

EDTA Chelation Might Restore Cardiovascular Function?

This safe therapy has been used successfully for over 50 years and yet your heart doctor will never tell you about it!

The chemical solution most often used in chelation therapy, EDTA, was first made in Germany in the 1930s. It is now widely accepted as an effective treatment for heavy metal poisoning.

Amalgam fillings, environmental pollution, tainted meat, fish, produce, along with most healthcare and beauty products can cause the build-up of toxic metals in our bodies. These toxic metals inhibit vital enzyme function and increase free radical damage. With chelation therapy several substances are administered to patients orally or intravenously to lower or eliminate heavy metals.

These chelating agents latch onto or bind to these metals, creating a compound that can be passed in the urine.

Without chelation therapy these heavy metals can reside in the blood, muscle and bones for decades causing problems with DNA replication and enzyme function thus further predisposing the body to future illness at a time of compromised immune function.

Coronary Artery Disease (CAD)

Up to now, there have been no adequate, controlled, published scientific studies using currently approved scientific methodology to support this therapy for cardiovascular disease.

The National Center for Complementary and Alternative Medicine (NCCAM) and the National Heart, Lung, and Blood Institute (NHLBI), both components of the National Institutes of Health (NIH), have launched the Trial To Assess Chelation Therapy (TACT). TACT is the first large-scale, multicenter study to determine the safety and efficacy of EDTA chelation therapy for individuals with coronary artery disease. The questions and answers below provide additional information on coronary artery disease, EDTA chelation therapy, and the study.

What is coronary artery disease?

Coronary artery disease (CAD) is the most common form of heart disease. In CAD the coronary arteries, the vessels that bring oxygen-rich blood to the tissues of the heart, become blocked by deposits of a fatty substance called plaque. As plaque builds, the arteries become narrower and less oxygen and nutrients are transported to the heart. This condition can lead to serious problems, such as angina (pain caused by not enough oxygen-carrying blood reaching the heart) and heart attack. In a heart attack, or myocardial infarction, there is such poor oxygen supply to the heart that part of the heart muscle dies. If a sufficiently large portion of the heart is affected, it may no longer be able to pump blood efficiently to the rest of the body, resulting in death or chronic heart failure.

Approximately 7 million Americans suffer from CAD. It is the leading cause of death among American men and women; more than 500,000 Americans die of CAD-related heart attacks each year.

There are several factors that can each increase the risk of developing CAD:

- High blood pressure
- High cholesterol levels
- Smoking

- Obesity
- Physical inactivity
- Diabetes
- Family history of CAD
- Gender
- Age

A person with CAD may or may not have symptoms. Symptoms can include chest pain from angina, shortness of breath, lightheadedness, cold sweats, or nausea.

How is CAD diagnosed and treated?

Because the severity of CAD and its symptoms can vary from person to person, the way the disease is diagnosed and treated can also vary. CAD is often diagnosed through a series of tests that can include blood tests to see if protein has been released into the bloodstream from damaged heart tissues, electrocardiograms (EKG) to check the heart's electrical activity, "stress" tests to record the heartbeat during exercise, nuclear scanning to check for damaged areas of the heart, and angiography to see how blood flows.

Treatment of CAD depends on many factors, such as the patient's age, heart function, and overall health. Often, treatment begins with focusing on lifestyle--stopping smoking for patients who smoke, reducing fat in the diet, and engaging in a prescribed exercise program. Medications may also be prescribed, such as aspirin to prevent additional heart attacks, medications that decrease the workload on the heart, or medicines to reduce high blood cholesterol levels or high blood pressure. If these efforts are not effective, a patient may need to have the narrowed or blocked arteries re-opened through a procedure called balloon angioplasty, or bypassed through surgery. Balloon angioplasty involves threading a thin tube into the artery and expanding a balloon-like apparatus as a way to increase the size of the artery so more blood can flow. Bypass surgery is used to treat severe blockages by using veins or arteries from other areas of the body to divert blood flow around the blocked coronary arteries.

What is EDTA chelation therapy?

Chelation is a chemical process in which a substance is used to bind molecules, such as metals or minerals, and hold them tightly so that they can be removed from a system, such as the body. In medicine, chelation has been scientifically proven to rid the body of excess or toxic metals. For example, a person who has lead poisoning may be given chelation therapy in order to bind and remove excess lead from the body before it can cause damage.

In the case of EDTA chelation therapy, the substance that binds and removes metals and minerals is EDTA (ethylene diamine tetra-acetic acid), a synthetic, or man-made, amino acid that is delivered intravenously (through the veins). EDTA was first used in the 1940s for the treatment of heavy metal poisoning. EDTA chelation removes heavy metals and minerals from the blood, such as lead, iron, copper, and calcium, and is approved by the U.S. Food and Drug Administration (FDA) for use in treating lead poisoning and toxicity from other heavy metals. Although it is not approved by the FDA to treat CAD, some physicians and alternative medicine practitioners have recommended EDTA chelation as a way to treat this disorder.

Does EDTA chelation therapy have side effects?

When used as approved by the FDA (at the appropriate dose and infusion rate) for treatment of heavy metal poisoning, chelation with EDTA has a low occurrence of side effects. The most common side effect is a burning sensation experienced at the site where the EDTA is delivered into the veins. Rare side effects can include fever, hypotension (a sudden drop in blood pressure), hypocalcemia (abnormally low calcium levels in the blood), headache, nausea, vomiting, and bone marrow depression (meaning that blood cell counts fall). Injury to the kidneys has been reported with EDTA chelation therapy, but it is rare. Other serious side effects can occur if EDTA is not administered by a trained

health professional.

How might EDTA chelation therapy work to clear blocked arteries?

Several theories have been suggested by those who recommend this form of treatment. One theory suggests that EDTA chelation might work by directly removing calcium found in fatty plaques that block the arteries, causing the plaques to break up. Another is that the process of chelation may stimulate the release of a hormone that in turn causes calcium to be removed from the plaques or causes a lowering of cholesterol levels. A third theory is that EDTA chelation therapy may work by reducing the damaging effects of oxygen ions (oxidative stress) on the walls of the blood vessels. Reducing oxidative stress could reduce inflammation in the arteries and improve blood vessel function. None of these theories has been well tested in scientific studies.

Is there evidence that EDTA chelation therapy works for CAD?

There is a lack of adequate prior research to verify EDTA chelation therapy's safety and effectiveness for CAD. The bulk of the evidence supporting the use of EDTA chelation therapy is in the form of case reports and case series. Some patients who have undergone chelation therapy and the physicians who prescribed it claim improvement in CAD. In addition, there are approximately 12 published descriptive studies and 5 randomized controlled clinical trials regarding the use of EDTA chelation for CAD. Although each descriptive study did report a reduction in angina, they were uncontrolled clinical observations or retrospective data, typically with a small number of participants. Of the five clinical trials in which patients were randomly selected to receive chelation therapy or a placebo (a dummy solution), the most rigorous way of assessing a new treatment, three trials involved so few people that only a dramatic improvement could have been detected. Studies need a larger number of participants to detect more mild benefits of a treatment. The fourth study was never published in final form, so its conclusions are uncertain. Finally, the fifth study reported that EDTA chelation was associated with an improvement in ability to exercise, but it had only 10 participants.

How frequently is EDTA chelation therapy used?

It is estimated by the American College for Advancement in Medicine (ACAM), a professional association that supports the use of chelation therapy, that more than 800,000 visits for chelation therapy were made in the United States in 1997 alone.

Why did NCCAM and NHLBI decide to study this therapy?

