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Unproven Methods of Cancer Management

The Metabolic Cancer Therapy of Harold W. Manner, Ph.D.

After careful study of the literature and other information available to it, the American Cancer Society has found no evidence that treatment with the Metabolic Cancer Therapy of Harold W. Manner, PhD, results in objective benefit in the treatment of cancer in human beings. Lacking such evidence, the American Cancer Society would strongly urge individuals with cancer not to participate in treatment with the Metabolic Cancer Therapy of Harold W. Manner, PhD.

The following is a summary of information on the Metabolic Cancer Therapy of Harold W. Manner, PhD, in the American Cancer Society files as of May 1985. No implication of agreement by the Society with the contents of any proponent material is to be construed because of the Society's reference to that material.

Background

Metabolic Cancer Therapy, as proposed by Harold W. Manner, PhD, came to the attention of the American Cancer Society in 1977 when the Society received inquiries about a report on the effects of treating mice with a combination of amygdalin (laetrile), Wobe-Mugos enzyme, and emulsified vitamin A. The American Cancer Society issued a summary of information on the work of Dr. Manner in 1978.

Proponents

Dr. Manner founded and is President of the Metabolic Research Foundation. This Foundation promotes "nontoxic metabolic treatment" for cancer, arthritis, and multiple sclerosis and offers to refer interested individuals to physicians who purportedly make available Dr. Manner's metabolic therapy.

Dr. Manner was educated at John Carroll University (Bachelor of Science, 1949) and Northwestern University (Master of Science, 1950, and Doctor of Philosophy, 1952). He was on the faculty of Utica College of Syracuse University from 1953 until 1969 in the Department of Biology and held the positions of Assistant Professor (1953–1957), Associate Professor (1957–1962), and Professor (1962–1969). He also served as Chairman of the Division of Science and Math (1962–1969). Dr. Manner was a Professor of Biology and Chairman of the Department of Biology at Saint Louis University from 1969 until 1972. He served as Professor of Biology at Loyola University of Chicago from 1972 until 1982 and was the Chairman of the Department of Biology from 1972 until 1979. According to Dr. Manner, it was while at Loyola University that he changed his professional interests to laetrile and cancer after about 20 years of interest in the comparative and developmental biology of fish and animals such as frogs, salamanders, and mice.

The Metabolic Research Foundation is located in Glenview, Illinois. An "application for therapy" from the Foundation lists 140 cities in 36 states where there are facilities at which physicians offer meta-
bolic therapy; no names, however, are listed. According to the application, the Foundation will arrange for an applicant’s admission to one of the facilities. Most of the facilities offer the therapy on an outpatient basis, but some provide inpatient care. Five cities in Canada, and one each in Scotland, Japan, and Mexico are also listed.

Proponent Claims

In the pamphlet, “Facts about Metabolic Therapy,” Dr. Manner describes cancer as the result of a weakened immune system unable to destroy cancer cells, which are often formed in the body. "The main goal of metabolic therapy is to help the body to strengthen its immune system—to bring it back to its normal, fully functioning condition so that it regains its capacity to kill cancer cells as they form," he says. He also writes that "cancer is manifested to a great extent by the body’s inability to fight off the disease due to the underlying factors of inadequate nutrition and the inability of the pancreas and other glands to produce enzymes." The book, The Death of Cancer, by Dr. Manner and associates provides a "Physician’s Protocol" that presents the various components of the Metabolic Cancer Therapy. The protocol is offered, the book says, "only as a guide with the full realization that modifications will undoubtedly be mandated by the condition of specific patients." The protocol includes:

- Pretreatment, consisting of hair or blood analysis to detect mineral imbalances to be corrected.
- A diet.
- "Detoxification" with a daily coffee enema (twice a day "in cases of extreme toxemia").
- Digestive enzymes in the form of one or two Hydrozyme tablets with each meal; the tablets contain "hydrochloric acid, pepsin, and enterically coated pancreatic enzymes."
- "Antineoplastic enzymes" in the form of three Retenzyme tablets and one Intenzyme tablet three times a day. "If the tumor is palpable, one ml of Wobemucos (sic) intratumoral enzyme is injected directly into and around the tumor mass on alternate days."
- Emulsified vitamin A administered as follows: "Twenty drops of B10 Ae Mul-sion (Forte) are given in morning juice and another 20 drops in the evening juice. This will give the patient 500,000 IU daily." Alterations in this regimen are recommended if drying or scaling of the skin occurs.
- Vitamin C at a minimum of 15 grams per day.
- "Vitamin B-15": Two tablets of Panga-mik-15 (sic) or True-15 with each meal.
- Amygdalin (laetrile): Three-gram vials administered intravenously daily for three weeks, and then two three-gram vials administered twice a week.
- "A therapeutic vitamin mineral preparation such as Plus 198 should be given morning and evening."
- Other supplements can also be given, such as selenium, zinc, “RNA-DNA,” and vitamin E.

Dr. Manner also discusses the importance of developing a “positive mental attitude” through psychological counseling, “extensive counseling on the proper nutritional approaches,” and “developing a basic lifetime plan of diet, nutrition, exercise, and good health habits for the future.”

An undated “Dear Friend” letter from the Metabolic Research Foundation states: "By applying the vast amount of knowledge gained thus far as a result of the efforts of Dr. Manner and other distinguished researchers, nontoxic metabolic treatment of cancer and other degenerative diseases has become a reality in this country. Medical facilities throughout the United States are making available Dr. Manner’s metabolic therapies. These facilities are experiencing a success rate of 68 percent in the treatment of cancer."

