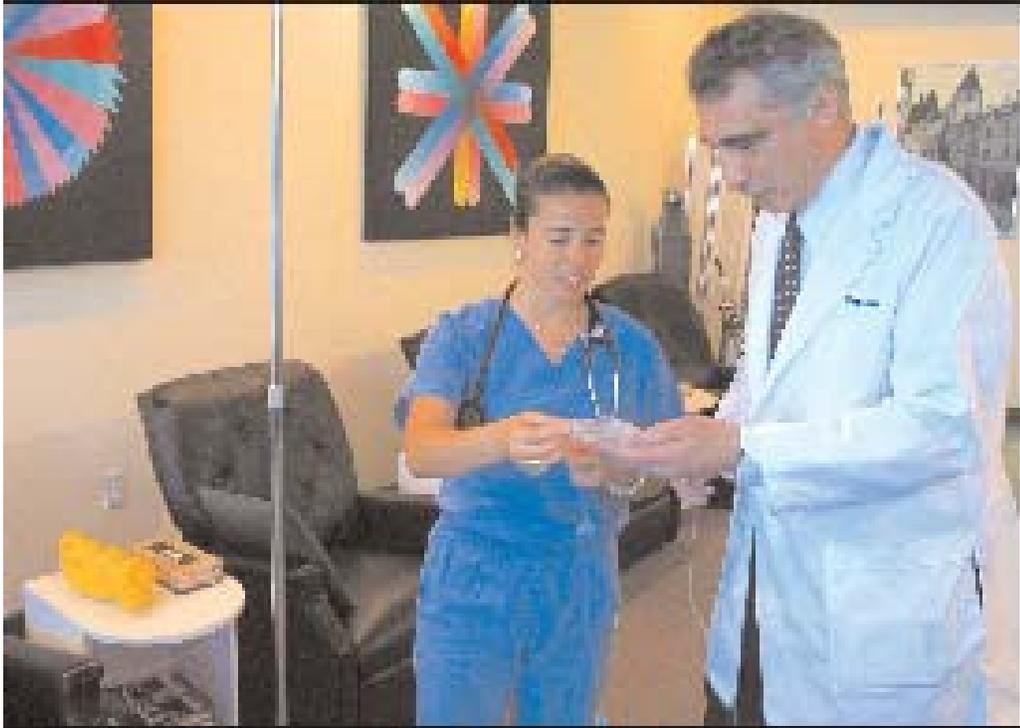


## *The Case for Intravenous EDTA Chelation Therapy, August, 2006 update*



*Dr. Johanna Mendez (Columbia, S.A.) and Dr. Martin Dayton  
discussing contents of a chelation treatment in a clinical setting  
2006*

### *Positive*

#### **Prevention of Lower-Extremity Amputation with EDTA Chelation, Holliday, HJ Clinical Practice of Alternative Medicine 1(3):165-169, 2000**

The lower extremity amputation rates of 89 patients treated with traditional vascular surgical interventions for peripheral vascular insufficiency (clogged arteries in the lower extremities) were compared with 22 patients with similar severity of vascular disease who received intravenous EDTA therapy. The overall amputation rate for the vascular surgery treated group was 9% compared to 0% for the chelation treated group. Rest pain disappeared in the 64 % of the surgical group 75% in the chelation group.

***Chelation reduces need for amputation and may be used as an alternative or adjunct to vascular surgery.***

*Positive*

**Brachial Artery Stiffness Testing as an Outcomes Measurement for Measurement for EDTA-Treated Patients with Vascular Disease Chappell, T. Et al. Clinical Practice of Alternative Medicine 1(4):225-228, 2000**

Twelve of 18 patients with carotid and/or peripheral vascular disease (associated with blood flow to the brain and lower extremities respectively) were treated with 30 infusions of intravenous EDTA. Of the 13 who had abnormal arterial stiffness at the beginning of the study 12 had an average of 29% reduction in brachial artery stiffness index. All patients had improvement symptomatically and/or objectively in vascular symptoms and/or blood flow. Increased arterial stiffness correlates with increased atherosclerosis and endothelial dysfunction (hardening of arteries and disease processes associated with the lining of blood vessels)

*Block buster*

**Angiograms Miss Most Atheromas, Betsy Bates Family Practice News, July 15, 2001**

“Conventional Angiography fails to visualize 95%-99% of atherosclerotic plaque”  
Dr. Steven Nissen, head of clinical cardiology at Cleveland Clinic.

