EDTA chelation is a therapy by which repeated administrations of a weak synthetic amino acid (EDTA, ethylenediamine tetra-acetic acid) gradually reduce atherosclerotic plaque and other mineral deposits throughout the cardiovascular system by literally dissolving them away. EDTA exerts its beneficial effects on the body because this molecule is extremely proficient at chemically bonding with mineral and metal ions. This bonding process, known as chelation, is a natural and essential physiologic process that goes on constantly in the body. EDTA's chelating abilities make it ideal for many tasks:

- 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. EDTA normalizes the distribution of most metallic elements in the body.

- Because it is so safe and effective, EDTA is also used widely as a stabilizer for packaged food. Minute amounts of EDTA (33-800 PPM) added to food help to preserve flavor and color and to retard spoilage and rancidity. (Read your food labels.)

- Because EDTA inhibits blood clotting so well, it is routinely added to blood samples that are drawn for testing purposes.

- EDTA improves calcium and cholesterol metabolism by eliminating metallic catalysts that can damage cell membranes by producing oxygen free radicals.

Thanks to these and probably other effects of EDTA, it has been reported to have a wide variety of benefits.

EDTA Chelation vs. Conventional Therapy for Vascular Disease

Researchers first started to notice EDTA in the days during and after World War II when men who worked in battery factories or painted ships with lead-based paint began coming down with lead poisoning from their high exposure in these jobs. EDTA was found to be extremely effective for removing the lead from the men's bodies, but what really made people sit up and take notice was an apparent reduction in symptoms of heart disease in many of these men.

The first systematic study of EDTA in people with atherosclerosis was published in 1956. When the researchers gave 20 patients with confirmed heart disease a series of 30 I.V. EDTA treatments, 19 of the patients experienced improvement, as measured by an increase in physical activity. Another study 4 years later in a similar population found that 3 months of EDTA infusions resulted in decreases in the severity and frequency of anginal episodes, reduced use of nitroglycerin (a common anti-angina drug), increased work capacity and improved ECG

(electrocardiogram) findings.

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 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%. 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." By contrast, mortality rates for EDTA chelation, when carried out according to accepted protocols, approaches 0%.

- 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. 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. Because EDTA chelation restores blood flow to the brain, it often results in improved cognition and memory.

- 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. Another surgical procedure, endarterectomy, is commonly used to clear out the carotid arteries that supply the brain. When patients who have undergone carotid endarterectomy are treated with EDTA afterwards, the degree of subsequent restenosis (re-occlusion) drops by 10%.

- Despite the danger and costs associated with these procedures, they are often only temporary fixes. Restenosis of treated coronary arteries occurs within 6 months in as many as one in three cases. By contrast, EDTA chelation permanently removes blood vessel obstructions throughout the body without dangerous and expensive surgery. How well does EDTA chelation work? Virtually every study that has looked at the efficacy of EDTA chelation in vascular disease has demonstrated significant improvements. Here is a brief

sampling of a few of the major results:

- A 1993 meta-analysis of 19 studies of 22,765 patients receiving EDTA chelation therapy for vascular disease found measurable improvement in 87%.
- In a study of 2,870 patients with various degrees of degenerative diseases, especially vascular disease, almost 90% of the patients showed excellent improvement, as measured by walking distance, ECG, and Doppler changes.
- A small, blinded, crossover study of patients with peripheral vascular disease found significant improvements in walking distance and ankle/brachial blood flow.
- In 30 patients with carotid artery stenosis, there was a 30% improvement in blood flow after EDTA treatment.
- Using retinal photographs in patients with macular degeneration, one researcher demonstrated significant improvement following EDTA treatment.
- EDTA chelation treatment was evaluated in patients with carotid and coronary disease. Significant improvement in arterial blood flow and ejection fraction (a measure of heart pumping ability) was reported.
- When 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% (58) 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.

Some of the common side effects of chelating agents include:

- Burning sensation when injected into a vein.
- Fever and chills.
- Headache.
- Nausea and vomiting.
- Diarrhea.
- Convulsions or seizures.
- Fall in blood pressure.
- Low blood calcium

- Allergic reactions may occur
- Kidney damage but it is reversible

Improvements in CKD

Ward Place Health Care noticed improvement in kidney function in those patients who had chronic kidney disease after careful administration of chelation therapy. Following are some of them.

Name	Age	File No.	Previous S. C	Present S. C	Previous G. F. R	Present G. F. R
Mr. M. N. M. Shareef	67	585	1.4	1.14	52	65.71
Mrs. G. R. Rohini	66	602	1.24	0.9	59	74.46
Mr. Abdul Nazar	64	464	1.57	0.98	46	92.73
Mr. M. I. K. Rifai	54	667	1.38	1.06	58	79
Mr. K. M. Karunadasa	60	704	1.41	1.22	53.76	64.04
Mr. A. L. M. Iqubal Deen	59	701	1.44	1.1	52	72.58
Mrs. Kemawathi	77	682	1.35	0.83	38	73
Mr. Danapala	60	537	1.31	1.2		61
Mr. Rajasingham	64	921	1.5	48.5	1.19	64.17
Mr. W. G. Premadasa	63	576	1.73	38.39	1.3	58.48

Abbreviation

S. C = Serum Creatinine

C. T = Chelation Therapy

G. F. R = Glomerular Filtration Rate

C. K. D = Chronic Kidney Disease

Conclusion

While most American physicians choose to remain blind to the benefits of EDTA, those who prescribe it are free to witness its life-enhancing benefits on a daily basis. One of those physicians is Dr. Garry Gordon, whose own life was saved by EDTA and who has been a leader in chelation therapy since the early 1960s. "I have taken on patients who were inoperable, who had already had every known form of bypass surgery, who had no more veins in their legs to strip out and put into their heart, and who were sent home to die, and I could get those people back to full functioning," says Dr. Gordon.

POTENTIAL BENEFITS OF EDTA CHELATION	
Prevents cholesterol deposits	Heals calcified necrotic ulcers
Reduces blood cholesterol levels	Reduces
Lowers high blood pressure	Claudication
Avoids by-pass surgery	Improves vision in diabetic
Avoids	Retinopathy
Reserves digitalis toxicity	Decreases
Removes calcium from	Degeneration
Atherosclerotic	Dissolves small cataracts
Dissolves intra-arterial blood	Eliminates heavy metal
Normalizes cardiac arrythmias	Toxicity
Has an anti-aging effect	Makes arterial walls more
Reduces excessive heart	Flexible
Contractions	Prevents osteoarthritis
Increases intracellular potassium	Reduces rheumatoid arthritis
Reduces heart irritability	Symptoms
Improves heart function	Lowers diabetics' insulin
Removes mineral and drug	Needs
Deposits	Reduces Alzheimer-like

Dissolves kidney stones	Symptoms
Dissolves kidney stones	Symptoms
Improves heart function	Lowers diabetics' insulin
Removes mineral and drug	Needs
Deposits	Reduces Alzheimer-like
Dissolves kidney stones	Symptoms
Reduces serum iron levels	Reverses senility
Reduces heart valve calcification	Reduce stroke/heart attack
Reduces varicose veins	After-effects
	Prevents cancer
	Improves memory
	Reverses diabetic gangrene
	Restores impaired vision
	Detoxifies snake and spider
	Venoms