

EDTA CHELATION THERAPY

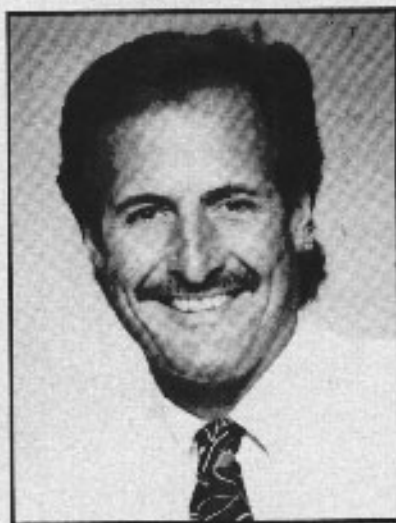
by Bruce R. Dooley, M.D.

A minority of physicians throughout the world use EDTA chelation therapy to treat atherosclerotic cardiovascular disease. This therapy has been administered to over one million patients since the 1950s with remarkable success and safety. Though commonly used for the treatment of cardio-, cerebro- and peripherovascular-related disease states, it also seems to produce benefits for a wider array of medical conditions. It is the intent of this article to introduce this therapy to the medical establishment and to review the results obtained over the past thirty years from the offices of hundreds of physicians trained in the protocol. It is not the intent to discuss the medico-political history and controversy or attempt to delineate "scientific proof" that this therapy is clinically valid.

Historical Perspective

The word "chelation" derives from the Greek word "chele" which refers to the claw of a crab or lobster. Alfred Werner, Ph.D., received the Nobel prize in 1913 for the discovery of the chelating principle. Described by Bruce Halstead, M.D., in his treatise *The Scientific Basis of EDTA Chelation Therapy*, chelation "is specifically defined as the incorporation of a metal ion into a heterocyclic ring structure. An example would be a metal or mineral, such as calcium or lead, that comes into contact with a chelating agent, and is imprisoned by the chelating chemical, thereby taking on a new identity". The chelating agent EDTA (ethylene-diamine-tetra-acetate) was developed in Germany to remove calcium from the mineral-hardened waters used in the dye industry and thus prevent staining of material. It is currently used in a wide array of non-medical applications from foodstuff preservatives to cleaners.

EDTA entered medical application in the 1950s for the treatment of lead poisoning. In one early use, at a Michigan battery plant, a cardiologist Dr. Norman Clarke from Providence Hos-



pital, Detroit, noted that in addition to reversal of the lead toxicity symptoms with EDTA, many workers reported relief from chest pains — a symptom associated with arteriosclerosis. Soon afterward, Navy physicians, while treating lead-toxic ship painters with EDTA, discovered that those suffering from early signs of arthritis and atherosclerosis enjoyed increased mobility, reduced leg cramps, and easier breathing. Between 1950 and 1966 international medical reports detailing EDTA's benefits for arteriosclerosis and related disorders were numerous. One 163-page report in 1964 warrants identification: Dr. Alfred Soffer, then Director of the Cardiopulmonary Lab at Rochester General Hospital and Associate in Medicine at Northwestern University Medical along with colleagues Rubin, Chenoweth, and Spencer reported on patients suffering from advanced arteriosclerosis and diabetic ulceration, gangrene, and necrosis of the feet. In one particular case, a sixty-seven year old man suffered seriously advanced ulcers due to loss of circulation. After twenty EDTA treatments he was released "with ulcers and open sores completely healed". Their conclusion was that many patients "benefited from repeated administration of chelating agents [and was] particularly promising in patients

with diabetes whose lower extremities have been effected by reduced circulation".

Current Reports

To date, hundreds of studies have been reported on the use of EDTA. Four of these will be summarized due to their size. The latest, a meta-analysis by Chappell and Stahl reviews results from the treatment of 22,765 patients who fit the criteria for inclusion into the meta-analysis. Only those improvements measurable by an objective test were accepted as a favorable outcome category. Patients who improved clinically but had no objective test results were placed in the category of same, or worse. Out of this large body of patients, 87 percent had favorable outcomes with no significant concerns for safety. The meta-analysis had a high positive correlation coefficient of 0.88. Another recent Danish Study by Hancke and Flyrlic reviewed progress between 1987-1993 in 470 patients with claudication and/or angina documented by Doppler or Stress test. Of the 265 patients with myocardial ischemia, 87 percent (231) showed improvement and of the 262 patients with intermittent claudication, 83 percent (217) showed improvement. The authors report that 27 patients who entered the study had already been referred for amputation of one or both legs. After treatment 24 of the 27 were spared the amputation procedure. Patients with claudication who could not walk more than 100 feet could walk painlessly for 2 miles or ride several miles on a bicycle after their treatment. Their report of subjective symptom improvement in other categories parallels findings in other chelation offices over the years: general well being-88 percent, working capacity-87 percent, energy/initiative-86 percent, vertigo-76 percent, memory-67 percent, hearing-65 percent, visual-60 percent. Other issues such as migraine and tinnitus disappearing and male sexual potency improving were re-

