

A Discussion with
Dr. Edward C. Kondrot, MD
May 2000

Topic: Chelation & Microcurrent Stimulation Therapy

DR. KONDROT: I am happy to be a part of this email discussion group. I am an Ophthalmologist and a Homeopathic doctor. This may seem like an unusual combination, but I became interested in Homeopathy and alternative medicine after practicing traditional Ophthalmology for 20 years. I was tired of telling my patients that nothing could be done for macular degeneration. I began to investigate alternative therapies and became quite surprised to find out that they can reverse the damages of macular degeneration. My research has been into the use of Homeopathy, Chelation therapy and microcurrent therapy for this devastating disease. I have recently published two books dealing with my experiences over the last ten years: *Healing the Eye the Natural Way: Alternative Medicine and Macular Degeneration* and *Microcurrent Stimulation: Miracle Eye Cure*.

I will be happy to answer any questions you might have regarding these therapies. Please visit my web page at www.homeopathiceye.com to learn more.

RENALDO: I have been interested in chelation for a long time, and would like to know more about it please. Is this the same as the heart patients get? I believe a person may have to go for more than 30 treatments. How soon will a person notice a change like the warming of hands and feet, and after how many treatments have some of your patients seen a change in their vision? I can not imagine myself going for so many treatments with a needle in my arm. Is there a treatment that can be taken orally, and how effective is it? If it can be taken orally, for how many months will a person have to take it to equal 30 chelation taken intravenously? If the eyesight do not improve, what other benefits can a person get from this treatment?

DR. KONDROT: Chelation therapy is an intravenous therapy using the synthetic amino acid EDTA (Ethylene diamine tetraacetic acid) which has the ability to "bond" or "hook onto" atoms of calcium, lead, cadmium, mercury and some of the trace minerals. These minerals combined with the EDTA are eliminated from the body through the kidneys into the urine. Chelation therapy is used for patients with heavy metal poisoning, poor circulation due to arteriosclerosis and conditions related to these primary diagnoses. We are beginning a clinical trail under the supervision of the American College of the Advancement of Medicine on the effectiveness of chelation in macular degeneration. The causes of macular degeneration are many but it is felt that arteriosclerosis and the formation of free radicals contribute to this disease. Chelation therapy has been documented to be helpful in both of these conditions. In arteriosclerosis, the blood vessels are damaged and then obstructed by the buildup of plaque. During and following chelation therapy, this plaque is dissolved very slowly and the blood flow throughout the body improves. We expect chelation patients to follow a basic program of non-smoking, diet, exercise

and vitamin and mineral supplements.

Studies have shown that oral chelation is not as effective as intravenous. The oral agents are bound to metals in the gastrointestinal tract and are rendered ineffective for chelating any metals or calcium from the body

You can call the American College of Advancement of Medicine for more information regarding chelation (949) 583-7666 or visit their web page at www.acam.org.

BRIAN: Can you tell us how micocurrent therapy stimulates our vision when the actual retina cells are damaged? I have an understanding that retina cells cannot be regenerated. Does that mean the microcurrent stimulation will cause a migration of retina cells from other parts of the eye to the macula and, as a result, we can restore our central vision?

DR. KONDROT: MCS helps improve the function of retinal cells in macular degeneration. The cells, as we know, are the building blocks of the body, and they must function properly for life, and--in the case of the eye--for vision to occur. An important component of the cell is the mitochondria. Each cell is composed of thousands of mitochondria, which are the source of energy for the cell to function. In order to generate energy a chemical reaction takes place in the cell in which ATP is required. ATP is the fuel that the mitochondria need to generate energy. The cell uses this energy to convert amino acids into proteins that are used for the function of life and vision. So there are three things a cell needs: healthy mitochondria, ATP, and the ability to make protein. One theory is that macular degeneration results because of a lack or deficiency of ATP. The following experiment demonstrates how the use of MCS enhances cells' functioning.

Ngok Cheng, in 1982, studied the effects of TENS on the skin of the rat. He applied different levels of current on the surface of the rat skin and then studied the changes in the cells using electron microscopy. This technique enabled him to observe the changes in the cellular mechanics. His results indicated that between 50 and 500 microamperes will cause an increase in mitochondria and an increase of 300 to 500 percent in ATP levels. He also noted that, at this level, there was an increase in protein synthesis and gluco-neogenesis. This study is exciting, because it gives us a model on how MCS might work inside the eye. The MCS applied to the eye will stimulate the diseased retinal cells, increasing cellular functions and stimulating the diseased cells to recover.

