

Questionable Methods of Cancer Management

Questionable Cancer Practices in Tijuana and Other Mexican Border Clinics

After study of the literature and other available information, the American Cancer Society has found no objective evidence that various procedures known as "metabolic therapies" as available in Tijuana and other Mexican border clinics result in objective benefit in the treatment of cancer in human beings. Lacking such evidence, the American Cancer Society strongly urges individuals with cancer not to seek treatment with these metabolic therapies.

The following is a review and summary of material on metabolic therapy as available in Tijuana and other Mexican border clinics in the American Cancer Society files as of November 1990. Reference to that material by the Society does not imply agreement with its contents.

Abstract

Tijuana, Mexico, has become a refuge for cancer patients who have been convinced that they may be cured of their terminal illness by unconventional, unproved, and disproved methods offered in the border clinics. About a dozen United States promoters have joined with Mexican colleagues to offer a variety of treatments. Some patients are diagnosed using standard methods prior to arrival at the clinics, but many healthy individuals are misdiagnosed as having cancer or "precancer" and are then treated there. Others are told they have been cured or are improving even though they still have active disease. The

modalities and regimens used are often referred to as "metabolic therapy" and, for the most part, are either not based on sound scientific principles or have been shown in controlled clinical trials to be useless or even dangerous.

A basic metabolic regimen consists of three phases: detoxification with fasting and bowel cleansing, strengthening the immune system with numerous "supplements," and attacking cancer with "natural and non-toxic" chemicals. Popular treatments include injections of hydrogen peroxide, large quantities of pressed liver and carrot juice, coffee enemas, infusions of Laetrile mixed with massive doses of vitamins and dimethylsulfoxide (DMSO), special diets, and a host of other pseudo-scientific regimens. Unfortunately, no evidence exists that any of these modalities is more effective than no treatment at all. Patients traveling to the Mexican border clinics for metabolic therapy are subjecting themselves to costly and hazardous regimens, especially if they forgo responsible medical care in the process. The American Cancer Society, therefore, strongly urges individuals with cancer not to seek treatment with metabolic therapies in the Mexican border clinics.

Introduction

Tijuana, Mexico, and several surrounding communities have become havens for self-proclaimed cancer specialists offering a

variety of methods of cancer management under the common name of "metabolic therapies." Included are unproved and disproved diagnostic and treatment methods that are inappropriately described as "non-toxic," "alternative," "complementary," "nutritional," and "holistic." Metabolic practitioners generally claim that diseases, including cancer, are caused by an accumulation of toxic substances in the body. These practitioners allege that if these toxins are removed, the body is able to heal itself naturally.

Most cancer patients who patronize these metabolic practitioners are likely to have been previously diagnosed by standard methods. Other patients are told they have cancer, or "precancer," based on unverifiable diagnostic tests available at the clinics. These individuals are often "healed" rather quickly but may be required to take certain supplements and follow special regimens in the future to avoid a "recurrence."

A wide variety of modalities may be employed under the heading of "metabolic therapy," because the focus is more on the body's condition than on specific treatments per se. Three basic steps are common to metabolic therapy: (1) detoxification, (2) strengthening the immune system, and (3) the use of special modalities to attack the cancer. None of the metabolic therapies has been demonstrated to be safe or effective in treating forms of cancer that are incurable by approved methods. There have been many instances where patients utilizing metabolic therapies were kept from timely, effective therapy, resulting in needless deaths.

