An Introduction to Medical Ozone

BY: MICAH LOWE

I believe that the greatest gift you can give your family and the world is a healthy you.

Joyce Meyer

This book is provided for you as one who is interested in alternative healing therapies. Please take it, read it and pass it along.

Disclaimer

This book is a prodcut of the author. It is not intended for medical advice or diagnosis. No medical treatment should be administered solely on the basis of the information herein. This book is not in any way associated with a specific clinic or physician. It is intended to provide information both clinical and experimental regarding a treatment that has been used in hundreds of clinics and hospitals over the past 80 years.

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Natural forces within us are the true healers of disease.

– Hippocrates

Introduction

In the United States, we face a host of evolving disease and illness. Crohn's disease has about 700,000 cases per year. Irritable bowel encompasses another 1.2 million suffering people. Few conventional therapies help but many individuals are told there is little chance of recovery.

Jill was suffering. Over the years she visited scores of physicians. "They had no answer" Jill commented sadly. Where can you go when there is nowhere else to turn? Day in and day out her exhaustion was followed by sickness allowed by lowered immunities. Despair was equally as debilitating as the sickness, "When and how can I overcome this," she thought.

After continued suffering under conventional treatment, Jill decided to consider an alternative health clinic. Jill was surprised to learn how the clinic was educated with conventional techniques and a lot more. The staff explained how pharmaceutical drugs were not the first line of defense, and reserved for when it best suited the patient. For the first time, Jill experienced a glimmer of hope. She was ready for something new, she had listened

to all the regular doctor's suggestions. Rounds of drugs, limited success, and scads of money. But as the case with many, "Often it is a last resort that people turn to alternative physicians" said the doctor.

Jill's words resound many who have sought alternatives, "A friend had recommended for me a round of ozone therapy. I came to this clinic after being sick for over a year. After just 4 rounds of ozone therapy, I feel alive, regaining energy more and more each week! And my digestive tract has begun to function again! I am so thankful for all the staff and the kindness when they see me." Finally, an attempt with a physician paid off for Jill! And non-conventional nonetheless.

In the United States, we face a host of evolving disease and illness. Crohn's disease has about 700,000 cases per year. Irritable bowel encompasses another 1.2 million suffering people. Few conventional therapies help but many individuals are told there is little chance of recovery. According to one conventional physician, "Treatment depends on the symptoms and can include topical pain relievers, immunosuppressants, and surgery."

These kinds of conventional treatments do little to find the underlying cause. However, alternatives exist.

Welcome to our world. Alternative treatments are not just dispensed from a pharmacy. Many therapies, common to the rest of the world, are not implemented in American medical education. Ozone therapy is one of many ignored conventional medical education. There are over 40,000 doctors in the world that use ozone therapy regularly. They utilize ozone as an effective tool against several disorders each day. Many of the 40,000 physicians belong to one of the 38 different international ozone organizations. These organizations meet yearly to explore new research, teach, and expand on ozone therapy.

"The great part about ozone is that the therapy is non-specific," states an ozone doctor from California. For chronic diseases that have a suppressed immune system, this therapy works to stimulate it into activity. On the other hand, it can quiet down an overactive immune response which is what happens for autoimmune diseases". If the body is healthy and functioning well, it is capable of much more than any drug. And that is the purpose of ozone therapy, to jump-start bodily functions back into working order. Ozone therapy acts synergistically with the body and promotes the body's natural functions.

"Fortune had it that Jill found ozone therapy and experienced the radical benefits. If you or a friend echo the story of Jill, finding few results at the mercy of her healthcare, perhaps ozone therapy is an option. The purpose of this book is to give a brief education on what ozone therapy is, who it's for, how it's used, and why it works. Continue to read to find if ozone therapy can help recover your health.

"After over 8 years, I am finally feeling terrific!! Both, the Mayo Clinic and the Cleveland Clinic said there was nothing wrong. I knew there was. I was finally being diagnosed with Lyme and treated with ozone IV therapy. This has been a true blessing!! I am so thankful to have a life again!

This clinic works to help patients who are very ill and without hope! It's been a miracle! It is a wonderful gift to have renewed life again!"

- Lyme - Deborah S., California

"After years of pain from osteoarthritis, I finally feel relief. A few months before a major neck surgery, I experienced a terrible infection. I was treated with strong antibiotics which seemed to knock it out. I had the surgery which was completely successful but my recovery was long and painful. A year and a few months later, I lost all of my energy, memory and could not get out of bed. No one could diagnose my condition.

I came to the alternative health clinic and was diagnosed with intestinal E.coli and low white blood cell count. Ozone therapy, along with some IV supplements have healed me."

- E coli - Matt B., Washington

"My left hip had regular pain on the top and bottom of the pelvic bone which seemed to connect with pain behind my left knee. I would constantly be rubbing behind my left knee especially after sitting for more than 30 minutes.

After 3 treatments of Ozone therapy in the joint, first the "bottom of the bone" pain went away, then about 50% of the "top of the bone" pain, but with the third treatment

the top got better (probably 70% better) and the behind the knee pain has gone completely! Plus, with two further shots, my incontinence improved at least 50% and we weren't even thinking about that!"