CAD is the leading cause of death among men and women in the United States. In spite of effective standard therapies, such as lifestyle modifications, medications, and surgical procedures, some patients with CAD seek out EDTA chelation therapy as a treatment option.

Therefore, NCCAM and NHLBI saw a public health need to conduct a large-scale, well-designed clinical trial that could determine more clearly whether EDTA chelation therapy is indeed an effective and safe alternative for treating CAD. However, there are professional organizations that are of the opinion that a large study of EDTA chelation therapy should not be carried out because of the lack of scientific evidence supporting its effectiveness.

What will the study determine?

Overall, the investigators will assess whether EDTA chelation therapy and/or high-dose vitamin/mineral supplements are safe and effective in treating individuals with CAD. Specifically, they will determine if EDTA chelation and/or high-dose vitamin supplements improve event-free survival (length of time without another heart attack, etc.), are safe for use, improve quality of life, and are cost effective.

The investigators will look at several markers of improvement, or endpoints, to make these determinations. The primary

endpoint in the trial will be a composite of:

- All causes of death
- Heart attack
- Stroke
- Hospitalization for angina
- Coronary revascularization

Secondary endpoints will include:

- Cardiac death, or nonfatal heart attack, or nonfatal stroke
- The individual components of the primary endpoint
- The safety of the therapy
- Health-related quality of life
- Cost effectiveness

Who is the study's principal investigator?

The principal investigator for the trial is Gervasio A. Lamas, M.D., director of academic affairs at Mount Sinai Medical Center-Miami Heart Institute, Miami Beach, Florida. Dr. Lamas is a board-certified cardiologist and an associate professor of medicine at University of Miami School of Medicine. He has extensive experience in the design, conduct, and analysis of randomized, multicenter trials of the treatment and management of cardiac diseases, including CAD.

What types of participants will be recruited?

Participants must be 50 years of age or older, have had a heart attack at least 6 weeks prior to evaluation, and have not had chelation therapy within the past 5 years. Other exclusion criteria include:

- History of allergic reactions to EDTA or any of the therapy's components
- Coronary or carotid revascularization procedures within the past 6 months or a scheduled revascularization
- History of cigarette smoking within the last 3 months
- Childbearing potential
- History of liver disease
- Diagnoses of additional medical conditions that could otherwise limit patient survival, such as cancer

The trial began in 2003; patients receive 30 weekly intravenous treatments, then 10 more treatments given bimonthly, over a 28-month period. They also receive high doses of vitamins, which are also often given with chelation therapy. (The effect of such vitamin doses will also be examined in the trial.) The study is expected to be completed in 2010.

Over 800,000 patient visits were made for chelation therapy in the United States in 1997. EDTA, which effectively speeds removal of heavy metals and minerals such as lead, iron, copper, and calcium from the blood, is approved by the U.S. Food and Drug Administration (FDA) for use in treating lead poisoning and toxicity from other heavy metals. Although it is not approved by the FDA to treat coronary artery disease, some physicians and alternative medicine practitioners have recommended EDTA chelation as a way to treat this disorder.

Coronary artery disease (CAD) is a type of heart disease in which the coronary arteries (vessels that supply oxygen-carrying blood to the heart) become blocked by deposits of a fatty substance called plaque. As plaque builds, the arteries become narrower and less oxygen and nutrients are transported to the heart for proper function. CAD can lead to serious health problems such as angina (pain caused by insufficient oxygen-carrying blood reaching the heart) and

heart attack.

If Plaque is dissolved throughout your entire circulatory system. It can reverse atherosclerosis, lower cholesterol levels and blood pressure and help to prevent heart attacks and strokes!

If you are reading this report you are obviously worried about your heart. You may have been told that you have:

- **Artery blockage**
- **Clogged cardiac artery**
- **Total cholesterol count is too high**
- **Heart surgery necessary**
- **LDL is too high**
- **Symptoms of Atherosclerosis**
- **Statins & other drugs prescribed etc. etc. etc.**
- **Artery plaque build-up**
- **Stent surgery required**
- **HDL count is too low**
- **Blood pressure is too high**
- **Blood circulation is poor**
- **Cardiovascular disease**
- **Erectile Dysfunction**
- **Drastic life style changes**
- **Peripheral Artery Disease-PAD**

THE ATHEROSCLEROSIS PROCESS

As we age, cholesterol, calcium, and other minerals accumulate on the inside lining of our blood vessels and, over time, clog them. This process is referred to variously as hardening of the arteries, atherosclerosis, arteriosclerosis, and arterial plaque buildup (see Figure 1).

CLOGGED ARTERIES CAUSE ALL THIS HAVOC

According to the U.S. government, one million Americans will be killed by a clogged artery.

Every 34 seconds an American dies as the result of a blocked cardiac artery (heart attack)

There's a 90 percent chance that poor circulation will trigger a serious health problem at some point in your life

More than 6.8 million Americans undergo heart bypass, balloon angioplasty and other circulation-related procedures each year

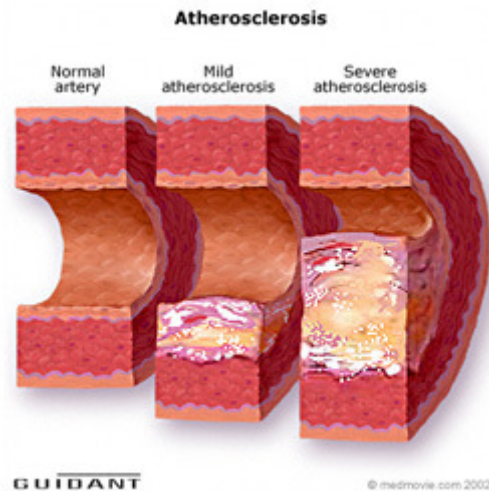


Figure 1. The atherosclerotic process.

To ignore this process can be exceedingly dangerous and may result in rampant cardiovascular disease. Examples of such diseases are high blood pressure, angina (chest pain due to poor blood circulation to the heart), heart attack, peripheral vascular disease (poor circulation to the legs and feet), and stroke.

When plaque builds up in blood vessels, blood flow (carrying oxygen and nutrients) is restricted. It's like water flowing through a pipe

- Every 53 seconds someone in the USA suffers a stroke
- Heart disease is the biggest killer of both men and women.
- Nearly 70% of the US population has some level of heart disease.
- Over 50% of those who have a heart attack never have a warning. In other words, the very first symptom of heart disease for these people is a heart attack!
- 33% of those without any prior symptoms of heart disease DIE from their first heart attack. In other words, their first symptom is death!
- It is a silent but very deadly disease.
- 50% of people who die of a heart attack have normal cholesterol levels.
- 50 million suffer from high blood pressure
- 12 million suffer from heart disease

The American Heart Association also says that some drug remedies increase the risk of a heart attack by 60%. Many high blood pressure drugs multiply the problem.

Having heart surgery is not the answer either.

Studies by Harvard Medical School

clogged with mineral deposits; if the deposits are thick enough to create a complete blockage, the water will stop.

It is no different with your blood vessels. If there is excessive plaque buildup and the vessels become partially or completely blocked, not enough blood can reach the body's tissues, which become starved for the oxygen and nutrients they need. Consequently, they will not function optimally and may even die. An example is peripheral vascular disease in a diabetic, where there is insufficient blood flow to the lower legs or the feet. Depending on the degree of compromise, the patient may experience pain upon walking, even short distances, or cramping in the legs or feet. Left unattended, gangrene of the feet may ensue, followed by amputation (if one seeks conventional treatment).

