DOWNLOAD PDF A TEXTBOOK ON EDTA CHELATION THERAPY

Chapter 1 : A Textbook on EDTA Chelation Therapy - Google Books

Chelation therapy, based on the intravenous infusion of EDTA, is a highly effective treatment for atherosclerotic cardiovasular disease. Saftey and effectivenss are well documented in clinical studies, all of which to date are supportive of this therapy, and there are no studies showing lack of effectiveness.

Chelation therapy, as discussed in this article, is a series of intravenous infusions containing disodium EDTA and various other substances. It is sometimes done by swallowing EDTA or other agents in pill form. Proponents claim that EDTA chelation therapy is effective against atherosclerosis and many other serious health problems. Its use is widespread because patients have been led to believe that it is a valid alternative to established medical interventions such as coronary bypass surgery. However, there is no scientific evidence that this is so. The scientific jargon in these books may create the false impression that chelation therapy for atherosclerosis, and a host of other conditions, is scientifically sound. The authors allege that between , and , patients have safely benefited. However, their evidence consists of anecdotes, testimonials, and poorly designed experiments. This article identifies the major claims made for EDTA chelation and examines each in light of established scientific fact. The sources used for this review included position papers of professional societies, technical textbooks, research and review articles, newspaper articles, patient testimonials, medical records, legal depositions, transcripts of court testimony, privately published books, clinic brochures, and personal correspondence. Chelation with other substances has legitimate use in a few situations. For example, deferoxamine Desferol is used to treat iron-overload from multiple transfusions. But this is not related to the topic of this article, and chelation with disodium EDTA is not a substitute for Desferol chelation. With this claw, EDTA binds di- and trivalent metallic ions to form a stable ring structure. EDTA is water-soluble and chelates only metallic ions that are dissolved in water. Mercury, lead, and cadmium cannot be metabolized by the body and, if accumulated, can cause toxic effects by interfering with various physiological functions. These substances are called "heavy metals," a term applied to metallic elements whose specific gravity is about 5. Aluminum is not a nutrient, but iron, copper, nickel, cobalt, zinc, manganese, magnesium, and calcium are essential nutrients that are needed for normal metabolic activity. After EDTA was found effective in chelating and removing toxic metals from the blood, some scientists postulated that hardened arteries could be softened if the calcium in their walls was removed. The first indication that EDTA treatment might benefit patients with atherosclerosis came from Clarke, Clarke, and Mosher, who, in , reported that patients with occlusive peripheral vascular disease said they felt better after treatment with EDTA [1]. In , Meltzer et al. However, during the next two months, most of the patients began reporting unusual improvement in their symptoms. Prompted by these results, Kitchell et al. They found that although 25 of the 38 patients had exhibited improved anginal patterns and half had shown improvement in electrocardiographic patterns several months after the treatment had begun, these effects were not lasting. At the time of the report, 12 of the 38 had died and only 15 reported feeling better. This "improvement" was not significant, however, because it was no better than would be expected with proven methods and because there was no control group for comparison. The group conducts courses, sponsors the American Journal of Advancement in Medicine, and administers a "board certification" program that is not recognized by the scientific community. The protocol calls for intravenous infusion of to 1, ml of a solution containing 50 mg of disodium EDTA per kilogram of body weight, plus heparin, magnesium chloride, a local anesthetic to prevent pain at the infusion site , several B-vitamins, and 4 to 20 grams of vitamin C. This solution is infused slowly over 3. The initial recommendation is about 30 such treatments, with the possibility of additional ones later. Additional vitamins, minerals, and other substancesâ€”prescribed orallyâ€”"vary according to preferences of both patients and physicians. The number of treatments to achieve "optimal therapeutic benefit" for patients with symptomatic disease is said to range from 20 "minimum" , 30 usually needed , or 40 "not uncommon" before benefit is reported" to as many as or more over a period of several years. Some chelationists, in an attempt to secure coverage for their patients, misstate on their insurance claims that they are treating heavy-metal poisoning. In , ACAM issued a revised protocol describing the same procedures but adding circumstances contraindications