Background

The exact origin of the term "metabolic therapy" is unclear. Miller and Howard-Ruben¹ attribute the concept to German-born Dr. Max Gerson, who developed a treatment regimen in the 1920s based on bowel cleansing and dietary modification. Gerson brought his treatment to the United States in 1938, where he practiced until his death in 1959.² A modified version of Gerson's therapy is currently being promoted at Hospital de Baja California del Sol by

Dr. Gerson's daughter, Charlotte Gerson Strauss.³

In the late 1960s two other major promoters started treating patients with their forms of metabolic therapy. William Donald Kelley, DDS, wrote that he believed that malignancy was indicative of pancreatic enzyme deficiency. His tests for cancer included the Kelley Enzyme Test and the Kelley Index of Malignancy, both of which were questionnaires he used to detect and analyze the size, growth rate, location, and age of tumors, as well as information about medication and prognosis.⁴ It was south of Tijuana at Kelley's clinic Plaza Santa Maria that the actor Steve McQueen was unsuccessfully treated for mesothelioma in 1980.⁵ Kelley is no longer active, but his former doctor, Rodrigo Rodriguez, MD, is now medical director of American Biologics, one of the major clinics in Tijuana.⁶ Comparable regimens are also being advertised and practiced by various practitioners in the US.⁷

Ernesto Contreras, MD, originally established Clinica El Buen Samaritano in Tijuana, where he promoted Laetrile injections as a cancer cure-all.⁸ Eventually he added the other aspects of metabolic therapy to his regimen in the form of vitamins, enzymes, and detoxification.⁹ He currently operates Hospital Ernesto Contreras, a modern and well-appointed hospital at the Playa de Tijuana, where he provides legitimate medical service to native Mexicans as well as metabolic therapy to patients traveling to Mexico for cancer treatments.¹⁰

A third form of metabolic therapy was developed by Harold Manner, PhD, a former zoology professor from Loyola University. In addition to standard detoxification modalities and oral vitamin and enzyme doses, Manner's therapy includes daily "Manner Cocktails"—infusions of vitamins A and C, Laetrile, and dimethylsulfoxide (DMSO).^{11,12} Although Manner died in 1988, his version of therapy is still offered at Clinica Cydel (also known as Clinica Manner) in Tijuana.

The most recent major addition to the armamentarium of metabolic therapeutics is "oxymedicine," the use of compounds such as ozone and hydrogen peroxide that

contain reactive forms of oxygen, supposedly to help destroy tumors.¹³ According to Kurt Donsbach, DC, a metabolic practitioner with a clinic located to the south of Tijuana in Rosarita Beach, the whole concept of “metabolic therapy” was developed by Otto Warburg, MD, twice the recipient of the Nobel Prize in Medicine. Warburg became famous for discovering specific respiratory enzyme complexes.¹⁴

According to Donsbach, metabolic therapy was developed to increase oxygenation of malignant cells based on Warburg’s theory that cancer cells respire anaerobically and are destroyed by high levels of oxygen (a view also held by Max Gerson¹⁵). One purpose of the metabolic therapies, therefore, is to “restore oxygenation by maintaining vitamin and mineral agents that keep the respiratory cycle in a high state of efficiency.”¹³ Most modern metabolic practitioners have incorporated compounds they claim will oxygenate into their regimens.

Methods

Although metabolic therapists share common beliefs in the etiology and progression of degenerative disease, their applications of the various forms of therapy vary widely. The discussion that follows, therefore, is general and illustrates the most commonly used practices.

Most promoters claim that standard medical practitioners treat only the “symptoms” of disease while they, on the other hand, address the underlying cause of disease, a build-up of toxins in the body.¹⁶ Accumulation of unspecified toxic substances supposedly originates with an unhealthy lifestyle; the consumption of unnatural foods, food preservatives, and additives; the use of pesticides; and industrial pollution. These toxins, the promoters say, disrupt the immune system so that people become susceptible to degenerative diseases, including cancer.^{12,13,17}

Promoters contend that metabolic regimens are designed to eliminate toxins and strengthen the immune system so that the body is able to use nature’s inherent powers to heal itself.