(Reference: Cheng, Ngok. The effects of electrical current on ATP generation, protein synthesis and membrane transport in rat skin. *Clinical Orthopedics and Related Research*, 171 (Nov.-Dec. 1982) 264-271.)

KAREN: Have you ever treated anyone with retinoblastoma? My daughter, now 5 years old, is in remission, and she has maintained both of her eyes, thanks to chemotherapy. She has much scarring on her retinas, as well as calcified tumors, which occupy 25% of her better eye and over 50% of her worse eye. I realize that the tumors are there forever; however, I wonder if any of these therapies would help the parts of her retinas that are tumor-free, but scarred. My understanding is

that this scarring is a result of her retinas being completely detached at one point, as well as from laser and chryotherapy.

DR. KONDROT: I would suggest considering microcurrent or homeopathy as an adjunctive treatment for your daughter. Microcurrent should help revitalize the retinal cells and might give her a better level of vision. Homeopathy is a scientific method of therapy based on the principle of stimulating the body's own healing processes in order to accomplish cure. The basic system was devised and verified by Samuel Hahnemann, a German physician, nearly 200 years ago. Homeopathy's astounding success rates in both chronic and acute diseases has not only stood the test of time, but has rapidly achieved widespread acceptance in Europe, India, and South America.

In Homeopathy ("homeo-" means "similar"), each of us is a total complete individual, no aspect of which can be separated from any other. To be effective, any valid therapy must be based on a deep understanding of and respect for the uniqueness of each individual. In Homeopathy each patient is evaluated as a whole person--mentally, emotionally and physically. The prescribing remedy is based on the unique patterns found on all three levels. This means that each person is given a remedy that will stimulate his or her particular body to heal. Ten people with retinoblastoma might receive ten different homeopathic remedies.

Homeopathy has been carefully researched, and its effectiveness has been reported in the following well-respected national medical journals:

Jacobs J: Treatment of Acute Childhood Diarrhea with Homeopathic Medication. *Pediatrics* 1994; 93:719-7255.

Reilly DT: Is Homeopathy a Placebo Response? *Lancet* 1986; Oct: 881-886.

Kleijnen J: Clinical Trails of Homeopathy. *British Medical Journal* 1991; 302: 315-323.

I have not treated any patients with retinoblastoma, but I have studied with Dr. Ramakrishnan, who has shared with me his experience in this area.

BRIAN: One theory about MD is that the retinal cells are being rubbed off from the tissues, especially in the case of the wet form of MD, in which case the retinal cells are torn off by the blood vessels and/or leakage. If this theory about MD is true, the diseased cells do not even exist. In other words, does that mean once MD takes place, nothing, including microcurrent stimulation, can be used to reactivate or regenerate the cells that have been rubbed off?

Please let me know, because I may have a wrong understanding of the causes and results of MD. If my understanding is wrong, I will be more than happy and excited to join your clinical trial.

DR. KONDROT: I believe that in the early stages of wet and dry macular degeneration the retinal cells are dysfunctional and are not able to receive images and transmit them to the brain. It is at this early dysfunctional stage that procedures

like chelation, homeopathy, and microcurrent are most effective. Once there is death of cells, the therapies can still work, but they are not as effective.

Is it possible to regenerate retinal tissue? I do not think anyone can answer this question, but I have seen several patients with evidence of some retinal regeneration after the above treatments. Long term studies will give us more information. The rule of thumb is the better the vision before treatment, the better your prognosis.

I would be happy to evaluate your case and to treat you using microcurrent therapy. My main interest is in using homeopathy, but my practice also includes chelation therapy, microcurrent stimulation, and vitamin therapy. The best way to evaluate and treat you is in person at one of my office locations, either at 5501 North 19th Ave. , Phoenix, AZ (602) 347-7950 or at 239 4th Ave., Pittsburgh, PA 15222 (412) 281-0447.

If you are coming for MCS therapy, it is necessary to have an evaluation, eight office treatments, and instructions on the home unit. A Homeopathic evaluation is optional. Plan to stay for at least four days. There are several reasonably-priced hotels nearby, and some will supply transportation to our office. Here is a tentative schedule for the four days: Day one: Initial evaluation and two MCS treatments. Day two: Nutritional and vitamin consult and two MCS treatments. Day Three: Homeopathic evaluation (Optional) and two MCS treatments. Day four: Instructions on the home unit and two MCS treatments. Cost is \$1500. There is an additional fee of \$275 for the homeopathic evaluation.