under which chelation should not be performed. As in , the document gives no criteria for determining: Unproven Claims Proponents claim that chelation therapy is effective against atherosclerosis, coronary heart disease, and peripheral vascular disease. Its supposed benefits include increased collateral blood circulation; decreased blood viscosity; improved cell membrane function; improved intracellular organelle function; decreased arterial vasospasm; decreased free radical formation; inhibition of the aging process; reversal of atherosclerosis; decrease in angina; reversal of gangrene; improvement of skin color, healing of diabetic ulcers. None of these claimed benefits has been demonstrated by well-designed clinical trials. In a retrospective study of 2, patients treated with NaMgEDTA, Olszewer and Carter concluded that EDTA chelation therapy benefited patients with cardiac disease, peripheral vascular disease and cerebrovascular disease. These conclusions were not justified because the people who received the treatment were not compared to people who did not. In , these authors carried out a "double-blind study" in which EDTA chelation was used to treat ten patients with peripheral vascular disease. The authors claimed that this was the first such study. Between and , independent physicians published at least fifteen separate reports documenting the case histories of more than seventy patients who had received chelation treatments. They found no evidence of change in the atherosclerotic disease process, no decrease in the size of atherosclerotic plaques, and no evidence that narrowed arteries opened wider. More recently, the results of two randomized, controlled, double-blind clinical trials of chelation therapy were published in peer-reviewed German medical journals. The first was conducted by Curt Diehm, M. Diehm studied 45 patients who had intermittent claudication, a condition in which impaired circulation causes the individual to develop pain in the legs upon walking. About half of the patients were treated with EDTA and the rest received Bencyclan, a bloodthinning agent. In addition to determining the effect of each agent on the ability to perform pain-free walking exercises, Diehm measured the progress of the disease process in each patient during the four-week treatment period and three months after treatment was stopped. Diehm also concluded that the improvements in walking measurements in both groups were directly related to his success in convincing them of his strong interest in their well being and his ability to motivate them to make an effort to perform greater activity. In the second trial, R. Hopf, a cardiologist at the University of Frankfurt, tested chelation in patients with coronary heart disease [4]. In this trial, 16 patients with angiographic evidence of coronary heart disease were randomized and divided into an EDTA-treated and an untreated group. Before treatment, the treated group averaged 2. Patients were infused with ml of either the EDTA solution or dilute salt water a placebo at three-day intervals for a total of 20 infusions. On completion of the trial, patients in both groups said they felt better and performed weightlifting tests equally well. Hopf concluded that chelation had no effect on diseased coronary arteries. This is an excerpt from a flyer from an osteopathic physician whose radio advertisements invite people who have been advised to have coronary bypass surgery to consult him first. There is no published scientific evidence that chelation therapy can render bypass surgery unnecessary or can help people with any of the conditions listed in the ad. The experience to which the ad refers is not a trustworthy substitute for scientific testing. People with coronary artery disease who need bypass surgery and choose chelation instead place themselves at great risk. Dubious Safety Proponents also claim that chelation has been demonstrated to be safe. In Bypassing Bypass, Cranton declares that six million chelation treatments have been given safely over the last forty years. In his textbook, however, he warns of the seriousness of the possible side effects and advises that prospective patients be given a complete physical examination and be tested to rule out hypocalcemia, kidney impairment, allergic conditions sensitivity to components of the EDTA infusion fluids , hypoglycemia, blood-clotting problems, congestive heart failure, liver impairment, and tuberculosis. Other observers have reported cases of hypocalcemia leading to cardiac arrhythmias and tetany; kidney damage; decreased blood clotting ability with abnormal bleeding; thrombophlebitis and embolism; hypoglycemia and insulin shock; severe vasculitis and autoimmune related hemolytic anemia, dermatitis with pruritus and generalized eczema; and extensive clumping of platelets in the blood of some patients with atherosclerosis and other chronic diseases. An important theoretical consideration should also be considered. The trace metal most dramatically lost as a result of EDTA chelation is zinc. French researchers have found that 24 hours after an infusion of EDTA, the urine of human subjects contained 15 times the normal amount of zinc [5]. Without