Another example is coronary (heart) vessels that become so clogged that there is insufficient blood flow to the heart muscle itself (see Figure 2). Symptoms might be tightness in the chest, chest pain, or discomfort in the jaw or left arm. If the blood supply is restricted for too long, a myocardial infarction, or heart attack, can occur. In this case, actual muscle tissue of the heart dies. If too much of it dies, the heart will no longer be able to pump blood to sustain life, and death will result.

Heart With Muscle Damage and a Blocked Artery

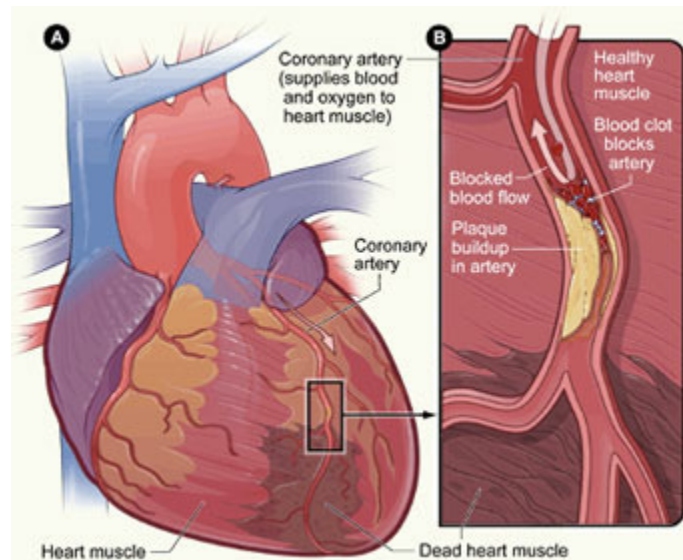


Figure 2

PLAQUE BUILDS UP THROUGHOUT THE BODY

researchers and the U.S. Government's Office of Technology Assessment have concluded that a staggering 85% of bypass surgeries were not necessary.

- Up to 42% of the 700,000 Americans who have coronary bypasses each year can expect to have diminished mental capacity.
- Up to 50% of surgeries fail, requiring another bypass to restore adequate coronary blood flow.
- Up to 4% die on the table.
- 80% return to their previous condition within 7 years.
- 19% have a heart attack, stroke or hemorrhage after surgery.
- 30% have slight brain damage.
- 20% suffer depression, and many men become impotent.

Unfortunately 50% of men and 63% of women who died suddenly of heart disease had NO previous symptoms

DISSOLVE A LIFETIME OF ARTERY PLAQUE

Fatty deposits called plaque starts building up at a very early age, even if you eat well and lead a healthy lifestyle, and relentlessly accumulates until the blockage leads to serious health problems.

Young arteries are flexible and supple, but early on small deposits of cholesterol and fat molecules (lipids) appear as fatty streaks.

By the time you're 30 years old, your arteries have been subjected to continuous trauma from high blood pressure events, viral and bacterial assault, and biochemical and free radical attack. As a result, the interior lining of the arteries becomes more damaged, and the

It is important to recognize that hardening of the arteries is not a localized or segmental disease. It does not affect only one part of the body at a time. If your coronary arteries are clogged with plaque, it's a sure bet that the arteries in your brain (the site of strokes), kidneys, lungs, sex organs, and other vital organs are in a similar state. But there is something that can be done to prevent or reduce plaque buildup.

WHAT CAN BE DONE ABOUT IT?

A possible answer is EDTA – ethylenediamine tetra-acetic acid-

EDTA is a remarkable arterial cleansing agent that might have the ability to effectively remove the plaque, cholesterol and heavy metals which congest, restrict, and impede blood flow and oxygen throughout the 75,000 miles of blood vessels within the body.

It's an amino acid, with a composition very similar to common vinegar. It was synthesized in the 1930's, and first used in intravenous injections as a vital treatment for people who had been exposed to toxic levels of lead, mercury, aluminum and cadmium. Following these initial uses, patients', who were suffering from angina and coronary artery disease, symptoms dropped dramatically. This prompted the first studies to discover the other therapeutic effects of EDTA, principally in atherosclerosis and other heart diseases.

With 50 years of results, and thousands of confirming studies, articles and reviews, EDTA has been proven to be a safe by over 2 million patients.

EDTA CHELATION (pronounced "keelation")

EDTA binds molecules (called chelation), such as metals or minerals and holds them tightly so they can be removed from the body.

This chelation process is comprehensive. EDTA clears the bloodstream of heavy metals by seeking them out and binding to them. The body then flushes out the EDTA, taking the metals along with it. There are two theories for why chelation therapy works. One is that EDTA binds to free radicals, highly active molecular fragments that can damage tissue and perhaps the lining of the blood vessels. The other is that it binds to calcium and other minerals in the bloodstream, resulting in a series of actions that improves cellular and vascular health.

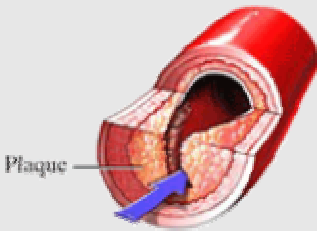
fatty streaks become more prolific, making the arteries less flexible.

As you approach your 40's and 50's, more damage to arterial linings has occurred and more plaque has formed. As atherosclerosis progresses, these calcified plaques multiply and blood flow is restricted. This ultimately sets the stage for the diseases that result from atherosclerosis.

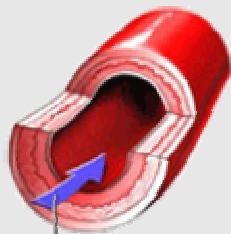
Besides the arteries, calcium is also deposited in the joints, kidneys and even around the bones of the inner ear, where it can affect hearing acuity. Luckily, EDTA dissolves "metastatic" calcium — calcium deposited where it doesn't belong.

ARTERIES GO FROM THIS

Artery narrowed by atherosclerosis



TO THIS ...



Blood flow
Normal

“As blood starts to reach areas of your

In the same way that an eggshell dissolves in vinegar EDTA will take calcium and other clogging materials off your arteries and washes the debris out through the kidneys.

When an individual undergoes chelation therapy, the EDTA makes clogged arteries and blood vessels more open, pliable and flexible by reducing inflammation and plaque density. This therapy improves blood circulation, which in turn lowers blood pressure and improves cardiovascular and vascular disease. Chelation therapy with EDTA also helps diabetes and osteoarthritis and helps people with memory loss and cataracts because of the way it clears the heavy metal toxins from the bloodstream.

Clinical experience with EDTA chelation therapy has convinced thousands of licensed physicians in North America that it is a safe and effective treatment for atherosclerotic vascular disease, as it consistently improves blood flow and relieves symptoms associated with the disease in greater than 80% of the patients treated.

There are over 3,000 research studies, papers and articles supporting the efficacy of EDTA Chelation Therapy over the past 50 years. There's not much on the medical landscape this well documented. Many are referenced at the end of this report and hundreds more are indicated for review at other web sites.

HOW DOES IT WORK?

EDTA chelation is the therapy by which intravenous or oral infusions of EDTA gradually reduce atherosclerotic plaque and other mineral deposits throughout the cardiovascular system by literally dissolving them away. It has frequently been compared to a "Liquid Plumber" in the cardiovascular system, because it dissolves plaque and returns the arterial system to a smooth, healthy, pre-atherosclerotic state. EDTA is a chemical compound in which the central atom (usually a metal ion) is attached to neighboring atoms by at least two bonds in such a way as to form a ring structure. Chelating is the process in which the metal ion reacts with another molecule to form the chelate.

