D-L Phenylalanine

A significant number of chronic pain patients have found pertinent pain relief when using D-L phenylalanine. While DLPA often has value for chronic pain disorders it has no value for acute pain. This confirms that chronic and acute pain use somewhat different mechanisms and pathways as these peripheral sensations are projected to brain centers involved in the conscious perception of pain. It is believed that the dextrorotatory phenylalanine which is relatively inactive biologically is responsible for inhibiting or preventing metabolic destruction of synaptic endorphine or enkephaline. In that instance these naturally occurring neurotransmitters will be more effective in blocking the transmission and perception of pain.

A trial of 750 mgm of this D-L mixture t.i.d. can be used for a week to check upon the clinical response. If no response occurs the amount can be doubled for another week to be sure that enough had been used. When relief has occurred a few patients can reduce the amount required to maintain this relief. Some can even discontinue its use for as long as a week before needing to begin its use again.

It is of interest that this is a "pharmacologic" use of a large dosage of this amino acid because the biologically active levorotatory compound is not effective in causing pain relief. Both versions are easily metabolized and very safe to use in large doses. However, since we are not using the D-phenylalanine to supplement intracellular metabolic activity, the D-L phenylalanine amounts to a "non-Orthomolecular" use of megadoses of a safe, non-toxic compound.

The patient is a 50 year old retired man whose major problem involved a toxic sensitivity to industrial fumes. He was also sensitive to several foods, particularly wheat, sodium glutamate in Chinese dishes, also alcohol, especially white wines which could increase his sense of exhaustion. He had chronic generalized pain in his extremeties and particularly in his lumbar paraspinal area which was caused by a non-union fracture of a lamella of the fifth lumbar vertebrae.

The use of D-L phenylalanine, 750 mgm t.i.d. with meals had no apparent effect for the first 4 days. On awakening the fifth day he realized that he could roll over to get out of bed without discomfort. He had become so inured to this level of pain that he did not identify it even to himself as pain. During this time he was using no alcohol since it would increase his physical complaints when he felt depressed. Within 2 days he found that the chronic low level pain in his extremities, especially hands and ankles, had disappeared. Several days later he had a "special dinner" out with his wife to celebrate this relief, and had 2 drinks. He had pain in both achilles tendons and in the tendons of his hands that evening and a return to his lower back pain the following day. These pains were not so severe as previously, and were relieved in one day by the continuing use of D-L phenylalanine. He has subsequently found that the use of alcohol is consistently related to a prompt recurrence of the tendon pains, and by low back pains on the following day. He has found that when he increased his physical activity and began to work on postponed projects that he had acute aches and pains while getting into

better physical condition.

In short, he had a clear relief from chronic tendon and musculoskeletal pain, with no relief from acute pains, including those which occur while getting into better condition for increased physical efforts. He was surprised to find that pain in his achilles and his finger tendons could consistently recur, even though at decreased intensity, when he drank socially. The depression which he was experiencing at the start of therapy decreased as he was able to increase his activity, and he returned to a "normal" level of moods within a month of beginning to use the phenylalanine. This relief from chronic pains has continued for over one year. He must maintain dosage at the same level as when he began its use. If he reduces the amount to 375 mgm t.i.d., or to 750 mgm HS alone, the chronic pains return at a lower level of intensity in three days. When he uses 750 mgm t.i.d. he can continue a normal activity in comfort and good spirits.

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Dear Dr. Hoffer,

I just now had the time to read the last Journal Vol 14#4 and want to write a letter to the editor. Your Indole Derivatives article was an excellent review of this field started by yourself and Osmond in 1952 with your adrenachrome theory. It seems to me all of Medicine no matter which field, needs 30 to 40 or more years to arrive at some simple truth after a real innovator makes the original observation. The history of medicine is filled with examples not the least of which is the story of Vitamin C and the British Navy. It took them 150 years to see the light. It has only taken the National Institutes of Health twenty years to recognize the value of Vitamin B3, Niacin, on the level of Cholesterol, something which you, Altschul and Stephen did in

1955, now 30 years ago.

This paper on indoles and melanin may penetrate the darkness surrounding the elite who will only see what they know is true. Even the cancer people now agree Vitamin A and nutrition have something to do with cancer. It is impossible to hide candles of truth under bushel baskets forever. Standing now on the outside looking in, makes these things easier to see and to accept. I know all this takes time which I was not going to allow when I was licensed. The Establishment is still bitter and vindictive but so long as there are people like you who write articles like this, we shall succeed.

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Dear Dr. Hoffer,

We read with interest Dr. Henry Turkel's letter (JOP, fourth quarter, 1985) concerning the various partial attempts to replicate the research by Dr. Ruth Harrell and her colleagues, in which megavitamin therapy combined with thyroid was found useful in raising the IQs and well being of retarded children.

We feel that Dr. Turkel's complaint concerning the failure to use thyroid supplements by those who purport to have replicated Dr. Harrell's work is very justified. There may in fact be more to this matter than superficial consideration would indicate.

Recently we have been in contact with a mother whose mentally handicapped child had showed little or no response to megavitamin therapy (Bronson's GTC formula for 4 years). The child's pediatrician was not enthusiastic about the mother's trial of megavitamin therapy, and was at first very reluctant to follow the mother's suggestion that he prescribe thyroid supplements for the child, since the child was only 5 and did not show thyroid deficiency

by the usual tests. However, when the child was 10, the pediatrician agreed to prescribe Levothyroid 0.1 mg b.i.d. (said to equal 2 grains thyroid/day). The mother told us that the effects on the child were truly remarkable. The child suddenly read 20 books cover to cover, never having been interested in books before. His hand flap-ing and other hyperkinetic behaviours dropped sharply.

He began to enjoy and excel at spelling in school, and began making perfect scores on spelling tests. His mother does not claim her child is cured, but is ecstatic with his vastly improved outlook. The benefits have been maintained for nearly one year at this writing. Once, when supplements and thyroid supplies ran out, hyperkinetic behaviour reappeared within two days.

It appears that the megavitamins with minerals may have interacted synergistical-ly with the extra thyroid, even though, as indicated above, there was no apparent need for thyroid supplementation.

Although this is only a single case observation, and may have little significance, it is at least conceivable that the phenomenon is reproducible in other cases.

If any readers of this Journal are aware of similar cases of megavitamin therapy being facilitated by the addition of thyroid, we would be very much interested in learning about the circumstances.

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