replacement, the loss of this much zinc over the months during which 30 to 40 treatments are delivered will increase the potential for severe impairment of immune function, precancerous cellular mutations, loss in selective permeability of cell membranes and altered solubility of pancreatic insulin. Although proponent literature advises that supplemental zinc be administered to guard against zinc depletion, studies showing that this supplementation actually prevents depletion have not been published in the peer-reviewed scientific literature. Unsound Theories Over the past 40 years, proponents have invoked various biochemical mechanisms to justify their use of EDTA chelation. Each time critics proved that the mechanism in vogue was scientifically untenable, a new one was postulated together with new dogma. The "roto-rooter" hypothesis ss. Throughout the s chelation proponents claimed that the structure of arterial plaque depended on the calcium it contained. They suggested that this calcium was dlike the rivets in a steel structure and that removing it would cause the plaque to disintegrate, widening the affected arteries and increasing blood flow. This mechanism was compared to "roto-rooter" cleaning of a clogged household water pipe. Plaque is an integral part of the artery wall and not a deposit on its surface. Calcium enters arterial plaque in the late stages of its enlargement. Since EDTA cannot pass through the artery cell membranes it cannot chelate the calcium there. Chelation proponents have never presented evidence that chelation therapy causes softening of hardened arteries, removes calcium from arterial plaque or causes the plaque structure to disintegrate. Even if a chelating substance could impact on arterial disease, there is good reason to doubt that EDTA would be an effective agent. Of all the synthetic chelating agents that have been used to bind metals in the body, EDTA is probably the least effective. Because it is water-soluble, it cannot penetrate the lipid-rich cell membranes. Because it is nonspecific, it binds the other divalent and trivalent metal ions in a mixture before it binds calcium. It is rapidly eliminated from the body, carries all bound trace metals with it, and can deplete nutritionally important trace metals. Parathyroid hormone PTH and plaque decalcification ss. By the mids the roto-rooter hypothesis had been repudiated. However, because proponents still believed that the structural integrity of arterial plaque depended on its calcium content, a new rationale was needed. This stimulated the parathyroid gland to secrete PTH, which promoted remineralization of bone. Walker alleged that the calcium for this bone remineralization was supplied through serum by "gradual transfer" of calcium from hardened arterial tissue and plaque. This, he said, softened the arteries and caused plaque to disintegrate. Every metabolic process in our tissues depends somewhat on calcium for its activity. To ensure human survival, the neuromuscular system must be protected by preventing a loss of calcium from the soft tissues. The calcium in blood plasma is strictly maintained between 9. The rest is contained in the soft tissues 0. The homeostatic mechanism by which the plasma calcium level is maintained involves the action of PTH, and 1,25 dihydroxyvitamin D3. These hormones regulate absorption of calcium from the gut, reabsorption in the kidney tubules, and mobilization from the bone. The remineralization of bone uses calcium drawn from the plasma. A fall in plasma calcium triggers secretion of extra PTH, increases calcium reabsorption in the kidney tubules and synthesis by kidney tissue of 1,25 dihydroxyvitamin D3, which causes increased calcium absorption from the gut.

Chapter 2 : Chelation Therapy: Unproven Claims and Unsound Theories

A Textbook on EDTA Chelation Therapy, pp. , Published List Price $ but now available at a discount Scroll down to to read the titles and authors of all 38 chapters TABLE OF CONTENTS.