EDTA Chelation has been proven effective in the elimination toxins and dangerous arterial plaque in hundreds of medical studies conducted by many of the world's most highly respected medical institutions over 50 years.

The therapy can be understood simply as the removal of calcium deposits (from your arteries, where you don't want them) and other harmful minerals that promote blood clotting and atherosclerosis.

body in greater volume than it has in years you are going to start feeling better, more energetic and more alert”

“Preventive maintenance requires a bit of a leap of faith: there's always the question, "Would I get sick if I didn't follow a preventive course or if I stopped doing so?" Do you wait until your car won't start anymore to bring it in to your mechanic, or do you bring it in every few thousand miles for a check-up? Sure, you could stop any preventive regime for a couple of years and see if something developed. But who would want to take such a high risk? The only real way to answer the question is to let the scientific literature and reason guide your decision. It is the only objective source of information we've got.”

“For those whose atherosclerosis is severe enough that they are experiencing symptoms, EDTA chelation may not only keep them from falling under the horrific CABG knife, but offer them instead the experience of renewed energy, clearer thinking, improved sexuality, warming of feet and hands, ability to walk or hike pain-free, stronger bones, diminished or eradicated chest pain, improved cholesterol, reduced blood pressure, or improved vision. Restoring blood flow can be like being born again! It can be like a new life for you to enjoy.”

“For those who have not yet reached the symptomatic stage, preventing the onset of atherosclerotic diseases is the goal. Oral EDTA chelation retards the plaque buildup that progresses with aging, and it

Since these harmful deposits are also known to cause excessive free radical production, EDTA chelation also functions as a powerful free radical buster — protecting cell membranes, DNA, enzyme systems, and lipoproteins from the destructive effects of these ravenous molecules. Some experts believe that the primary benefits of chelation are due to its free radical-fighting effects. 1 And perhaps one of the most compelling, but often overlooked, explanations for chelation's anti-aging, energizing effects is that EDTA "resuscitates" your cells' mitochondria. Mitochondria are the "power plants" of every cell in the body — the site in which the energy-producing ATP is generated. Without ATP, life can not exist. 2 Loss of mitochondrial function has long been considered to be one of the primary causes of the aging process. 3

Roto-Rooter is a better metaphor for conventional medical treatments for heart disease, all of which are closely tied to the concept of the cardiovascular system as plumbing. When a pipe/artery gets clogged, simply ream it out or flatten the deposits (angioplasty). If that doesn't work, just cut away the bad sections and replace them with a new piece of pipe (coronary artery bypass graft, or CABG). CABG, known affectionately in the medical profession as "cabbage," is the most frequently performed surgery in the United States. At \$100,000 per procedure, that's definitely a lot of "cabbage," not only for cardiac surgeons but also for hospitals. These figures provide a powerful incentive for physicians to reject an effective, but inexpensive and unpatentable treatment like EDTA chelation.

BLOOD CLOTTING

EDTA helps prevent heart attacks, stroke, varicose veins, and more by inhibiting blood clotting. Because EDTA inhibits blood clotting so well, by tying up calcium, it is routinely added to blood samples that are drawn for testing purposes. Blood can't clot if the calcium is tied up. Inhibition of blood clotting can help prevent stroke, heart attack, phlebitis (painful inflammation of a vein), pulmonary embolism (potentially fatal clot to the lung), or varicose veins. Generally, these conditions are associated with aging.

RESEARCH PROOF- EDTA CHELATION WORKS

In the 1950's, EDTA was first used for clinical use in Michigan to treat battery factory workers who were suffering from lead poisoning. Following the treatment, the patients who were suffering from angina and coronary artery disease symptoms dropped dramatically. Additional studies were commenced to study these effects.

may even reverse plaque buildup in many cases. Think of it as an insurance policy. EDTA slows, or even reverses, to some extent, the aging of the cardiovascular system."

"With perfect laminar blood flow a mere 19% increase in the diameter of a blood vessel will double the flow rate. In a vessel with turbulent flow, such as a diseased artery with plaque, a 10% increase in diameter will cause a doubling of blood flow"

SIGNS OF RISK

- Fingers or toes that often feel cold?
- Are you experiencing loss of libido or impotence?
- Your arms or legs often "go to sleep"?
- Do you experience numbness in arms or legs?
- Does your hand often cramp when writing a letter?
- Is there a sharp, diagonal crease in your earlobe?
- Do your lips or fingers have a tingling sensation?
- On short walks, do your legs get aches or pains?
- Is your memory worse than it used to be?
- Ankles that swell late in the day?
- Do you get breathless on slight exertion?
- Is there a whitish ring under the outer part of the cornea in your eye?

In 1955, research conducted at Providence Hospital in Detroit, Michigan, found that EDTA dissolves "metastatic calcium" i.e. calcium that has been deposited where it is not wanted, namely arteries, joints, kidneys and even the bones in the inner ear. Chelation therapy appeared to be a powerful antidote to- and preventative against-atherosclerosis, arthritis, kidney stones and otosclerosis (hearing loss related to the calcification of the bones in the ear)

The first systemic study of EDTA in people with Atherosclerosis was published in 1956. Twenty patients with confirmed heart disease were given a series of 30 EDTA treatments intravenously. Nineteen of the patients experienced improvement, as measured by an increase in physical activity and in another study conducted four years later, a similar group found that three months of EDTA infusions caused decreases in the severity and frequency of anginal episodes, reduced use of nitroglycerin, increased work capacity and improved Electrocardiogram results

Since these early studies, hundreds of papers have been published on the favorable effects of chelation therapy in a variety of chronic diseases.

There have been two massive meta analyses of published and unpublished studies evaluating the results of over 24,000 chelation patients. The results: 88 percent of the patients demonstrated clinical improvement. 4

One other study included 92 patients who were referred for surgical intervention. At the end of the study, only 10 required surgery either during or after their chelation therapy. 5 In another study of 2,870 patients with various degrees of degenerative diseases, especially vascular disease, almost 90% of the patients showed excellent improvement. 6 In one small, controlled crossover study of patients with peripheral vascular disease, results showed significant improvements in walking distance and ankle/brachial blood flow. 7

And when, in one study, 65 patients on the waiting list for CABG surgery (for a mean of 6 months) were treated with EDTA chelation therapy — the symptoms in 89% improved so much, they were able to cancel their surgery. In the same study, of 27 patients recommended for limb amputation due to poor peripheral circulation, EDTA chelation resulted in saving 24 limbs. 8

It soon became clear from these and later studies that EDTA treatments result in progressive and widespread improvement and stabilization of cardiovascular function. This is in contrast to standard

“Because EDTA Chelation restores blood flow to the brain, it often results in improved cognition and memory”

“Because EDTA is so effective at removing unwanted minerals and metals from the blood, it has been the standard FDA-Approved treatment for lead, mercury, aluminum and cadmium poisoning for more than 50 years”

“Studies by Harvard Medical School researchers and the U.S. Government's Office of Technology Assessment have concluded that a staggering 85% of bypass surgeries were not necessary. Further, The American Heart Association also says that some heart disease drug remedies increase the risk of a heart attack by 60%. Many high blood pressure drugs multiply the problem.”

treatments, such as angioplasty or CABG, which instantaneously restore normal function in the few treated arteries, but leave the rest of the body completely untreated (there's every reason to believe that if arteries are clogged in the heart, they're also clogged in other vital organs, like the kidneys and brain). High-tech treatments for heart disease, such as angioplasty and CABG, long hailed as medical breakthroughs, are in fact, oversold, overpriced, and ineffective, especially when compared with EDTA chelation. The truth of this assertion has been demonstrated on numerous occasions over the last 2 decades:

