

Administration of Massive Doses of Vitamin E to Diabetic Schizophrenic Patients

Antonio J. DeLiz, M.D., Ph.D.¹

Dr. Shute states, "Gangrenous areas in the extremities of small size may often be salvaged by this agent (Alpha-Tocopherol or vitamin E) notably in diabetics... We have many colour photographs of such patients, patients who had been advised by the ablest surgeons to have amputation." Dr. Shute states, on the basis of clinical evidence, that the healing of these areas of gangrene by Alpha-Tocopherol was achieved by mobilizing collateral circulation and by locally improved tissue oxygenation. This news came to the author when this paper was already being edited. The author states, therefore, "My paper cannot claim the originality that I thought it could." (See Totgyes, S., and Shute, E.V.: The Summary, 6-48, 1954; Shute, Evan V., B.A., M.B., F.R.C.S. [C], F.R.S.M., Med., Se. D., Director of the Shute Institute for Clinical and Laboratorial Medicine, London, Canada: Alpha-Tocopherol [Vitamin E] in Cardiovascular Disease. The Summary, p. 6, December, 1973.)

Recently I have treated 20 individuals — 8 women and 12 men—who had been diagnosed schizophrenics 10 years ago. During the last five years, however, these patients showed signs of diabetes mellitus. The schizophrenic condition was treated by Thorazine and other phenothiazines alone. The diabetes mellitus has been treated by sugar-free diet, diabinese and other related drugs. While the schizophrenic condition improved, the patients suffered from chronic signs, but allegedly never developed dramatic errors of perception. The age of the female patients oscillated from 30 to 45 years; the male patients were between 40 and 55 years old.

The patients were referred to me mainly because of their symptoms of disorganized perception and cognition. The treating internists revealed to me that this acute perceptual cognitive disorder, although present before, had never reached the degree of intensity detected recently. I was also informed that this worsening of the patients' sensory functions had more or less coincided with paresthesias, hyperesthesias, and hyposthenias, and local signs of incipient gangrene of the toes and feet.

¹ 218 W. Stewart Ave., Garden City, New York
11530

The patients' families were told that the areas of incipient gangrene had to be cauterized and, perhaps later on, radical amputation would be necessary. I was asked to see these patients as a psychiatrist, as most of the former schizophrenic symptoms appeared more serious and had resisted even the highest doses of neuroleptics.

When we observed them, they also showed delusions, hallucinations, were confused about past and present events, were concrete in thinking, were withdrawn, and showed diminished attention span and euphoria followed by delusional depression. Two of them showed quasi-catatonic-like postures and other mannerisms and rituals, while in others the speed of speech oscillated from muteness to pressure of speech. Three showed neologisms. The most outstanding signs were errors of perception, particularly of time and space, and profound cognitive disturbance. For five, hyperesthesias in the feet were perceived as "a heart pulsating" and the pain was felt in the head though simultaneously they would touch their toes with the hands. Hyposthenias were perceived in the toes as if they were asleep.

One of the patients, who had areas of ischemia in the legs, felt that all his body was burning, and he would try to pour water on the legs to extinguish the fire. Another female patient, who had an incipient gangrene in the right toe, when asked when her lesion had started, replied, "in the beginning of the universe."

When further asked if she was in pain' (pain was present), she answered:

"It doesn't hurt so much now that I am approaching the ultimate boundaries of the infinite."

Another patient, a man of 45, claimed that his body was reduced to the feet. When asked why, he responded:

"It is very simple, Doctor, I have just to look at the mirror and there I see nothing but my feet."

When asked where the rest of his body was, he said:

"I told you already, Doctor, I just have

feet."

When he looked at the nurse and was asked what he was seeing, he responded:

"Just two eyes and a nose."

The door of my office was seen as totally constituted by the knob.

The fact remains that in 50 percent of these patients, narcotics had to be given in order to permit them to sleep.

In the midst of this massive perceptual-cognitive disorder, some patients would develop fleeting moments of awareness of the realistic danger of their situation. Anxiety, anguish, and terror were then apparent in their behavior the moment they became cognizant that amputation of their feet would become possible in the future. Three patients had a constant itch on the skin of the abdomen and back, caused by abnormal amounts of glycogen in the skin in diabetes mellitus. It is well known that diabetics suffer from atherosclerosis in the large and medium-size muscular-elastic arteries of the heart and peripheral skin arteries, with a high incidence in the toes and feet. Three patients had secondary infected ulcers which were very resistant to antibiotic treatment.

I was faced with a problem of tremendous proportions. On the one hand, the antidiabetic treatment, neuroleptics, cauterization of the ulcers, and so on had not produced visible results. I recalled Linus Pauling's thesis that individualized doses of vitamin E helped the circulation of arteries and veins, of heart and skin. Following this insight, I began to increase the administration of vitamin E continuously during one month. Beginning with 800 units a day, I raised the level of this vitamin to 20,000 units a day at the end of five weeks. By this time, I noticed with great interest the progressive disappearance of the patients' complaints of acute pains and numbness of the toes. Two weeks later — by maintaining the patients on the same amount of vitamin E — areas of ischemia on the legs began to fade. Three weeks later (by the way, I began using vitamin C 500 mg twice a day), signs of secondary

infected ulcers disappeared.

When the patients told their internists that they received vitamin E, they manifested great skepticism; however, as the skin lesions healed they felt quite intrigued. It is evident that the internists were still adhering to old paradigms and resisted the acknowledgement of clinical results for which they could not find any explanation within the general theory of current therapy of diabetic complications for defective circulation.

This sort of thinking called preconception is an old known fact in the history of science. Just to stay within our field of psychiatry, one may recall that for Eugene Bleuler the errors of sensory perception shown by schizophrenics about their inner and outer worlds were insignificant from a diagnostic viewpoint. Bleuler's belief was nevertheless a myth. This myth was forever dethroned by the work of Aldous Huxley, Hoffer, Osmond, and others.

My clinical study (although it should be repeated with a much larger sample of patients) is nevertheless suggestive of the objective truth embodied in Linus Pauling's thesis.

To terminate this short article, it is worthwhile stressing the judgement of one of the greatest logicians in the world, W.V. Quine, who suggested that "total science is like a field of force whose boundary conditions are experience."² *"A conflict with experience at the periphery occasions readjustments in the interior of the field. Truth values have to be redistributed over some of our statements. Re-evaluation of some statements entails re-evaluation of others, because of their logical interconnections - the logical laws being in turn simply certain further statements of the system, certain further elements of the field... But the total field is so undetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single*

contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole." Any validated experience occurring at the periphery of this system and which is recalcitrant with it must inevitably sooner or later lead scientists to occasion readjustments in the core of the system. These readjustments affect often all the structural interrelationships which obtain between the theories, making part of the total field. It is a trivial fact known by the historian of science that this sometimes unexpected total reconstruction of paradigms which had been considered as standing for an image of reality, is stubbornly resisted as they represent the painful giving-up of cherished beliefs. But the ascending march of science was never detained by this irrational clinging to preconceptions as such.

Without pretending to be facetious, someone might say: "The dogs may bark, but the caravan moves on."

² Quine, W.V.: Two Dogmas of Empiricism Analyticity. E. Harris, J.F., Jr., and Severens, Richard H. Quadrangle Books, p. 49, Chicago, 1970.