

The High Desert Heart Institute Clinical Study

Arginine – Citrulline - Nitric Oxide

The High Desert Institute, in Victorville California (HDHI), is an affiliate of Cedars-Sinai hospital. It provides primary care for heart disease to its high risk patients. In 2009 the High Desert Heart Institute conducted the most comprehensive human clinical trial ever conducted on a nutritional supplement, for the purpose of proving the efficacy and health benefits of ProArgi-9 Plus.

Dr. Siva Arunasalam M.D. PhD.

Dr. Siva Arunasalam is the Director and founder of The High Desert Heart Institute. He came to the U.S in 1977 as an undergraduate of medicine, to the University of Nebraska. He did his MD and PHD in both John Hopkins and Emory Universities in Atlanta and completed his residency and fellowship in the prestigious Cedars-Sinai hospital in UCLA. He is board certified in Internal Medicine, Cardiology and Interventional Cardiology. In his interview with John Hewlett, he gives us an in-depth look into his philosophy for cardiovascular care and his findings with the use of L-Arginine in the care of his patients.

Dr. Siva has seen a significant increase in the chronicity of illness in the last 10 years. He explains that he is seeing less and less heart attacks because of modern medicine and interventions, such as stenting and bypass. In 2008, 450 angioplasties were carried out at HDHI where he specializes in stenting. He is now able to save people that would not have lived 20 years ago in the same circumstances. However, the problem now is that these patients have damaged organ systems such as heart muscle weakening and experience symptoms from the diseased organs. He has patients who are now in their 80's, still having perfect brain function and wanting to be more active, but they are limited by their medical condition. From a medical management point of view he was looking for an alternative treatment.

In 1999 when Dr. Siva was sitting for his internal board exams he read many articles on L-Arginine. He made the correlation between Nitro-glycerine and L-Arginine as both could produce more Nitric Oxide in the body to dilate blood vessels and promote blood flow. Nitroglycerine is used to treat angina and increase blood flow to the heart but has many side effects. He began using L- Arginine in his own practice but had limited results. He decided to use a higher dosage in his trial and achieved impressive results.

When asked if many of the findings from the study were a surprise to him, Dr. Siva said it was not so much the results, as the speed with which they saw the results that surprised him. He explained this by saying he would not see the results of lowering BP for years when he treated somebody for high blood pressure with standard medications, whereas he saw direct results within a month of beginning the trial with Pro Argi 9 Plus.

Dr. Siva was impressed but not surprised by the marked improvement to many conditions such as Peripheral Arterial Disease (PAD), Pulmonary Hypertension (which is very difficult to treat), Renal Failure, Neuropathy and Oxygen dependency. He answered it by saying "Everything depends on Blood Flow". It's a significant factor in strokes, heart attacks, liver function, and kidney function. All organ systems improve with increased blood flow. He points out that as we age blood vessels become less flexible and deliver less blood and nutrients to the organs.

Dr. Siva chose 35 of his high-risk patients for the clinical trial, one was later offered a heart transplant and then another opted out of the study leaving 33 patients. All of these patients had reached the position where in the words of Dr. Siva "everything medically and pharmacologically" that could be done for them had already been done.

When asked why others of his profession do not promote the use of LArginine, he replied by saying that it is all to do with drug promotion. L-Arginine is a generic product, and unless there is money to be made, nobody will promote it.

Dan Swindell witnessed firsthand, many of the patients, before, during and after the study. He gave incredibly moving accounts of how these patients came from planning their funerals to getting their lives back.

He saw patients with diabetes who had had partial or full amputations, patients on maggot therapy from having necrotised tissue, patients with MRSA, patients on as much as 61 units of oxygen at rest. All of them were gravely ill, on several medications a day.

One such story is that of a man that had gone home to die. Angelo Cici was a major player in corporate America; he had been the senior litigator for Litton Industries for many years. In 2002 he had a pacemaker fitted and continued to work full time as a realtor, despite having officially retired. In 2009, his pacemaker failed and he suffered congestive heart failure, renal failure and pulmonary hypertension. He survived the initial organ failure, but endured numerous trips to the ED. He lost all strength, could not walk 20ft at one time, couldn't even open a bottle of water and he needed oxygen 24/7 just to survive. He felt totally defeated, discharged himself from hospital and went home to die.

Angelo had an appointment at the HDHI, during which Dr. Siva suggested he take part in the upcoming clinical trial. Angelo agreed and proceeded to take therapeutic doses of Pro Argi 9 Plus along with his existing meds. After 30 days, he stopped making trips to ED. After 90 days on the trial, his life changed dramatically. He no longer needed oxygen. He went from renal failure and facing dialysis to having NORMAL kidney function.

He reports having all of his strength and stamina back to that of 40 years old - he is now 72. Angelo says he "wanted to open death's door". Now he is living life to the full.

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Clinical Trial Overview

- *Based On Nobel Prize-Winning Science
- *Usage of ProArgi-9 Plus as integrative arginine
- *35 High Risk Test Patients
- *Commencement date of Clinical Study is Feb 2nd 2009

Protocol

- *Under direction of Dr. Prendergast and HDHI Physicians
- *Each patient receives 20 grams am and 20 grams pm
- *30/60/90 day period data review on patients

Disease Category Subsets

- *PVD (Peripheral Vascular Disease)
- *Angina
- *Malignant Hypertension
- *Diabetes Mellitus
- *Pulmonary Arterial Hypertension
- *Erectile Dysfunction

Labs To Determine Baseline, 30/60/90 Day Results

- *CMP (Complete Metabolic Panel)
- *CBC (Complete Blood Count)
- *HgbA1c Hemoglobin 90 day test
- *Full Lipid Panel
- *Vitamin D3 levels
- *Microalbumin
- *Plac Test (diaDexus)
- *LFT (Liver Function Test)
- *BNP (B-Naturetic Peptide Levels)
- *CRP (C-Reactive Protein)

Further Diagnostic Tests

- *Echocardiogram
- *CardioDynamic Analysis (BioZ)
- *6 Minute Walk Test
- *Coronary Calcium Score: (Computerized tomography)
- *Coronary CT Angio IV Contrast
- *Ankle - Brachial Index
- *Cardio Pulsewave Analysis (B-Pro)
- *Doppler Echo
- *Blood Oxygen Saturation Levels (APRIA Health)

These are some of the results of the study that will soon be published

- CASP (Central Aortic Systolic Pressure decreased by 6%.
- There was a 3% increase in cardiac index.
- Pulmonary Hypertension dramatically improved.
- Quality of life measurements significantly improved for all participants
- 35% increase in magnesium levels (even though there is no magnesium in the product)
- Decreases in platelets
- Albumin decreased by 70%
- Bilirubin decreased significantly - this meant it reduced the workload of the renal system negating the requirement for Dialysis treatment for many of the patients.
- 18% increase in HDL
- 40% decrease in triglycerides
- 8% Glucose reduction
- 25% decrease in C-reactive proteins
- 11% reduction in creatine levels

- Vitamin D levels increased by 183%
- Systolic BP decreased by 13% Diastolic BP decreased by 17%
- Peripheral blood flow increased to the feet by 16% (an ankle reading)