- The average mortality for CABG surgery is 4% to 10%. 9,10 In fact, CABG has no overall effect on improving survival. According to one study published in the New England Journal of Medicine, "As compared with medical therapy, coronary artery bypass surgery appears neither to prolong life nor to prevent myocardial infarction in patients who have mild angina or who are asymptomatic after infarction in the five-year period after coronary angiography." 11 By contrast, mortality rates for EDTA chelation, when carried out according to accepted protocols, approaches 0%. 12
- Grafted coronary arteries are more than 10 times as likely to close up again within 3 years compared with coronary arteries that are not replaced with a graft. 13 Improved blood flow following EDTA chelation therapy is permanent as long as regular EDTA therapy (either oral or I.V.) is maintained.
- Significant cerebral dysfunction, especially in older patients, is commonly seen following CABG. 14 Because EDTA chelation restores blood flow to the brain, it often results in improved cognition and memory. 15
- Atherosclerosis is typically a body-wide disease. If your coronary arteries are occluded, it's a safe bet that arteries in your brain, kidneys, lungs, and other vital organs are also occluded. Angioplasty or CABG can clean out only a few arteries supplying the heart.

Virtually every study that has looked at the efficacy of EDTA chelation in vascular disease has demonstrated significant clinical improvement

SAFETY

EDTA is used by the carload and FDA approved as a food and blood preservative. (You may have heard of it in the O J Simpson trial where it was used in Simpson's blood sample for preservation). It is so safe it is used in baby food and every other kind of food and drink

imaginable.

More than 200,000 children in the USA alone have been treated with EDTA for lead poisoning. And two million patients have received EDTA intravenous Chelation therapy from Doctors. It is very safe!!

EDTA, as an anti-clotting blood thinner, is three times safer than aspirin

The safety aspect of the use of chelation treatment has been phenomenal, with hardly any serious reactions being recorded amongst the host of seriously ill people to whom chelation therapy has been correctly applied.

By 1980 it was estimated by Bruce Halstead, MD, (Halstead 1979) that there had been over 2 million applications of I.V. chelation treatment involving some 100 million infusions, with not a single fatality, in the USA alone.

EDTA chelation is one of the most effective, least expensive, and safest treatments for heart disease ever developed,

ERECTILE DYSFUNCTION (ED)

Erectile dysfunction may be an early warning sign of coronary artery disease, even in men without typical risk factors, new research shows. In a small study done in Italy, men with erectile dysfunction showed more signs of being on the road to coronary artery disease than men without erectile dysfunction. "Erectile dysfunction should be part of a cardiovascular risk assessment. These patients should be considered at high risk for coronary artery disease and should have high priority for aggressive treatment," says Chiurlia, in a news release.

Chiurlia works for the Institute of Cardiology at Italy's University of Modena and Reggio Emilia. The study appears in the Journal of the American College of Cardiology. It's "not a surprise" that erectile dysfunction and artery problems can go hand in hand, the researchers wrote. Erectile dysfunction often stems from blood vessel problems tied to atherosclerosis, the hardening of the arteries, the researchers write. They probed that connection by studying 143 men living in Italy.

All of the men were white, had similar heart health profiles, and didn't have known coronary artery disease. Seventy men were being treated for erectile dysfunction at a local clinic. Erectile dysfunction

related to blood flow was verified with special Doppler testing.

In the study none of the men had coronary artery disease -- at least, not yet.

However, men with erectile dysfunction were more likely to show three early warning signs of coronary artery disease:

- Higher levels of C-reactive protein (CRP), which is used as a marker of inflammation.
- Abnormal blood vessel response to changes in blood flow.
- Calcium deposits in heart arteries (coronary artery calcifications).

"We think that erectile dysfunction represents the 'tip of the iceberg' of a systemic vascular disorder, thus potentially preceding severe cardiovascular events," says Chiurlia, in the news release. (See "LOSS OF LIBIDO AND ERECTILE DYSFUNCTION")

PERIPHERAL ARTERY DISEASE (PAD)

Peripheral Artery Disease, or PAD, is caused by blockage in the arteries that slows the supply of blood to the legs. The arteries carry blood to your muscles and organs and when those arteries are clogged with plaque, it becomes difficult for blood to reach all the areas it needs to reach. PAD is not very well known among the general populace, though health professionals know it to be a painful and dangerous disease. The most common symptom of PAD is claudication, which is pain in the calves or thighs after you walk just a block or two. Usually the pain goes away after having rested for a little while. Claudication occurs because not enough blood is flowing to the muscle. During exercise, muscles need more blood, and because of the restricted arterial blood supply associated with PAD, exercise can be painful.

PAD greatly increases the chances of heart attack or stroke. PAD usually affects older people but can affect everyone when smoking, diabetes, high blood pressure or high cholesterol are involved. PAD affects 8 to 12 million people in the United States, although most who have the disease have never heard of PAD.

Increasing blood flow through the process of chelation and by removing excessive minerals and heavy metals from the body oral chelation helps in relieving Peripheral Artery Disease symptoms.

DON'T YOU NEED CALCIUM IN YOUR BODY FOR

BONES?

Yes you do- and some people may assume that EDTA depletes the body of needed calcium. However, when EDTA lowers blood calcium, it also stimulates the parathyroid gland to produce a hormone called parathormone. This hormone is responsible for removing calcium from places such as the inside of arteries and depositing it in the right places, such as bone. So, chelation makes you physiologically younger because it moves calcium from your arteries and actually makes your bones stronger.

STENTS- Does EDTA effect metal in stents and joint replacements?

EDTA has no effect on intact metals used for implants in the body, or anywhere else for that matter. EDTA binds only dissolved and positively charged (oxidized) metal ions dissolved in solution. Stents and joint replacement are made from alloys such as highly refined stainless steel, vanadium alloys and titanium, that will not dissolve in body fluids.

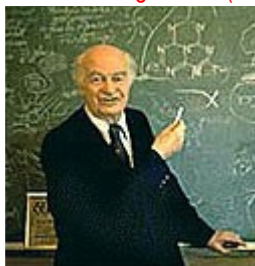
ESSENTIAL MINERALS

It's always important to supplement your diet with a good mineral supplement because: 1) physical or emotional stress causes a drain on the body's resource of minerals, and a mineral deficiency can result in illness. 2) According to the 1992 Earth Summit Report, America's soil has suffered an 85% mineral depletion in the last 100 years, which means we're only getting a fraction of the minerals we need from our food.

It's especially important to take a mineral supplement when you're doing chelation therapy. Since EDTA is so effective at clearing debris from the arteries, it may result in the depletion of certain elements, as well. That's why it's recommended you take a broad-spectrum mineral supplement when using Advanced Formula EDTA Oral Chelation. You should take the minerals and the Advanced Formula at different times of day: Advanced Formula should be taken with meals, and the Minerals should be taken in between meals on an empty stomach or at night before bed.

LINUS PAULING ENDORSED EDTA CHELATION THERAPY

This is a Foreword to "A Textbook on EDTA Chelation Therapy" edited by Elmer M. Cranton, MD.



Linus Pauling, PhD is the only person ever to have received two full, unshared Nobel Prizes. He was one of the world's greatest biochemists and scientists. Before his death he wrote and researched extensively in the field of alternative and nutritional medicine.