— Hip Pain - Dianne M., Florida

Ozone, best known for its protective role in the earth's ecological harmony, and for its interaction at ground level with industrial pollutants, has unique biological properties which are being investigated for applications in various medical fields.

Introduction To Ozone and Ozone Therapy

Ozone is a gas that can be used medically for its therapeutic properties. In low concentrations, ozone has been proven safe and effective in treating and preventing a variety of diseases. The invention of medical grade generators has made ozone an inexpensive and accessible therapy that can be used at home. Information beyond this book can be found at www.DrsOzone.com.

What Is Ozone?

Ozone, or O_3 , is a gas consisting of three atoms of oxygen. It is chemically quite unstable (1). O_3 is not to be confused with the oxygen needed to breathe, known as O_2 , which consists of two atoms and is very stable. Because of its third oxygen atom, ozone can be useful as an agent of reaction. Essentially, in order to achieve the more stable form, an ozone molecule is desperate to give away an atom of oxygen—a process called oxidation. The free oxygen atom has the ability to combine and alter other substances, which is the basis for ozone's reactivity (2).

You've probably heard of the ozone layer as it relates to the Earth's stratosphere. Here ozone gas exists in high concentrations. Ozone is formed when oxygen reacts with ultraviolet light or when oxygen encounters electrical discharges in the atmosphere. The

ozone layer protects the earth from ultraviolet radiation, which is damaging to living things.

What Are the Benefits of Ozone?

Ozone is a potent oxidant. Let's put this in terms of something more familiar. The process of oxidation (ozone's primary mechanism) can be illustrated as it applies to industrial treatments, for example, the oxidation of metals which cause rust. As you probably know, rusty metal is far more brittle than non-oxidized metal. But oxidation is also an important process when it comes to cellular or microbial activity. In vitro, ozone has been shown to weaken or damage the cellular integrity of microorganisms such as bacteria, viruses, fungi, and yeast—common culprits in spreading disease. While ozone does not oxidize microbiota inside the body, it has been used successfully as a disinfectant and to purify water (1).

As you can imagine, ozone can be extremely reactive in high concentrations or in the presence of easily oxidized substances, such as metals. But in lower concentrations, ozone can be harnessed for its therapeutic effects. Ozone's antimicrobial qualities may be used for topical therapy or for dental indications. Ozone introduced into the body can optimize oxygen levels or stimulate the immune system. In fact, ozone therapy is best used for treatments that require immunomodulation or oxygen efficiency. The practice of ozone therapy has been deemed safe by researchers and clinicians alike, and has proven to be a valid treatment with minimal and preventable side effects (1).

Lyme - Jessica A., Wisconsin

"While Rectal ozone isn't my most favorite treatment, it has been something that changed my life! I have struggled with Gl issues and up to 30 food allergies for the past eight years. Intestinal pain was part of my everyday life. By my third Rectal ozone treatment, the pain started subsiding. After one week of Rectal ozone, most of the pain was gone.

I can now tolerate some oils/fats and protein in my diet. I feel like my digestion has improved. I forgot how good it is to feel well! If you fear this treatment, Amelia does everything possible to make you comfortable and give you a good experience.

The Rectal ozone has been a huge blessing as I progress in recovering from chronic Lyme disease."

How Was Ozone Discovered?

Ozone has a sharp smell, and it was this smell that led to its discovery. Late eighteenth- and early nineteenth-century scientists noticed ozone's distinctive odor following an electrical reaction of a lightning strike. Upon isolating the gaseous chemical, German-Swiss chemist Christian Friedrich Schönbein named it "ozone" from the Greek word "to smell." Ozone's potential as a powerful disinfectant was soon realized. In the late 1800's ozone was used to purify drinking water. Its powerful oxidizing capabilities meant that ozone could be used to kill microbes and bacteria. In fact, it was even used to treat infection during the First World War. Ozone was most widely utilized in commercial and industrial applications, in which the production of ozone was inconsistent and often unsafe. Here the potential for toxicity was over-exposed. Workers frequently experienced irritation of their eyes and respiratory systems, symptoms attributed to ozone exposure. The FDA stated in 1976 that when inhaled, ozone is considered a toxic gas—a position they reiterated more recently. This inspired the need to develop a method for safely generating and controlling ozone production and application.

How Is Ozone Produced?

While ozone was proving its potential as a valid medical treatment, scientists were energized to find a way to produce and administer precise and safe therapeutic doses of O_3 .

Only with an ozone generator could scientists perform consistent research in a controlled environment, studying ozone's toxic effects as well as its potential medical properties. In 1896, famed engineer, physicist, and futurist Nikola Tesla patented the first ozone generator in the United States. Of course, most early generators were geared toward commercial applications. Today, ozone generators have a variety of uses from cleaning air pollutants to administering medical O_3 at home.