Atheromas within arterial walls account for 2/3 myocardial infarctions that occur at sites of “hemodynamically insignificant stenosis,” that is, areas without significant blockage. An atheroma is a deposit or degenerative accumulation of lipid-containing plaques on the innermost layer of the wall of an artery. Atheromas primarily cause heart attacks by rupturing into the arterial lumen where blood flows initiating the formation of heart attack producing clots rather than progressively increasing in size to block the blood flow in the arterial lumen or to produce emboli as previously thought .

Thus, surgical interventions to reduce blockage would not be expected to reduce mortality from future heart attack. Statistically such interventions have not reduced rates of occurrence of or death from heart attack.

Approaches affecting body chemistry, such as the use of aspirin (in men) and statin drugs, have been statistically proven and generally accepted today to be useful for this purpose. *Chelation is a chemical approach.*

***In regard to preventing deaths due to heart attacks overall, have angiographers and radiologists been looking for and surgeons and interventional cardiologists been operating on the wrong plaque for the past 40 years, inappropriately promoting therapies which have never been subject to randomized double blind clinical study? Governmental and private insurance companies do not routinely pay for chelation therapy in part due to lack of a definitive randomized double blind clinical study. Had and are governmental and private insurance companies paying the wrong doctors?***

*Conventional wisdom changes facts and vice versa, albeit not always quickly. 500 years ago the world was flat. Today, chelation is not a standard of care covered by insurance.*

*Positive*

**Environmental Exposure and Progression of Chronic Renal Failure Diseases in Patients without Diabetes Lin, J Et al, JAMA 2002; 287(4):481-486**

In this Taiwanese study 64 patients with chronic progressive renal (kidney) insufficiency and elevated lead body burden (lead toxicity) were randomized into two groups one receiving intravenous EDTA and the other placebo. The EDTA treated group demonstrated an almost three fold decrease in loss of kidney function versus placebo. The authors concluded that EDTA chelation may improve kidney function and slow progressing renal insufficiency. This study demonstrates, what physicians using have been maintaining, that intravenous EDTA improves kidney function. Intravenous Chelation critics had previously maintained that EDTA damaged kidneys

*Negative*

**Program to Assess Alternative Treatment Strategies to Achieve Cardiac Health (PATCH)-EDTA Study, Knudtson, ML, Wyse DG, Et al., N Engl J Med 2003;348(4):277-286.**

Canadian double blind, randomized, placebo controlled study involved patients with a history or myocardial infarction or evidence of coronary artery disease given 33 infusions intravenously with one group receiving EDTA and the other receiving placebo. 79 of 84 randomized patients completed the study. Exercise indices and quality of life increased in both groups without significant differences. The authors felt that there was insufficient evidence to support the benefit of Chelation therapy for patients with stable angina and positive stress test. The study findings and the conclusions of its authors were criticized by proponents of chelation therapy. Given the duration of the study was relatively short, the participants were relatively healthy and the number of participants relatively small, the authors agreed (along with their critics) that a larger study is needed.

*Negative (sub-study)*

**Effect of Chelation Therapy on Endothelial Function in Patients with Coronary Artery Disease: PATCH substudy. Anderson TJ, Hubacek J, Wyse DG, et al. J Am Coll Cardiol. 2003;41:420-425.**

A total of 47 patients with diseased coronary arteries enrolled in the Program to Assess Alternative Treatment Strategies to Achieve Cardiac Health (PATCH) study were measured before and after receiving 33 EDTA chelation infusions in

combination with oral vitamins and minerals via high-resolution ultrasound testing for vasomotor related change in brachial artery blood flow of the upper extremities at six months. Significant increments in brachial artery blood flow, one of the parameters involved with improved endothelial function, was not found.