Foreword

by Linus Pauling, PhD

For more than twenty years I have devoted most of my time to research and education in the fields of nutrition and preventive medicine. I have written and lectured extensively about simple, safe and inexpensive measures to improve the length and quality of life. In my recent book, "How to Live Longer and Feel Better", I covered that subject at length. EDTA chelation therapy fits in well with my views on health care.

EDTA is not normally present in the human body and is therefore, by definition, not an orthomolecular substance. Chelation, however, is far safer and much less expensive than surgical treatments for atherosclerosis. Physicians who adhere to the protocol for safe and effective administration of EDTA, as approved and promulgated by the American College of Advancement in Medicine, integrate the results of my own research into their chelation program. That protocol is published in its entirety in this book. Improved nutrition and supplementation with vitamins and trace elements is an important part of the overall chelation program.

EDTA chelation therapy makes good sense to me as a chemist and medical researcher. It has a rational scientific basis, and the evidence for clinical benefit seems to be quite strong. Metallic ions play an important role in the formation of atherosclerotic plaque. EDTA removes those ions with relative safety and without surgery. Published research and extensive clinical experience show that EDTA helps to reduce and prevent atherosclerotic plaques, thus improving blood flow to the heart and other organs. The scientific evidence indicates that a course of EDTA chelation therapy might

Unexplained Illnesses?

ADD, Alzheimer's, anemia, autism, bone pain, muscle aches, weakness, speech problems, osteoporosis, impaired immune system, impaired kidney function, impaired iron absorption, digestive problems, depression, loss of appetite, abdominal pain, nausea, diarrhea, constipation, malaise, fatigue, loss of sex drive, insomnia, metallic taste, mood swings, cancer, migraines, tremors, psychological changes, irritability, headache, short-term memory loss?

eliminate the need for bypass surgery. Chelation has an equally valid rationale for use as a preventive treatment.

Past harassment of chelating physicians by government agencies and conservative medical societies seems to stem largely from ignorance of the scientific literature and from professional bias.

A reference book such as this, which assembles a large body of scientific knowledge about EDTA chelation therapy into one volume, will be of great advantage to physicians who desire to learn more about this emerging nonsurgical treatment for atherosclerosis and related age-associated diseases.

Palo Alto, California July, 1988

Dr GARRY GORDON MD, DO



Is a world renowned expert and is considered the father of modern EDTA chelation therapy. He is the founder of American College for Advance in Medicine which has over 1,000 MD members who deliver intravenous therapy. A long-time advocate of the effectiveness of Oral EDTA alone and of its use as an adjunctive to intravenous EDTA, Dr. Gordon stated, "Let's look at a group of my patients with any level stageable heart disease and simply see how many of them are alive after 5 years, compared with those on standard therapy. I couldn't believe it when I went to the meetings with the cardiologists and found that they consider the diagnosis of congestive heart failure to be virtually a death sentence, because over 60% of their patients are dead within the first year. I haven't lost one patient with congestive heart failure in 10 years. I have taken patients who were inoperable, who had already had every known form of bypass surgery, until there were no more veins in their legs to strip out to put in their hearts. They were sent home to die and I could get those people back to full functioning.

I've seen lots of good things happen with EDTA-based programs."

Heavy metals stay in your system decades after exposure!

Some dangerous heavy metals that are removed from your body using EDTA chelation therapy are:

Aluminum

Sources: Antacids, aspirin, auto exhaust, cans, ceramics, construction materials, cookware, cosmetics, dental amalgams, deodorants, medication, nasal spray, pesticides, pollution, cigarettes, toothpaste.

Health Risks: Alzheimer's, muscle aches, weakness, bone pain, speech problems, anemia, osteoporosis, impaired immune system, impaired kidney function, impaired iron absorption, digestive problems, migraines, Fibromyalgia.

Lead

Sources: Ash, car exhaust, batteries, cigarettes, power plants, inks, cosmetics, dust, glass production, hair dyes, air pollution, lead pipes, mascara, metal polish, newsprint, paint, pencils, pesticides, putty, rain water, PVC, produce, refineries, smelters, tin cans, toothpaste, toys.

Health Risks: depression, loss of appetite, abdominal pain, nausea, diarrhea, constipation, and muscle pain, malaise, fatigue, loss of sex drive, insomnia, metallic taste, mood swings, migraines, Fibromyalgia.

Mercury

Sources: Adhesives, antiseptics, thermometers, batteries, baby powder, cosmetics, dental amalgams, diuretics, fabric softeners, felt, floor waxes, fungicides, germicides, industrial waste, insecticides, laxatives, lumber, paper & chlorine manufacturing, medications, vaccines, paints, paper products, pesticides, polluted water, contact lens solution, suppositories, tanning leather, tattoos, wood preservatives.

Health Risks: ADD, Alzheimer's, Autism, cancer, migraines, tremors, psychological changes, insomnia, loss of appetite, irritability, headache and short term memory loss, Fibromyalgia.

Cadmium

Sources: Cigarettes, fruits and vegetables, shellfish, organ meats, drinking water, air, ice cube trays, pitchers, bowls, jewelry, stained glass, paint, batteries, fertilizers.

Health Risks: cancer, migraines, tremors, psychological changes, insomnia, loss of appetite, irritability, Fibromyalgia, kidney & liver disease, vomiting, diarrhea, abdominal pain, choking sensation, pneumonitis, pulmonary edema, breathlessness, coughing, anemia, alopecia, arthritis, learning disorders, migraines, growth impairment, emphysema, osteoporosis, loss of taste and smell, poor appetite, and cardiovascular disease

"I've known people who had such poor circulation that their feet were black bordering on gangrene. After EDTA, their black feet became pink again!"

EDTA IMPROVES SKIN QUALITY AND REDUCES WRINKLES

One further comment by Dr. Gordon: "We can count the crow's feet next to a woman's eyes and show that those crow's feet disappear with IV chelation therapy. So we know that we are reversing cross-linkages." Cross-linking is an aging process caused by the destructive joining of proteins and resulting in loss of function.

EDTA IMPROVES SEXUAL POTENCY

Reduced blood supply is often the culprit in sexual impotency. Improved circulation improves libido and potency and will noticeably improve sexual feelings and performance in both men and women.

TOXIC HEAVY METALS

EDTA removes toxic metals from the blood. Studies have shown that as people age they continuously accumulate toxic metals: lead, mercury, aluminum, iron, cadmium, and arsenic, among others. The accrual of these toxins invites an increased risk for various diseases, especially heart disease. The less of these metals we have in our bodies, the more likely we are to be physiologically healthy or simply feel good, and the lower our risk for heart disease.

Because EDTA is so effective at removing unwanted metals and other minerals from the blood, it has been the standard, FDA-approved treatment for lead, mercury, aluminum, and cadmium poisoning for more than 50 years. EDTA normalizes the distribution of most metallic elements in the body.

Heavy metals stay in your system decades after exposure! Get tested today!

How much heavy metals have you absorbed from sushi, tap water, vaccines, deodorant, paint solvent, cigarettes, aluminum pots & pans, cosmetics and air pollution? Your body is like a sponge that has been absorbing toxic metals since birth. As we grow older the likelihood of developing a terminal illness is compounded.

We can test you to determine how much toxic metals have absorbed into your muscles and bones and then develop a treatment plan to

remove these metals to minimize the chances of you getting sick.

WHY DOESN'T EVERYONE KNOW ABOUT EDTA?

Why would anyone opt for invasive, less lasting options, such as angioplasty or CABG, when a safe and effective alternative for restoring normal or near-normal circulatory functioning of the vasculature exists? It seems that EDTA should be the first line of treatment, with the invasive surgical procedures as the last-resort alternative, not the other way around.