Diagnosis

Although patients arriving at the Mexican facilities may be asked to produce medical records, such records are not considered especially necessary, because the protocols employed at the clinics do not follow those established by scientific medicine. As pointed out by Sally Wolper, an employee of the Cancer Control Society, a referral agency promoting unproven cancer therapies, the metabolic physician often uses two sets of standards: the one set by modern medicine and a metabolic standard like the Manner Normal Blood Profile.¹⁸

Modern medical diagnosis includes standard tests such as sequential multiple analysis plus computer (SMAC) blood profiles and monitoring of carcinoembryonic antigen (CEA) levels. In contrast, the metabolic standards are determined using procedures of questionable scientific value. Examples are applied kinesiology (also called nutritional kinesiology); hair analysis; iridology; the Navarro Urine Test (a chorionic gonadotrophin quantitative test); the AMID test (Arthur Metabolic Immunostatus Differential, sometimes referred to as the Arthur Immunostatus Differential or AID test); live cell analysis; blood crystallization; and Donsbach’s Nutrient Deficiency Test. Unscientific tests such as these are used at the clinics to diagnose current problems and monitor patient progress as well as to predict susceptibility to disease in the future.^{19,20}

Detoxification

Metabolic therapy regimens frequently begin with a restricted diet or a fasting period, three days being common. To reduce the risk of electrolyte imbalance and severe dehydration, small amounts of juices or other foods may be provided.²¹ Enemas may be administered as frequently as every two hours to facilitate the removal of toxic build-up in the bowel.²² These may be standard enemas or high colonics, a procedure involving the use of nozzles connected to tubes that reach high into the colon.²³ Special enema solutions may also be employed to aid in the cleansing process. Examples are: soap suds, used to “help get

those bowels moving" (Manner); coffee, which is claimed to detoxify the liver (Gerson); herbal laxative mixtures (most clinics); and hydrogen peroxide (Donsbach).

Other detoxifying modalities include rectal infusions of wheatgrass, intravenous ethylene diamine tetraacetic acid (EDTA) chelation, "oral" chelation with various dietary supplements, and removal of mercury-amalgam fillings.²⁴

Strengthening the Immune System

The third phase of metabolic therapy is alleged to strengthen the immune system by the implementation of dietary intervention and specific immune system enhancers.

Diets range from poorly balanced vegetarian regimens to ones that are well balanced and nutritionally adequate. Diet is used by metabolic practitioners not only to strengthen the immune system but as part of a lifestyle change designed to restrict intake of new toxins.²⁵ Specific diets are tailored to correspond to each patient's metabolic profile as determined by the spurious diagnostic tests described above.²⁶

Foods commonly promoted are those that are "natural" and "organic." These include such items as fertile eggs, certified raw milk, sea salt, yogurt, carob, kelp, garlic, and wheatgrass juice. Products unacceptable are those that have been processed or homogenized or those that contain additives and/or preservatives.²⁷

Nutritional supplementation is a major part of essentially all metabolic therapies, and large numbers of supplements are routinely recommended.²⁸ Supplements are purported to balance the diet, help restore the patient's normal metabolic patterns, strengthen the immune system, and destroy tumorous growths. Commonly included are: (1) megadoses of vitamins, especially vitamins A, C, and B complex; (2) a variety of individual minerals, given orally or intravenously, including calcium, potassium, magnesium, selenium, and zinc; (3) enzymes to reduce tumor growth and aid digestion; (4) glandular extracts, promoted to boost the patient's corresponding ailing organ system (i.e., liver for liver cancer, lungs for lung cancer, etc.); (5) miscella-

neous products including para-aminobenzoic acid (PABA), carnitine, lecithin, inositol, RNA, DNA, amino acids, injections of animal organ cellular extracts, and a plethora of herbs and herbal products.²⁹⁻³¹

In addition to advocating nutritional supplements, metabolic therapists also recommend the use of products they claim will stimulate the immune system. While most are spurious, like gerovital (procaine hydrochloride plus vitamins) and "hepmare plus" (a shark liver extract), some are drugs used or being investigated by responsible physicians. Examples are *Bacillus Calmette-Guérin* (BCG), an antituberculosis vaccine not widely used in the US; gamma globulins; and interleukins.^{32,33}

Attacking the Disease

Finally, metabolic therapeutics are purported to attack and destroy tumors. Various tumor-specific substances are promoted and sold with the claim that they are effective, natural, and nontoxic.