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ported, and again, are not uncommon within the reports of practicing chelation physicians. A large study in 1988 from Brazil by Olszewer and Carter involved 2,870 patients and had results closely matching the above: 90 percent of the patients with peripheral vascular disease and 77 percent with ischemic heart disease showed "marked improvement". Finally, the Cypher study from the Great Lakes Association of Clinical Medicine (GLACM) involved 20,000 patients who underwent thermographic evaluations pre- and post-chelation therapy. Improvement was documented in 79 percent of these patients and appeared to be dose-related.

Mechanism of Action

Gordon and Vance, Halstead and Cranton and Frackleton have reviewed the pharmacology of EDTA in the treatment of cardiovascular disease. Emphasis was placed on the reduction of free radicals and lipid peroxidation by removing heavy metals, iron, and copper by antioxidant activity. Bjorksten suggested that chelation might be val-

uable in life extension. Deucher described chelation as an "antioxidant strategy", and Gutteridge identified increased effectiveness of hydroxyl-radical scavengers in the presence of EDTA. An editorial by Zylke mentioned EDTA as a possible treatment to control oxygen radicals. Kaman, Rudolph, and Walker demonstrated the removal of metastatic calcium in rabbit aortas. Kindness and Frackleton showed the beneficial therapeutic effects of EDTA chelation therapy of inhibiting platelet aggregation and prolonging the partial thromboplastin time. Lamb and Leuke recently discussed *in vitro* use of EDTA to inhibit the oxidation of LDL by macrophages and by copper. An excellent compendium of articles, including the protocol recommended by the American College for the Advancement of Medicine (ACAM) for EDTA administration was published in a Textbook of EDTA chelation therapy in 1989.

Conclusion

EDTA chelation therapy is often a superior alternative to current sur-

gical/interventional treatments of atherosclerotic disease conditions. This is particularly true when evaluating such issues as expense, morbidity and mortality, and reversal of the disease condition system-wide. Two international physician associations already mentioned, ACAM (1-800-532-3688) and GLACM (1-800-286-6013) have been responsible over the past twenty years for establishing safe protocols and training to physicians in EDTA therapy. Testing and certification is through the American Board of Chelation Therapy (1-800-356-2228). Extensive and expensive double-blind studies necessary for EDTA to be approved by the FDA for the indication(s) mentioned above are not forthcoming because the synthetic amino acid lost its patent rights years ago. Thus private physicians utilizing EDTA submit their findings from their office practices which are viewed as anecdotal or unscientific by recognized medical journals and the majority of physicians remain unaware of this modality; a classic Catch-22 situation.

The author wishes to extend deep gratitude and appreciation for this opportunity to submit an explanation of EDTA chelation therapy to his fellow physicians in South Florida.

"Whenever a new discovery is reported to the scientific world, they say first, 'It is probably not true.' Thereafter, when the truth of the new proposition has been demonstrated beyond question, they say, 'Yes, it may be true, but it is not important.' Finally, when sufficient time has elapsed to fully evidence its importance they say, 'Yes it is important, but it is no longer new.'"

Michel de Montaigne
16th century

Bruce R. Dooley, M.D., is a 10-year member of the Broward County Medical Association. He is a member of the American College for the Advancement of Medicine and has been trained in EDTA chelation therapy by the American Board of Chelation Therapy. His practice involves chelation therapy as well as nutritional and immune support for patients with chronic conditions.

References

Seventy-five references available upon request.

Chelation Therapy Works!

EDTA chelation is a very safe and effective intravenous treatment for improving circulation and oxygen to the brain, heart, extremities, etc. It is my belief and that of my colleagues that chelation should be a mandatory treatment before any bypass surgery, balloon angioplasty, or other expensive, dangerous, and temporary invasive procedures are attempted and that it will soon become required to be mentioned as part of a true informed consent.

I was asked to write this article for the Dade County Medical Association's journal, *Miami Medicine*. I accepted because it is my sincere wish to see this treatment routinely prescribed by physicians for their patients in the near future. Yet, it is important that only physicians trained and experienced in the ACAM protocol be administering EDTA therapy. Please call the *Florida Advanced Medical Association (FAMA)* at 1-800-684-8884 for a list of member physicians in Florida who qualify. My offices in South Florida are listed below. *Bruce R. Dooley, M.D.*

Chelation Centers of South Florida

- Ft. Lauderdale office: 305-527- WELL (9355)
- Naples/Marco office: 800-709- WELL (9355)
- Key West/Marathon: 305-295- WELL (9355)