Few, if any, would opt for surgical treatment if they were aware and informed about the value of EDTA chelation. However, there are organizations and institutions that see political gain in cloaking the truth about EDTA's benefits.

It is clear that most of the opposition to EDTA is due to the threat that this therapy represents, not to patients' health, but to the bank balances of orthodox physicians (those who specialize in CABG, for example), hospitals, and pharmaceutical companies. Conventional treatment of cardiovascular diseases is big business in the United States, bringing in tens of billions of dollars each year.

Each CABG might cost \$100,000; each angioplasty costs about \$25,000; drugs for reducing cholesterol, lowering high blood pressure, and normalizing heart rhythm bring the pharmaceutical industry billions of dollars each year. And these are only a few examples. By contrast, the cost of chelation therapy, cited above, is minimal. The patent for EDTA has long expired and the modern drug establishment is unwilling to pour in the millions of dollars required for extensive testing of a substance that they will not have exclusive rights to when they are done. You may be hearing more about chelation soon.

The National Institute of Health is currently doing a large clinical double-blind trial on EDTA chelation therapy for coronary heart disease with thousands of patients. This \$30 million IV Chelation study is a ten year study and is scheduled to run through 2013. This is an acknowledgement of the seriousness which the medical establishment now takes EDTA Chelation therapy.

The lack of acceptance by mainstream medicine should not prevent those interested in its claims from examining the objective evidence. It should not require "double-blind" control studies to impress the observer with the possibility that people are actually getting better when severely ill people, with advanced circulatory problems, sometimes involving gangrene, show steady improvement in their

functions, better muscular coordination, the disappearance of angina pain, increased ability to walk and work, restoration or improvement of brain function, better skin tone and more powerful arterial pulsations, along with the restoration of normal temperature in the extremities.

STATIN PRESCRIPTION DRUGS - WHAT YOU NEED TO KNOW-

“To follow the media, which features one statin commercial ad after another, one would think that cardiovascular care was all about cholesterol-lowering drugs and coronary bypass surgery. Right or wrong, these measures are important only after the disease is well established. You don’t want to let it get that far if you can help it. The trick, if you want to live a long and healthy life, is to prevent the disease from getting started in the first place-or at least, to catch it in its earliest stages, when it’s still fairly easy to treat and hasn’t done any permanent damage yet”

“Anecdotal reports have been surfacing for years of impotence, loss of libido and erectile dysfunction associated with statin drug use.”

If you’re reading this report you’re obviously worried about your heart and what will you be prescribed?

Lipitor, Lescol, Mevacor, Pravachol, Zocor, Crestor, (a seventh statin, Baycol was removed from the market during the summer of 2001 because of potentially serious side effects.)

(The obvious improvements to your health like eating right, exercising, losing weight, less salt, less sugar etc.- we won’t deal with all those here—you’ve heard them before and you know what you can do, how to do it and if you want to do it!)

This may be the first time you have seriously rubbed shoulders with the Drug Industry. Your Doctors want you to take powerful Statin prescription drugs to reduce your cholesterol and various other—probably at the same time- drugs to reduce your blood pressure.

Your Doctor may have told you that if he/she had his way he would prescribe these drugs for everybody in the world since they are so good at achieving reductions in cholesterol count or blood pressure. When I hear this I get nervous. The same people doing all the studies are now telling you we all need to take powerful drugs with significant side effects for the rest of our lives! What they don’t tell you is what this all has to do with eliminating Cardiovascular Disease!

We are worried about the side effects. You may have heard about the usual ones, cast aside as “rare”-“Side effects occur infrequently and include muscle aches, constipation, weakness, abdominal pain, and nausea.” etc.etc. Believe me they’re not so rare.

What they don’t tell you are the other ones where the brain’s normal memory functions are impaired.

READ THIS...

Jim Matthews (CBS TV News)
O’Fallon, Ill., May 24, 2004

"Some doctors are so high on statins, they seem to think most everyone should take them, that there's no down side. Lipitor's maker even says it may help Alzheimer's patients."

(CBS) When Jim Matthews needed to slash his cholesterol and heart attack risk, he joined the millions taking the world's top-selling drug, Lipitor.

After five weeks, he was struck by cognitive chaos and confusion.

All of a sudden, he found himself asking: "Did I go get the mail or did I just think I was going to go get the mail? Did I give my dog her thyroid pill, or did I just think I gave the dog the thyroid pill?"

He couldn't function for hours.

When he came back to his senses, he suspected Lipitor was to blame, but only found one glowing report after another on Lipitor and similar drugs - all called statins.

In fact, some doctors are so high on statins, they seem to think most everyone should take them, that there's no down side. Lipitor's maker even says it may help Alzheimer's patients.

But researcher Dr. Beatrice Golomb warns the studies generating the bulk of the positive press were funded by the companies that make the drugs, like Pfizer, which earns \$9 billion a year from Lipitor.

"I made the decision that I really didn't want to take money from the drug industry," says Golomb.

Funded by the government and not the drug makers, Golomb is taking an independent look at studies already done on statins, pinpointing severe muscle problems, which Pfizer has disclosed, and cognitive dysfunction -- not mentioned in patient leaflets.

"We have people who have lost thinking ability so rapidly that within the course of a couple of months they went from being head of major divisions of companies to not being able to balance a checkbook and being fired from their company," says Golomb, an assistant professor of medicine at the University of California in San Diego.

Golomb says statins do help the heart, but may also hamper the brain's performance and trigger other serious problems. She's leading an independent clinical trial to find out what harm statins may be doing. The results should be out in a few months.

Pfizer told us Lipitor's safety is supported by peer reviewed articles and scores of studies,"including the most extensive statin clinical trial program ever conducted." Pfizer "collects all available safety information...and shares (it) with regulatory authorities worldwide."

That may be right for most patients, but Matthews isn't looking for a repeat of his mental meltdown. He's taking a new tactic: trying to tame his cholesterol with diet and exercise

"Up with the good cholesterol, down with the bad," he says.

MORE...

The myopathies (muscle aches and pains) associated with the use of statins may be related to their ability to block not only the body's cholesterol production but also its production of coenzyme Q10 (Co Q10). This is a vitamin like substance found in all human cells that's critical for the production of energy; in fact, 95 percent of all the energy made by our cells is produced with the assistance of Co Q10. Organs that need the most energy — such as the heart, lungs, and liver — have the highest CoQ10 concentrations. Why is this so important? Because studies dating as far back as 1993 have shown that statins can reduce blood levels of Co Q10 by up to 40 percent! The consequences are unclear, but some researchers are looking at the role of Co Q10 in congestive heart failure and other medical conditions.

FINALLY...

LOSS OF LIBIDO AND ERECTILE DYSFUNCTION

What... nobody mentioned that to you?

Maybe they thought you were past that “phase” in your life and it wasn't going to bother you.

READ THIS...

Extract from DUANE GRAVELINE MD, MPH
Former USAF Flight Surgeon
Former NASA Astronaut
Retired Family Doctor

“Anecdotal reports have been surfacing for years of impotence, loss of libido and erectile dysfunction associated with statin drug use. I have summarized the available review articles, called attention to the most relevant of anecdotal case reports, reviewed relevant research studies and included a list of most relevant references in the preparation of this paper.

The findings of Kash Rizvi et al in their 2002 review of erectile dysfunction leave little doubt that a strong relationship exists between the taking of statin drugs and erectile dysfunction.

Applying the criteria suggested by Sackett and colleagues in their book, “Clinical Epidemiology: A Basic Science for Clinical Medicine” most would say that the strength of the relationship is sufficiently strong that it should be called “probably causal”.