Evaluation

A search of the scientific literature from 1949 through 1984 found 23 citations to articles and abstracts by Dr. Manner published over the period 1953 to 1978. Most of the
publications concern embryology and comparative and developmental anatomy. Dr. Manner's thesis for his PhD at Northwestern University in 1952 was a study of the regenerating forelimbs of salamanders. The first publications by Dr. Manner about his proposed cancer therapy appeared in 1977 in the article "The Non-toxicity of Amygdalin to Laboratory Mice," and an abstract, "Tumor Regression with Laetrile, Vitamin A, and Enzymes." The abstract reports that primary mammary tumors regressed completely in 89.3 percent of the treated mice and partially in the remaining 10.7 percent. In 1978, Manner et al reported complete regression of primary mammary tumors in 76 percent of mice treated with amygdalin (laetrile), emulsified vitamin A, and Wobe-Mugos enzyme. Manner et al specified that the findings pertained only to the primary tumor site and not to metastases, which were not studied, or increased lifespan since the study was stopped after 30 days.

Information received from the Metabolic Research Foundation indicates that the Foundation has been computerizing data for research purposes to "provide the public with accurate statistics concerning the efficacy of this therapy." However, none of the referenced publications by Dr. Manner present clinical studies of his proposed therapy with cancer patients. Likewise, no publications about the therapy or by the Metabolic Research Foundation were found in the scientific literature to support any claim of success rates in the treatment of cancer patients.

Herbert has pointed out that the Wobe-Mugos enzyme mixture used in the therapy contains enzymes that will digest human tissue. The injection of such digestive enzymes "directly into and around the tumor mass," as Manner et al wrote had been done in their experiments, should reduce the volume of tumor simply because it is digested by the enzymes. Herbert faulted the experiments for not including studies to determine if the enzymes would digest normal tissue in the mice and if the use of amygdalin, vitamin A, and Wobe-Mugos enzyme mixture shortened the lives of treated mice compared with untreated mice. Herbert also cautions about the potential for lethal anaphylactic shock if Wobe-Mugos and similar digestive enzyme preparations are repeatedly injected into humans, as is recommended in the protocol.

Moertel et al conducted a clinical trial of amygdalin (laetrile), vitamins (A, C, E, and B complex), minerals, and pancreatic enzymes in 178 cancer patients. The conclusion of the study was that "amygdalin (laetrile) in combination with high doses of vitamins, pancreatic enzymes, and a diet of the type commonly employed by 'metabolic therapists' is of no substantive value in the treatment of cancer. Further investigation or clinical use of such therapy is not justified."

Moertel et al also found that "the hazards of amygdalin therapy were evidenced in several patients by symptoms of cyanide toxicity or by blood cyanide levels approaching the lethal range. Patients exposed to this agent should be instructed about the danger of cyanide poisoning, and their blood cyanide levels should be carefully monitored." The toxic side effects associated with amygdalin therapy found among the patients studied by Moertel et al included nausea, vomiting, headache, dizziness, mental obtundation, and dermatitis. Such side effects are the consequences of the release of cyanide when amygdalin is metabolized. Deaths due to cyanide poisoning following the ingestion of laetrile have been reported by others.

Creagan et al and Moertel et al have conducted randomized double-blind studies to determine whether high-dose vitamin C (10 grams of vitamin C daily) is effective therapy for patients with advanced cancer. The Creagan et al study included a majority of patients who had received prior chemotherapy, whereas the Moertel et al study included no patients who had received chemotherapy. In both studies, vitamin C therapy was found not to be effective.

Dubick and Rucker describe the hazards of vitamins and minerals as dietary supplements. The ingestion of vitamin A in large doses can have the toxic side effects of skin lesions (drying, cracking, or peeling of skin or lips), hair loss, head-
ache, blurred vision, diarrhea, and damage to the liver, kidney, and bone. Selenium in high doses can cause hair loss, brittle fingernails, and fatigue. Vitamin C can have side effects such as nausea, abdominal pain, diarrhea, and stomach cramps and may cause the formation of kidney stones and other metabolic abnormalities in persons with medical problems. Coffee enemas that lower blood levels of sodium and potassium can have fatal consequences.

Pangamic acid or "vitamin B-15" has been called a vitamin by its proponents, but it is not a vitamin. Herbert notes that it does not meet the requirement of being a vitamin: that lack of the substance will produce a specific deficiency disease syndrome that can be corrected by supplying the substance. Herbert also states that oral pancreatic enzymes have no value except in pancreatic disease and, since they are proteins, they are destroyed in the intestine.

Hair analysis can be used to detect toxic levels in the body of some minerals, including lead, arsenic, cadmium, and methyl mercury. Otherwise, its use is of dubious value. No suitable standardized procedures have been developed for hair preparation and analysis. There is no clear definition of normal mineral concentrations in the hair that have physiological or health-related significance. The physical and chemical condition of the hair can be totally unrelated to the health of the body.

There is no evidence in the medical or scientific literature that the Metabolic Cancer Therapy of Harold W. Manner, PhD, has any benefit in the treatment of cancer patients. The study by Moertel et al of a similar treatment regimen found no benefit in the treatment of cancer patients. On the other hand, some components of the treatment pose serious risks that could lead to death in some persons undergoing the therapy. The Metabolic Cancer Therapy of Harold W. Manner, PhD, therefore, should be avoided for the treatment of cancer patients because it has not been shown to be effective and some components have serious health risks.

References

34. Letter from Metabolic Research Foundation to "Dear Friend," undated.