If it is not possible to visit one of my offices, you can purchase the Microstim 100 by telephone. The following are suggested before scheduling a telephone consult for evaluation of the MCS.

1) Please take time and fill out the attached questionnaire and consent form.

2) The following will be helpful but it is not required: If possible obtain eye records from your doctor. Please include visual acuity, visual fields, laboratory studies, diagnosis and past treatment. You will need to sign a release form from your eye doctor to obtain a copy of these records. Copies of eye photographs and a copy of fluorescein angiogram if available. These will be very helpful in the evaluation of your case.

3) Check payable to Edward C. Kondrot, MD for the amount of \$125.00.

Once all the above information is received a 30-minute telephone consultation will be scheduled to review your case. The cost of the Microstim 100 unit is \$700.00.

Please call if you have any questions please call me at 1-800-430- 9328 or email me at ekondrot@pipeline.com. I look forward to working with you.

LAVONNE: Please tell me if the rheotherapy done in Tampa, Florida, is the same as the chelation you are discussing? I had it done two years ago at great expense and no improvement.

DR. KONDROT: Rheotherapy is a plasma exchange done for the treatment of macular degeneration. It is a completely different procedure than chelation. I investigated this several years ago and felt it was too expensive and too invasive. I decided that chelation therapy was more affordable and effective. There are

currently studies evaluated the effectiveness of rheotherapy, but nothing has been published to date.

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We are beginning a clinical trial under the supervision of the American College of the Advancement of Medicine on the effectiveness of chelation in macular degeneration. The causes of macular degeneration are many, but it is felt that arteriosclerosis and the formation of free radicals contribute to this disease. Chelation therapy has been documented to be helpful in both of these conditions. In arteriosclerosis, the blood vessels are damaged and then obstructed by the buildup of plaque. During and following chelation therapy, this plaque is dissolved very slowly and the blood flow throughout the body improves. We expect chelation patients to follow a basic program of non-smoking, diet, exercise, and vitamin and mineral supplements. Studies have shown that oral chelation is not as effective as intravenous. The oral agents are bound to metals in the gastrointestinal tract and are rendered ineffective for chelating any metals or calcium from the body. You can call the American College of Advancement of Medicine for more information regarding chelation (949) 583-7666, or visit their web page at www.acam.org.

PAM: I am a member of MDList from England. I have been reading your most interesting answers to questions about different treatments for MD, but I don't think I have read anything which says whether all forms of MD are equally treatable. I have wet MD and have had laser treatment on both eyes. (I also think mine is inherited, as it affected both my mother and her mother). Others have the dry form and build-up of drusen. Would the treatments be more effective for one sort from another? Do you know if any of the methods you use are available in UK? With many thanks for your time and help.

DR. KONDROT: Homeopathy is widely-practiced in England, and it should be very easy to obtain a professional to evaluate your condition. I am not aware of anyone in England performing microcurrent or chelation therapy. You might want to contact Dr. Joel Rossen at jrossen@usa.net for information on doctors in England using MCS.

DR. ROBERT HOLLAND (To the general list): This is the address of a web page called Quackwatch. It seems thorough enough and has frequent updates and interesting pages on treatments, journals, colleges, universities, associations, etc. Some of the institutions are handing out "Degrees" to anyone willing to pay the fees. Some people's pets have ended up with credentials having passed tests with random or wrong answers on examinations.

www.quackwatch.com/01QuackeryRelatedTopics/chelation.html

The article is too long to repost here. There are many good links there as well. If you don't have web access feel free to email me and I'll post the page contents to you. rtico@aol.com

Here are a few excerpts:

FTC (Federal Trade Commission) Action!

In 1998, the FTC charged that ACAM's web site and a brochure had made false or unsubstantiated claims that:

"Chelation therapy is a safe, effective and relatively inexpensive treatment to restore blood flow in victims of atherosclerosis without surgery."

"EDTA improves calcium and cholesterol metabolism by eliminating metallic catalysts which cause damage to cell membranes by producing oxygen free radicals. Free radical pathology is now believed by many scientists to be an important contributing cause of atherosclerosis, cancer, diabetes and other diseases of aging. EDTA helps to prevent the production of harmful free radicals."

"Chelation therapy is used to reverse symptoms of hardening of the arteries, also known as atherosclerosis or arteriosclerosis ."