In a review of France and Spain's adverse drug reports by Bagheri and others, 74 cases of impotence associated with statin drug use were reported. In 85% of these cases the condition regressed completely when the statin drug was stopped.

Bruckert et al concluded that erectile dysfunction is a frequent disorder in hyperlipidemic men treated with statins. Their study group consisted of 339 age-matched men 40-50 years of age. If these otherwise healthy men were on either a statin drug or a fibrate derivative, impotence was much more likely.

L. de Graff and colleagues reported that decreased libido is a probable adverse drug reaction of statin drugs and is generally reversible. They added that this reaction may be caused by low serum testosterone levels, mainly due to cholesterol depletion.

Jackson reported on five men with coronary artery disease who developed impotence within one week of starting treatment with simvastatin 10 mg or having the dose increased to 20 mg.

All investigators in this field stress the likelihood of gross under-reporting of impotence, erectile dysfunction and loss of libido in the usual doctor / patient interaction.

If the examining physician does not specifically ask the question as to sexuality problems, it is very unlikely to be brought up by the patient. When studied as a separate issue, however, the preceding reports well document the importance of impotence, loss of libido and erectile dysfunction as a statin drug side effect.

Although some postulate a CNS explanation for the effect of statins on sexuality, diminished testosterone production due to relative depletion by statins of its cholesterol precursor deserves serious consideration as a causative factor.

EDTA is the synthetic amino acid which closely resembles four molecules of vinegar. It is never broken down in your body. It goes in and comes out as EDTA, attaching to metals and minerals, forming a bond called a chelate.

Side Effects of Chelation Therapy

A number of side effects have been observed with chelation therapy. These may include:

Headaches: This is generally from a low blood sugar level. To prevent this from happening, eat before or during the treatment. A common recommendation for the prevention of the 'EDTA-headaches' is to eat a semi to ripe banana during the first hour of infusion.

Local skin irritation: This is generally from a deficiency in zinc and vitamin B6. Supplementation of these nutrients are recommended during the therapy.

Nausea or stomach upset: Generally due to a deficiency of vitamin B6. It is manifested in less than 1 percent of the patients receiving chelation therapy. It is best treated by B6 supplementation, although short term relief (up to eight hours) from nausea can be achieved by acupressure treatment.

Diarrhea: Very very few people undergoing chelation therapy experience this discomfort. Take plenty of rest. Eat a diet that consists of plenty of liquids. Avoid spicy food. Frequency of urination goes up as the kidney efficiency improves. A weight loss (from fluid excretion) of 3 to 5 pounds (1.3 to 2.2 kg) is common after an infusion especially if the patient suffered from fluid retention before chelation therapy.

Feeling like fainting: This is generally due to a drop in blood pressure. It is common for those who had high blood pressure that returns to more normal levels as a result of the treatment. If the blood pressure was normal to start with, it could drop slightly after the infusion. This may lead to feeling of faintness on standing after sitting or lying. If this happens, rest for an hour or so. Keep your feet higher than your head so as to allow the blood to flow into the brain. Take a supplement containing the amino acid tyrosine to help restore normal pressure levels if this symptom persists.

Extreme fatigue: This is usually from a general nutrient deficiency of minerals such as magnesium, zinc or potassium. Taking a potassium rich supplements and/or the regular eating of potassium rich foods are suggested before and during chelation (grapes, bananas, peaches, potato skins), as this mineral may be removed during the chelation therapy.

Fever: Very few people (less than 0.02 percent of those undergoing the treatment) may develop fever during the day after chelation therapy sessions. If this happens to you, make sure you tell your therapist. This condition, left on its own, normally resolves on its own.

Cramps: About 5 percent of the patients report cramps usually at night. It is treated best by administering supplemental magnesium either orally or as an additive to EDTA infusion mixture. If magnesium is added to the infusion, it is generally in the form of magnesium chloride or magnesium sulfate. Such additions also reduce the chance of local skin irritation at the site of the infusion.

Pain in the joints: This is generally reported by patients who take frequent (three weekly) infusions. If this happens, reduce the number of infusions to one per week. Your therapist may also reduce the dosage of EDTA administered, if strong flu-like aches develop. The symptoms

Safety Concerns

Kidney Toxicity:

In the early 1950s several deaths occurred from kidney toxicity after EDTA treatment. At that time the dosage used was around 10 grams per infusion. The recommended dose now is 3 grams.

Kidney toxicity is related to size (quantity) of the dose and the rate of infusion. Experienced therapists adjust dosage so that the infusion will not harm the kidney. Indeed, research has shown that, properly administered, chelation therapy improves kidney function, especially if there is any impairment present to this vital organ.

However, if the patient is very elderly, or has low parathyroid activity or is suffering from heavy metal toxicity which is damaging the kidney, treatment should be modified to use less EDTA less frequently (once per week perhaps). Heavy metals damage the kidneys and too rapid infusion can overload them. Heavy metals most likely to produce kidney damage during infusion therapy are lead, aluminum, cadmium, mercury, nickel, copper and arsenic.

Renal function tests should always be performed before chelation therapy is started. In any case of significant renal impairment, lower dosage of EDTA infusions should be used. Use extreme caution. Also make sure that the patient has sufficient periods of rest between the infusions.

Excessive Removal of Calcium

If, through inexperience or error, there is too rapid an infusion (or too much EDTA used), levels of calcium in the blood can drop rapidly, resulting in cramps, convulsions, etc. An injection of calcium gluconate will swiftly rectify such abnormal reactions.

Inflammation of a vein

If an infusion into a vein is performed too rapidly, inflammation may occur. Reduce the dosage and dilute EDTA infusion mix. Administer the infusion very slowly.

Insulin shock and hypoglycemia

During EDTA infusion it is possible that blood glucose may drop, leading to insulin shock. This is more likely to happen to diabetic patients. Patients having EDTA infusions are advised to have a snack before or during the three hours plus treatment period. Avoid dairy products that are high in calcium. Eat complex carbohydrates; avoid foods containing sugar such as ripe bananas. You may eat a fruit during infusion, if needed.

If you are diabetic and is taking zinc-bound insulin, there is a risk of too rapid a release of insulin, leading to hypoglycemia and shock. If this happens, make sure that you are given a rapid introduction of sugar to stabilize your condition. Before further EDTA infusions, you will need to change the form of insulin used. It has been found that, most people need less insulin while undergoing chelation therapy.

Congestive heart failure

If the heart is already unable to cope adequately with the movement of fluids, and there is evidence of congestive heart failure (extreme shortness of breath, swollen ankles) and/or if digitalis-like medication is being taken, extreme care is needed over chelation infusions, since EDTA prevents digitalis from working adequately. Avoid sodium EDTA for such people as it could increase the fluid retention tendency. Use a 5 per cent dextrose and water instead.

Chelation therapy, when administered by an experienced therapist at the proper doses, is very safe. A very large study, which had been monitored by the friends and foes of chelation therapy, found that EDTA administered in the proper dosage was no more toxic than a placebo. American College for the Advancement in Medicine estimates that over 500,000 patients have undergone chelation therapy safely nationwide using ACAM protocol. No fatalities have been reported. It is important that the therapist keep a close eye on your condition for the toxicity and

side reactions. Strict adherence to the dosage and rate of administration is very important. Keep an eye on the calcium and magnesium in the blood as these are removed during the treatment. Many suggest the availability of emergency cardiac equipment as a wise precaution.

WARNINGS

The information provided herein is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment.

You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.

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