A few of the agents currently in vogue include urea, based on the idea that urine has cleansing powers; cesium chloride, claimed to inhibit cancer growth by making the pH of cancer cells "basic"; hydrazine sulfate, said to destroy tumors; germanium sesquioxide and hydrogen peroxide, sold as hyperoxygenators; and Laetrile, purported to poison only cancer cells.^{34,35} Also considered useful are modalities such as prayer, Bible study, sing-along sessions, imagery, exposure to colored lights, "bio-electrical stimulation," and the use of various magnetic devices.³⁶

Several clinics advertise low-level or "micro-dose" chemotherapy. Small doses of standard cytotoxic agents are administered with the claim that when they are used in conjunction with other aspects of metabolic therapy, the effectiveness of standard doses can be retained while eliminating side effects.³⁶

Contemporary Clinics and Their Promoters

Questionable cancer treatments are provided in numerous Mexican communities located along the border from eastern Texas

to the California coast. Furthermore, there are literally hundreds of metabolic practitioners practicing in the US. Some are agents of Tijuana promoters and some have set up clinics of their own. Tijuana and the coastal cities immediately to the south (Rosarita Beach and Ensenada), however, serve as the hubs of activity.

Currently there are seven major clinics in the Tijuana area that claim to administer some form of metabolic therapy. All use most facets of the regimens described above, but each adds its own special product lines and therapeutic modalities. The table represents a list of leading cancer clinics, their major promoters, and a few of the modalities that characterize each facility.³⁷

Additional clinics in the Tijuana area that treat smaller numbers of patients with metabolic therapies include American Metabolics headed by Geronimo Rubio, MD, and Gary Richards (both previously associated with Rosarita Beach Clinic); the Quintana Hospital, sponsored by the All-Natural Medical Center of Baja, California, and headed by J. Ronald Brown, MD; and the Yvonne Fraire Clinic headed by Yvonne Fraire, MD. There are also several other one-person clinics promoting cancer cures.

Costs

Patients at the clinics are urged to bring a companion and can expect to pay \$2,500 to \$4,500 a week for their stay. Some clinics have additional costs for extra treatments, and companions are charged \$200 to \$300 a week to share the room with their sick relative.² Outpatients are charged a one-time fee of approximately \$4,000 for a one-day visit to the Biomedical Center. They may return for future visits without additional charge.³⁸ Other outpatient programs cost \$1,000 to \$2,000 a week. With the exception of the Biomedical Center, the recommended treatment duration is three weeks, so patients usually pay \$8,000 to \$12,000 plus travel expenses for their treatments. Most programs also recommend follow-up therapy at home for additional fees, and some patients may be urged to return to the clinics for additional treatments.

Evaluation

The metabolic therapies described above defy precise and fully accurate evaluation. For the most part, the few recognizable unifying concepts lack reasonable scientific rationale or logic. On the other hand, so many modalities are utilized, including some that have a basis in responsible science, that one could not definitively claim that all aspects of these therapies are useless.

Additionally, because the hundreds of nostrums and regimens claimed to be metabolic in nature change almost daily, any full evaluation would be immediately outdated.

What can be evaluated, however, are the underlying concepts, frequently used diagnostic tests, detoxification regimens, major categories of immune-system-stimulating and tumor-reducing products, and documentation (or lack thereof) for safety and efficacy of the regimens.

Underlying Concepts

The three major concepts on which modern "metabolic therapies" are based are: (1) the idea that a build-up of man-made toxins from foods, additives, and environmental pollution is the primary cause of degenerative diseases; (2) the belief that appropriate detoxification and dietary intervention can result in the reversal of these diseases; and (3) the perception that tumors thrive in the absence of oxygen and are killed by substances that increase the oxygen supply to the site of the tumor.