"Every single study of the use of chelation therapy for atherosclerosis which has ever been published, without exception, has described an improvement in blood flow and symptoms."

"Chelation therapy promotes health by correcting the major underlying cause of arterial blockage. Damaging oxygen free radicals are increased by the presence of metallic elements and act as a chronic irritant to blood vessel walls and cell membranes. EDTA removes those metallic irritants, allowing leaky and damaged cell walls to heal. Plaques smooth over and shrink , allowing more blood to pass. Arterial walls become softer and more pliable, allowing easier expansion. Scientific studies have proven that blood flow increases after chelation therapy."

"Chelation therapy is an office treatment which improves blood flow throughout the entire vascular system...The reader is advised that varying and even conflicting views are held by other segments of the medical profession...This information represents the current opinion of independent physician consultants to ACAM at the time of publication."

In December 1998, the FTC announced that it had secured a consent agreement barring ACAM from making unsubstantiated advertising claims that chelation therapy is effective against atherosclerosis or any other disease of the circulatory system.

An important theoretical consideration should also be considered . The trace metal most dramatically lost as a result of EDTA chelation is zinc. French researchers have found that 24 hours after an infusion of EDTA, the urine of human subjects contained 15 times the normal amount of zinc. Without replacement, the loss of this much zinc over the months during which 30 to 40 treatments are delivered will increase the potential for severe impairment of immune function, precancerous cellular mutations, loss in selective permeability of cell membranes and

altered solubility of pancreatic insulin. Although proponent literature advises that supplemental zinc be administered to guard against zinc depletion, studies showing that this supplementation actually prevents depletion have not been published in the peer-reviewed scientific literature.

DAN ROBERTS, Director, MD Support: Dr. Holland has provided good balance to the chelation issue, and I highly recommend that everyone read the article which he mentioned. The article also points out that:

"The few well-designed studies that have addressed the efficacy of chelation for atherosclerotic diseases have been carried out by 'establishment' medical scientists. Without exception, these found no evidence that chelation worked.

"Based on numerous reviews of the world's medical literature, these same conclusions have been reached by the FDA, the FTC, National Institutes of Health, National Research Council, California Medical Society, American Medical Association, Centers for Disease Control and Prevention, American Heart Association, American College of Physicians, American Academy of Family Physicians, American Society for Clinical Pharmacology Therapeutics, American College of Cardiology, and American Osteopathic Association."

As everyone knows, MDList is a forum for all opinions on any subject related to MD, and I welcome both sides of every issue. As you also know, I am a strong proponent of self-education in personal health matters, and then using the information to make well-informed decisions.

Neither chelation therapy nor microcurrent stimulation have been proven scientifically, and no approved clinical trials have yet been established. This does not mean that they do not work, but it is a strong indication that people should be wary of any false claims which might be made. It is also important to remember that no fees are charged for legitimate studies in the medical field.

In defense of Dr. Kondrot, I have read his book, "Healing The Eye The Natural Way," which he was kind enough to send me, and it makes some good points for the field of homeopathy as it relates to MD. The sections on diet and stress are worth reading, and the book is written in a manner which is clear and understandable to the layman. He does promote microcurrent stimulation and chelation therapies as beneficial to the retina, and this is where the reader needs to apply critical and well-informed thinking.

Thank you, Rob, for your input, and I look forward to Dr. Kondrot's response.

DR. KONDROT: This is in response to Dr. Holland's comments. There will always be disagreements in the treatment of any disease. This is like politics. Each politician will quote studies to support his opinion and he will present a good case to support his opinion. What is the voter or patient to do?

I disagree with the comment that any ethical study should be free to the patient. I have been involved with three FDA (Food and Drug Administration Studies). The evaluation of the excimer laser for the correction of nearsightedness, a foldable intraocular lens study and a study to evaluate the LASIK procedure. None of these studies were free to the patient. Incidentally, the FDA eventually approved all of

these procedures. We have submitted a protocol for the evaluation of microcurrent stimulation to the FDA, and I hope to begin this study by the end of the year.

I come from a very conservative background practicing traditional ophthalmology for over 20 years. I was tired of telling patients nothing can be done. When I discovered homeopathy, chelation therapy, and microcurrent, I realized something can be done. These procedures can help reverse the process of macular degeneration. Here are some published articles to support my claims:

Microcurrent Therapy Articles:

N Cheng et al: The effects of electric current on ATP generation, protein synthesis and membrane transport in rat skin. *Clinical Orthopaedics and Related Research* 1982: 264-272.