Endothelial cells line the entire vascular system. Good endothelial function is required for:

- Regulating blood pressure, vascular smooth muscle tone, local blood flow, vascular growth and repair
- Balancing blood clotting and clot dissolution: maintaining a dynamic barrier between tissue and bloodstream
- Regulating immune function and inflammation, including inflammatory factors that underlie plaque formation and instability in occlusive (atherosclerotic) vascular disease
- Traffic through the vascular wall of immune cells, lipid particles and foreign bodies
- Tissue nourishment, ion transport and electrolyte balance

This study is limited in that it directly measures only vascular tone and blood flow, not all parameters of endothelial function inclusive of clotting, inflammation, etc. The patients were already under continuous optimal standard treatment, which affects endothelial function, as chelation was administered. Standard care may have left little room for improvement to be measured via ultrasound testing. The study does not measure the effect of chelation therapy when used without standard therapy. It does not evaluate the effect of adding optimized standard therapies to the care of patients already undergoing chelation.

In light of beneficial effects on endothelial function measured by similar parameters found by other researchers and the limitations of this study, much is left to be desired in regard to drawing general conclusions concerning the benefits of EDTA chelation therapy on endothelial function.

### *Positive*

#### **Subsequent Cardiac and Stroke Events in Patients with Known Vascular Disease Treated with EDTA Chelation Therapy A retrospective study, Chappell, LT Et al. Evid Based Integrative Med 2005; 2(1):27-35, 1176/06/0001-0027 534.95/0**

220 patients with coronary artery disease were treated with chelation therapy from 1992-2001 in 8 clinical centers internationally and followed for three years. The group outcome was compared with a similar group treated with standard medical care without chelation therapy. Using predictive meta-analysis a conventional medically treated group would have been expected to have 15 myocardial infarctions and six deaths. No myocardial infarctions or deaths were observed in the chelation treated group. Compared with meta-analysis predictions of a similar conventionally treated group, the chelation treated group had 93.6 % less angioplasties and 62% less coronary bypass surgeries. Four patients in the chelation group had strokes all with good recovery. The average amount of chelation

infusions used was 58. The authors have pointed out the need for a large definitive study.

*Has a large enough, well controlled enough, and well designed enough definitive study to evaluate the ability of intravenous chelation therapy to reduce symptoms of cardiovascular disease and avoid heart attack finally arrived?*

*The US government has committed approximately \$30,000,000 to fund such a double blind, placebo controlled study of intravenous chelation therapy involving in the vicinity of 2000 patients all with a past history of heart attack. The study is ongoing at the time of this writing. The acronym for the study is TACT which stands for the:*

## **Trial to Assess Chelation Therapy**



**For U.S. government detailed information on TACT and what is necessary to participate follow these links.**

**Link:** <http://nccam.nih.gov/chelation/>  
<http://nccam.nih.gov/chelation/chelationstudy.htm>

**How did the TACT study come about and where will it lead us?  
This author's personal involvement and commentary:**

Several years ago, I had given a lecture to the charitable organization, Miami Heart Research Institute, Miami Beach, Florida, inviting the organization to sponsor a study on chelation therapy. Enter Gervasio Lamas M.D., a cardiologist and researcher with deservingly impressive credentials in the cardiac research, working at Mount Sinai Hospital, Miami Beach. I put Dr. Lamas together with Miami Heart Research Institute and a private donor to fund for a small research study on chelation therapy. Later, when dining with the chief physician of the Miami Heart Research Institute, he revealed that he ok'd the funding to prove chelation does not work. The private donor conversely donated money because he felt it did work. I put Dr. Lamas together with organizations of physicians performing chelation. The small study was designed by Dr. Lamas with much input from others. Ted Rozema M.D., a prominent chelating physician organized the resources and political influences of the community of physicians performing chelation. Working all together, under the architectural genius of Dr. Lamas, TACT was designed along the lines of the first small study the results of which have not yet been published. The first study was used to successfully demonstrate to the National Institutes of Health that Dr. Lamas' chelation study design is feasible. The US government through the

National Institutes of Health funded TACT, the most definitive intravenous chelation study to date. The administration of chelation therapy for the study is being performed by prestigious institutions such as the Mayo Clinic and by numerous physicians' offices such as mine. The study is produced as a joint effort by mainstream conventional and alternative and complementary physicians. I continue to serve as an adviser to the study. Due to the time needed to determine long term benefits of intravenous EDTA, the results of the study will not be made public for a few years.

***If TACT proves chelation to be successful, IV chelation therapy may become an insurance reimbursable treatment of choice to prevent and address atherosclerotic circulatory compromise within... 10 years.***

***Wishing you affordable good health in a round world,***

***Dr. Martin Dayton***