

Laser Therapy and Cardiovascular Disease



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"Robert" was a 71-year-old diabetic with a long history of hypertension and heart disease. One day, he stopped taking all nine of his medications (three of which were for blood pressure) and showed up at our office, diaphoretic and pale. His blood pressure measured 220/125, and it was suggested that he take his drugs. He adamantly refused. He was treated three times, approximately five days apart, with supravascular laser therapy and acupuncture, and also was given herbs.

Robert's Blood Pressure Measurements

Visit	BP Pre-Treatment	BP Post-Treatment
1 st visit	220/125	195/115
2 nd visit	190/110	160/98
3 rd visit	160/92	148/88

Note that pre-treatment blood pressure readings moved downward progressively, not just readings taken after treatment.

Cardiovascular disease is our number one killer. One-third of Americans have one or more forms of it. Cardiovascular disease is a condition that is broadly defined, including anything affecting the heart or blood vessels. According to one estimate, our average life expectancy would increase by seven years if cardiovascular disease were eliminated.¹

The mainstream model seeks in large part to "manage" cardiovascular disease with pharmaceuticals, or to bypass or physically reopen blocked vessels through surgical intervention or angioplasty. These methods have proven highly useful in saving countless lives. Yet science has continued to move forward and there are new options to be explored.

In particular, the use of laser therapy in treating cardiovascular disease has researchers talking. Here's what they have to say:

- The treatment has been shown to have anti-anginal, antihypertensive effects, to improve cardiac performance and myocardial contractility, and to increase myocardial, coronary and aerobic reserves. This clinicofunctional efficacy was accompanied by positive shifts in lipid metabolism, lipid peroxidation activity, antioxidant defense, hemocoagulation and microcirculation.²

- Laser treatment significantly lowered systolic, diastolic and mean arterial pressure. Moreover, diastolic arterial pressure did not elevate high at submaximal bicycle exercise. Total peripheral vascular resistance also decreased. A good hypotensive effect was achieved in 90.4 percent of cases.³
- Use of low-intensity laser irradiation in the rehabilitation of patients with borderline hypertension during the sanatorium stage strikingly enhanced the efficiency of the therapy administered. It can be prescribed to patients irrespective of their hemodynamic types.⁴
- The efficiency of supravascular laser exposure in multiple-modality treatment of patients with atherosclerosis obliterans with distal vascular lesions has been demonstrated and the method of noninvasive laser exposure of the lower limbs validated.⁵
- The use of laserpuncture allowed patients to reduce their dosage of hypotensive drugs.⁶
- Patients with FC I-III exertional angina can derive benefit from laser therapy due to its cardioprotective effect. Positive hemodynamic shifts were accompanied by improvement in general health of patients, manifested by lower frequency of angina attacks and episodes of pain-free ischemia of the myocardium. Laser therapy had an effect on the relation between painful and painless ischemia of the myocardium, as evidenced by a predominant decrease in pain-free episodes of myocardial ischemia, this being regarded as a prognostically favorable fact.⁷
- Intravenous laser therapy had a wider spectrum of effects on erythrocyte number than medication. Changes in erythrocyte number in the peripheral blood upon intravenous laser radiation reflects the efficiency of treatment of coronary heart disease patients.⁸
- During an eight-year period, patients with atherosclerosis and renal dysfunction were treated with intravenous laser blood irradiation (ILBI). The study demonstrated a decreased level of total cholesterol, LDL cholesterol and triglycerides with a simultaneous increase of HDL cholesterol levels. No pharmaceuticals were given during the treatment period. The authors state that ILBI results in a stable hypolipidemic situation that prevents atherogenesis in patients with metabolic disorders, particularly in patients with renal pathologies.⁹
- Levels of fibrinogen, platelet aggregation, blood viscosity, anti-thrombin III, and fibrinogen fragments were investigated before applying laser light and on the fifth and 10th day after treatment. Laser therapy lessened cardiac pain and arrhythmias. Improvement of the clinical state of the patients was accompanied with improvement of hemorheological properties. Normal readings for blood viscosity, fibrinogen and platelet aggregation were obtained on the 10th day. Each of these

factors reflects its positive effect on the disseminated intravascular coagulation. The results showed that laser therapy improved hemorheological properties of blood, which can be compared with the improving clinical state of patients with acute myocardial infarction.¹⁰

- In 1984, this method was employed in the treatment of 133 patients. Of these patients, 102 were with atherosclerosis obliterans of the lower limb vessels, 17 with endarteritis obliterans, and 14 with Raynaud's syndrome. Intravenous laser therapy proved to be the most effective in atherosclerotic involvement of the vessels, with positive results achieved in 77.5 percent of patients. The length of remission was up to six months.¹¹
- After receiving a course of low-intensity infrared laser radiation treatment, patients displayed positive changes in blood lipid spectrum, which was associated with improvement in microcirculation, decrease in afterload, and increase in economization of heart functioning and activity tolerance. Results demonstrate that the hypolipidemic effect of laser radiation is a substantial factor in the regression of CHD manifestations.¹²

To view the researchers' comments, taken from online abstracts, in their entirety, visit www.healinglightseminars.com. Click on "Laser Research Library" and then scroll through the following categories: Angina – Ischemic Heart Disease, Arteriosclerosis – Atherosclerosis, Blood Irradiation, Hyperlipidemia, Hypertension, Myocardial Infarction, Myocardial Protective Effect and Myocarditis.

Commentary

If only a small fraction of the positive health benefits reported in the literature coming out of Eastern Europe is true, then ignoring the evidence in this area is a significant lapse of Western science. Whether or not these studies have been performed to acceptable standards, their sheer quantity, the scope of clinical applications and potential health benefits for all of us mandate a thorough investigation.

Although there are more than 100 Eastern European studies on laser blood irradiation, to my knowledge not one has been published in a Western, peer-reviewed journal. This is an astonishing oversight in light of the evidence, but one that can and will be corrected, sooner or later.

Laser therapy is being administered by many different methods, such as laserpuncture, transcutaneous, supravascular and intravenous irradiation of blood over the projection zones of organs, etc. Success has been reported with all of these treatment methods. In my view, a laser of the appropriate wavelength and power, in knowledgeable hands, is likely to be clinically relevant in almost any area or form of medicine.

It is also my belief that people generally continue to do things because they work. Those of us who practice Oriental medicine are especially likely to appreciate this fact. And new things also come along. Lasers are a big new thing. The eastern Europeans appear to

be very happy with the results they are reporting; the numbers of abstracts becoming available seem to me to be accelerating.

Innovations may appear more rapidly than the political and social structures to manage them. Yet when something is truly of value, sooner or later it always becomes available.

If you are interested in learning more about laser therapy, you are invited to attend the 7th Annual Conference of the North American Association for Laser Therapy (NAALT), which will be held May 18-20, 2007, in Tucson, Ariz. NAALT 2007 will focus on clinical applications, photobiological mechanisms, treatment parameters, techniques, basic laser physics, regulatory and reimbursement issues, as well as the latest technology. An international roster of speakers will be taking part, including keynote speaker Jan Bjordal. (A synopsis of Dr. Bjordal's work can be found at www.uib.no/isf/people/janmb.htm.) To register online or to learn more about NAALT, visit www.naalt.org.

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