The claim that poor diet and environmental pollutants cause all degenerative diseases is clearly without foundation. While it is true that various diet-disease relationships exist, the actual number or percentage of nutrition-related cancers remains unknown. Food additives, such as artificial colors and preservatives, are also claimed to be responsible for causing cancer, but evidence is lacking that such products pose a significant threat when appropriately used.³⁹ Similarly, various industrial pollutants have been associated with increased incidences of some tumors,

**LEADING CANCER CLINICS IN TIJUANA,
THEIR PRIMARY PROMOTERS, AND MAJOR MODALITIES
FOR WHICH EACH CLINIC IS KNOWN**

Name of Clinic	Major Promoters	Type of Facility	Major Regimens
American Biologics	Michael Culbert Robert Bradford Rodrigo Rodriguez, MD	Inpatient and outpatient treatment Small modern clinic	Mixed metabolic therapies Oxymedine Electromedicine
Bio Medical Center	Mildred Nelson, RN	Outpatient treatment Large converted mansion	Hoxsey Herbals
Clinica Cydel (Clinica Manner)	Gilberto Alvarez, MD	Inpatient treatment Large motel-like facility	Manner Cocktail, Colonics, Special enzymes, DMSO
Hospital Ernesto Contreras	Ernesto Contreras, MD Ernesto Contreras, Jr., MD Francisco Contreras, MD	Inpatient and outpatient treatment Small modern hospital	Lactrile Low-dose chemotherapy Sing-along sessions Bible study
Hospital de Baja California del Sol	Charlotte Gerson Strauss Norman Fritz	Inpatient treatment Converted motel	Gerson therapy Coffee enemas Pressed liver juice Fresh fruit juices
Hospital Santa Monica	Kurt Donsbach, DC Joel Wallach, DMV	Inpatient treatment Hotel-like clinic	Hydrogen peroxide Mixed medication infusions
St. Jude International Clinic	Jimmy Keller	Outpatient treatment Three rooms in back of a commercial building	Amino acid therapy Sulconar Herbal Panama Gas

but the levels to which most people are exposed do not appear to present a widespread hazard. As Bruce Ames has said, the threat posed by pollutants and additives is frequently outweighed by that from naturally occurring carcinogens.⁴⁰

Evidence is also lacking that removal of offending foods or other toxic substances from the diet or atmosphere will alter the outcome of active neoplastic disease once it has become established. The basic premise that dietary alterations will cure cancer, therefore, while possibly beneficial for the patient, has no established basis in fact.⁴¹

The concept that cancer cells thrive under hypoxic conditions is based on Warburg's observations that aerobic respiration rates are below normal in tumors.¹⁴ Modern researchers attribute the reduced respiration at cancer sites to lack of oxygen in poorly vascularized tissue surrounding rapidly growing tumors.⁴² Thus, there is no current scientific rationale for the use of specific products that promoters claim will kill tumors by increasing levels of blood oxygen.

Some promoters point to the use of hyperoxygenation of tumor sites during radiotherapy as justification for their regimens. Such legitimate therapies are based on the concept that damage to tumors results from the production of free radicals during irradiation rather than from any deleterious effects of high levels of molecular oxygen.⁴³ Furthermore, the small quantities of supposed oxygenators (e.g., four cc of hydrogen peroxide administered intravenously over a period of several hours) do not contain enough oxygen to have any significant hyperoxygenating effect.

Diagnostic Tests

Although some standard diagnostic tests may be used, metabolic practitioners do not necessarily use recognized values when interpreting the significance of test results. Harold Manner, for example, taught his proteges that SMAC values within the normal range can be indicative of mineral deficiencies,⁴⁴ and Ernesto Contreras inappropriately uses CEA values, which can be affected by factors other than cancer, as primary indicators that colorectal cancer

patients need his therapies.^{45,46} All the tests commonly used by metabolic practitioners to establish "metabolic standards" have been demonstrated to be useless or lacking scientific rationale.⁴⁷⁻⁵² Especially noticeable is the lack of biopsies evaluated by competent pathologists.