Halloran, Grace; Review of 24 Case Studies of Serious Eye Diseases Utilizing Alternative Therapies. *Townsend Letter* August 1999.

Michael, OD, Leland D. and Merrill J. Allen, Nutritional Supplemental , Electrical Stimulation and Age Related Macular Degeneration. *Journal of Orthomolecular Medicine*, Third Quarter (1993) Number 3.

Homeopathy Articles:

Similasan Eye Drop Study Mark Abelson, MD Harvard Medical School
Homeopathic Ingredients: Apis, Euphrasia and Sabadilla 32 Patients with ocular allergies Double blind Significant reduction in signs and symptoms.

Reilly DT. "Is Homeopathy a placebo response?" *Lancet* 1986; Oct: 881- 886. 144 Patients with Active Hayfever Randomized, double blind, placebo controlled study Showed that Homeopathy is not just a placebo response.

Kleijnen J. "Clinical trails of homeopathy" *British Medical Journal* 1991; 302: 316-323. Reviewed a total of 107 controlled Homeopathic studies from 1966 to 1990 81 showed positive results 14 out of 16 showed greater success in patients given Homeopathic medication.

Jacobs J. "Treatment of acute childhood diarrhea with homeopathic medicine" *Pediatrics* 1994;93: 719- 725. Randomized double blind clinical trail 81 children in the study Treatment group had statistically significant decrease in duration of diarrhea.

Reilly DT. "Is evidence for Homeopathy reproducible?" *Lancet* 1994; Dec : 3-8. Double blind study 28 allergic asthma suffers Patients receiving homeopathic treatment reported a significant improvement compared to placebo.

Benveniste J. "Human basophil degranulation triggered by very dilute antiserum

against IgE" Nature 1988; 333:816-818. Duplicated at 6 major European Universities Dilutions of anti- IgE from $1 \times 10(2)$ to $1 \times 10(120)$ Over this range there are successive peaks of degranulation from 40 to 60% of basophiles despite the calculated absence of IgE Transmission of the biological information could be related to the molecular organization of water.

Chelation Articles:

Rudolph CJ, et al; Visual field Evidence of Macular Degeneration Reversal using a combination of EDTA Chelation and Multiple Vitamin and Trace Mineral Therapy; Journal of Advancement of Medicine 1994; 7 :203-211.

Olzsewer E and Carter J: EDTA chelation Therapy in Chronic Degenerative Diseases MEDHyp 1988 2, 870 patients studied, using objective non-invasive measurements. Marked and good improvement in: Heart patients 93.5% ASVD (arterosclerotic vascular disease) of legs 98.5 Brain disorders 54%.

Rudolph CJ, et al: EDTA chelation therapy used to treat 30 patients with carotid artery blockage as measured objectively by Doppler imaging before and after 30 EDTA infusions over a ten month period. Overall 30% reduction in plaque. Severe stenosis had even greater reduction. Clear evidence of reversal of ASVD (arterosclerotic vascular disease).

Chappell LT and Stahl JP: EDTA chelation therapy related to improvement in vascular disease by objective testing before and after treatment. JadvMed 1993 19 articles met the criteria 22,765 patients 87% improved Correlation coefficient 0.88 (High).

Hancke C and Flytie K: JAdvMed 1993 58 of 65 patients on waiting list for bypass were able to cancel surgery 24 of 27 patients on waiting list for amputation were able to cancel surgery. According to Hancke's Data EDTA treatments might have prevented 363,000 of the 407,00 bypass procedures done in the US in 1991, saving more than \$8 billion.

Cranton EM: Free radical pathology in age- associated disease: treatment with EDTA chelation, nutrition and antioxidants. JholMed, 1984.

Rahko PS, et al: Successful reversal by chelation therapy of congestive cardiomyopathy due to iron overload JamCollCard, 1986.

Beboer DA, et al: Iron chelation in myocardial preservation after ischemia-reperfusion injury AnnThor Surg 1992.

Kaman RL, et al: Effects of EDTA chelation therapy on aortic calcium in rabbits on atherogenic diets JadvMed 1990.

Levy RJ, et al: GLA containing proteins of human calcified atherosclerotic plaque solubilized by EDTA *Atherosclerosis* 1986.

Kindness G, et al: Effect of EDTA on platelet aggregation in human blood *JadvMed* 1989.