Intravenous Chelation therapy is a medical treatment used for cardiovascular heart disease by improving metabolic and circulatory function by removing toxic metals such as Lead, Cadmium, Arsenic, Aluminum, Uranium, and abnormally located nutritional metallic ions such as copper and iron from the body. Heavy metals contribute to plaque in the arteries, loss of memory function; adversely affect vital organs such as the liver, thyroid, parathyroid, and heart. It can depress immune systems as well as brain function. What is IV Chelation therapy? This is a therapy administered by an intravenous infusion of a synthetic amino acid, ethylene-diamine-tetra-acetic acid EDTA. EDTA controls free radical damage that destroys cells as it removes heavy metals, restoring normal enzyme functioning. EDTA controls oxidative damage to cell membranes and enhances the efficiency of energy metabolism, independent of any effect on blood flow or oxygen. The intravenous therapy removes excess metal ions, redistributes abnormally high concentrations of essential nutritional trace elements in blood-deprived tissues, helps reestablish prostaglandin hormone balance which reduces arterial spasm, blood clots, plaque formation and arthritis; protects the integrity of blood platelets, normalizes calcium metabolism, intermittently lowers serum calcium by stimulating uptake of calcium in bones, increases tissue flexibility and encourages overall metabolic efficiency due to the whole range of above mentioned factors. Oral or rectal Chelation therapy with EDTA, even in small doses, can bind to other nutrients and trace minerals preventing absorption thereby detrimental to health. The only safe way to administer EDTA is intravenously. Recently that practice spread to the aggressive marketing of EDTA as a rectal suppository. In my opinion, those practices are deceptive and potentially dangerous. No statistically significant scientific evidence for effectiveness exists. EDTA is poorly absorbed by either the oral or rectal route. All statistically significant published data for effectiveness applies only to intravenous EDTA. DMSA, a chelating drug that is well absorbed orally, does not have the beneficial effect of intravenous EDTA on atherosclerosis and diseases of aging. In Swiss Nobel laureate Alfred Werner developed the concept on how metals bind to organic molecules. It was also found useful in the separation of specific metals. It gained importance in electroplating and industrial dye manufacture. EDTA as a chelate is used today in hundreds of everyday products. Not until World War II were the potential therapeutic benefits of Chelation realized as a treatment for arsenic and lead as well as other heavy metals. Navy adopted EDTA Chelation therapy for sailors who were poisoned by absorbing lead while painting ships at other naval facilities. EDTA, besides removing heavy metals has many health benefits. A study from Japan found that EDTA given intravenously into mice increased the blood concentration of interferon four to twelve fold. Interferon is produced by the immune system and increases immunity. Hundreds of thousands of people have now undergone Chelation therapy and thousands of scientific articles have been written about the process. Chelation therapy is not only safer than the conventional methods of treating ailments of cardiovascular disease such as blocked arteries from plaque formation, but also strengthens bones by increasing their calcium uptake, providing an indirect treatment for osteoporosis. Surgery often addresses the symptoms of a disease, while Chelation therapy goes directly to its causes and reverses the damaging processes. People who are prone to strokes often have poor cerebral circulation, according to one large study. Chelation therapy can help prevent a stroke or lessen its effects by removing calcium and other mineral deposits from the arteries in the neck and head, helping to improve the blood flow. A study of 19, people with peripheral vascular disease showed Diabetes also responds well because the disease also involves the arteries. It also may decrease the need for more insulin by opening up the insulin receptors. To some extent it slows the aging process. Chemical sensitivities and allergies also seem to improve due to a better functioning of the immune system. Also, all types of arthritis and muscle and joint aches and pains seem to improve after chelation. Macular degeneration, a major cause of visual loss in the elderly, is often improved and almost always arrested or slowed by chelation therapy. If you are interested, just give us a call at ; we will be happy to answer all of your questions.

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Chapter 3 : Dailymotion Video Player - Ebook A Textbook on EDTA Chelation Therapy: Second Edition Fre

EDTA chelation therapy removes from the human body, with relative safety and without surgery, metallic ions that play an important role in the formation of atherosclerotic plaque. Dr. Elmer Cranton's compilation of the most current and pertinent information on EDTA chelation therapy is now back in print, with even more information about.

Chapter 4 : TEXTBOOK ON EDTA CHELATION THERAPY by Elmer M. Cranton, M.D.

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Chapter 5 : Chelation Therapy for the Removal of heavy metals. Great info | Health Masters

EDTA chelation therapy removes from the human body, with relative safety and without surgery, metallic ions that play an important role in the formation of atherosclerotic plaque.