Detoxification Regimens

Extended periods of fasting, although no longer recommended at most of the clinics, are still used as parts of some metabolic regimens. Fasting for even a few days can cause electrolyte imbalances and even death when combined with other aspects of detoxification.^{53,54}

There is no evidence in the peer-reviewed literature that enemas and colonics are useful for detoxifying the body, as claimed by metabolic practitioners. On the other hand, the risks from enemas and colonics include perforation or rupture of the colon; transfer of pathogenic microorganisms between patients by contaminated enema devices; and colitis caused by additives such as soap suds, paint thinners, ground ginger, pepper, and ash.

Patients undergoing detoxification regimens frequently experience nausea, diarrhea, and flu-like symptoms. Deaths have resulted both from extended periods of fasting and from colonics.⁵⁵⁻⁵⁸

Diet

The edible components of the dietary regimens furnished at the inpatient clinics, although not especially ideal for cancer patients, are generally adequate and reasonably well-balanced. A notable exception is the highly restrictive Gerson diet.³ The use of unpreserved and inappropriately processed foods, however, may expose patients to unnecessary risk. The diets recommended to outpatients vary and are often nutritionally inadequate.⁵⁹

Foods touted as natural and organic have not been demonstrated to differ nutritionally from other foods and, therefore, are not worth any additional cost.⁶⁰ Furthermore, foods like raw milk have been implicated in numerous cases of sickness and death, especially in patients whose immune systems are compromised.⁶¹⁻⁶³

The massive levels of supplementation (costing as much as \$1,000 per month⁶⁴) prescribed as part of metabolic therapies also place patients at risk, since numerous vitamin and mineral supplements may cause symptoms of toxicity or disrupt metabolic balance when employed in doses significantly exceeding the recommended dietary allowances.⁶⁵ In some instances, patients on metabolic regimens have had to be hospitalized as a result of oversupplementation.⁶⁶

Glandular substances and enzymes are, for the most part, hydrolyzed when ingested and are therefore useless for mitigating diseases or palliating symptoms. Additionally, laboratory analyses have shown some products, especially those of animal origin, to be contaminated with pathogenic organisms due to certain methods of preparation.⁶⁷

Experimental drugs—such as interleukins and immunoglobulins—used at the Mexican clinics are not administered under clearly defined investigational protocols, as required by responsible research methodology. Additionally, one form of a drug (for example, alpha instead of gamma interferon) may be used inappropriately to treat cancers for which only the other form has proven effectiveness.⁶⁸ In some cases patients may not even be given the drugs they are told they are receiving. Patients may thereby be misled into believing that they are taking medication with proven efficacy.

Antitumor Agents

Few of the dozens of products promoted as antitumor agents by metabolic therapists have been approved for use by the US Food and Drug Administration, even as experimental drugs. Several, such as Laetrile and

germanium sesquioxide, have been tested and found to be useless, inappropriate, or toxic.^{68,69} The hyperoxygenators have no demonstrated benefits, and both hydrogen peroxide administered enterally and parenterally, and ozone, administered rectally, can be harmful because of excess free radical production and oxidation of tissue.^{70,71} Microdose chemotherapy when combined with metabolic therapy has not been shown to be effective. In fact, drugs used in doses below the maximum possible to obtain tumor kill constitute, according to Krakoff, "the most toxic side effect of chemotherapy and result in killing patients with misguided kindness."⁷²

Recommendations

Patients traveling to the Tijuana area for metabolic treatments appear to be subjecting themselves to costly and hazardous regimens, especially if they forgo responsible medical care.

None of the current practitioners mentioned has been specifically trained in oncology, none of the therapies has been tested utilizing the safeguards put in place by the scientific community to determine efficacy and to ensure that the potential benefits outweigh the risks, and no evidence of efficacy other than lay literature and patient testimonials has been provided to qualified researchers.

In addition, the underlying concepts are faulty; the methods of diagnosis are mostly useless; and the treatment modalities are antiquated, disproven, and in some cases clearly hazardous.

The American Cancer Society, therefore, strongly urges individuals with cancer not to seek treatment with metabolic therapies in the Mexican border clinics around Tijuana and elsewhere. ©

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