How do medical ozone generators work? An oxygen tank is attached to a device that converts oxygen into ozone. Two methods are typically used: ultraviolet and corona discharge. Ultraviolet (UV) generators expose the oxygen to specific UV wavelengths; corona discharge generators apply a high voltage to the oxygen in the device (3). Not long after ozone is formed in the generator, it will begin to revert back to oxygen. Remember, ozone has an extremely short half-life (about half an hour). Every 30 minutes ozone's potency will be reduced by 50% at room temperature. As long as concentrations are controlled, ozone is considered an environmentally friendly oxidant (3).

What are the different types of ozone generators?

Commercial Ozone Generators

These are used in wastewater treatment, agriculture, and air purification. They typically cost over \$10,000 and are used for purifying massive quantities of water and air.

Home Purification Ozone Generators

These small units are portable and use ambient air. They are great for getting rid of the smoke smell after fires, garbage odors, and mold. There are even some household purification units that help with allergies and other pollutants in the air.

Ozone Generators for Produce

These generators use ozone to strip off the 95% of the bacteria and pesticides on the surface of produce. A good option for individuals concerned with healthy eating. It bubbles ozone gas through water filled with produce. Our website will have more information on these generators.

Home-User Medical Ozone Generator

There are a number of available home-user generators on the Internet. A generator of this category is often sufficient for any ozone therapy at home. The problem is that some of them use inferior components and/or have erratic production of ozone. For information on how to use and where to get our equipment go to www.DrsOzone.com. If you're looking for a good unit contact your physician and follow these criteria:

- A United States based company
- Uses 100% ozone resistant materials
- Accurate Ozone Output
- United States service and repair
- Requires pure oxygen (not just ambient air)

Laboratory and Research Grade Ozone Generators

These units are what your doctor or research facility may have. For the home-user these are usually overkill. Usually a generator of this category costs between \$1,000 to \$10,000 per unit. The price variance depends on the features and uses. They have ozone compatible parts and consistently produce levels of ozone that are used for therapy or research. "Ozone therapy has been utilized and heavily studied for more than a century. Its effects are proven, consistent, safe and with minimal and preventable side effects. Medical 03 is used to disinfect and treat disease. Mechanism of actions is by inactivation of bacteria, viruses, fungi, yeast, and protozoa, stimulation of oxygen metabolism, activation of the immune system."

— Elvis, A.M.

Ozone Therapy: A Clinical Review

Medicine is the restoration of discordant elements; sickness is the discord of the elements infused into the living body.

– Leonardo da Vinci

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The History of Medical Ozone Therapy

Ozone is not new in its use as medicine. But because of the molecule's known instability and its destructive effect on easily oxidized substances, ozone faced many challenges gaining traction in a clinical setting. The development of O_3 generators for use in the medical space, as well as effective methods of administration (keep in mind that the medical application of gas is relatively uncommon in the USA), have allowed researchers to better evaluate the effects of ozone (1). This diligent research has led to a sizable list of indications that respond successfully to ozone therapy.

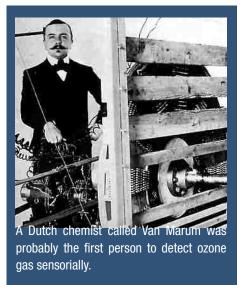
What Is the History and Current Practice of Ozone Therapy?

Ozone has been heavily studied for over a century and utilized in the form of medical therapy for many decades. The medical use of ozone to treat infections and wounds has actually been around for over 150 years and its effectiveness has been documented (1). But only during the First World War did ozone as a medical treatment find broader recognition.

Medical resources were limited, and because ozone had known antibacterial properties, doctors applied ozone topically to help heal soldiers' infected wounds. This led to the discovery of ozone's ability to reduce inflammation and its hemodynamic effect—meaning it can affect blood flow (1).

Germany was one of the first countries to adopt ozone therapy as a widespread medical treatment in the 1950's (4). And in the late

1980's, German doctors began treating HIV patients with ozone therapy. Initially, ozone's antiviral behavior demonstrated success in the treatment of HIV as applied to in vitro blood samples. Unfortunately, it did not prove effective as an in vivo treatment administered to actual AIDS patients (1). This research, however, opened up the potential applications for ozone, many of which



were tested through clinical trials and are now counted among valid therapeutic practices.

What Are the Medical Properties of Ozone?

From its initial discovery, ozone has been used for its antimicrobial properties (4 Reactions initiated by contact with unstable ozone molecules damage the cellular walls of a number of microbial populations, including bacteria, viruses, fungi, and yeast. Ozone

has anti-inflammatory properties (4). In fact, O_3 serves to regulate the immune system by stimulating the production of key signaling proteins that elicit the destruction of microbes.

The immune system's primary function is to identify and attack foreign substances that cause inflammation and damage to the body.

Ozone has hemodynamic properties, meaning it positively impacts blood flow and circulation throughout the body. Ozone stimulates the uptake and utilization of oxygen by the body's cells (4). It does this by activating the Kreb's cycle, the mechanism that allows your cells to optimize oxygen by transforming it into energy. Ozone improves the circulation of blood, as well as it allows your body use oxygen more efficiently.

Furthermore, ozone increases the effectiveness of the body's antioxidant enzyme system (4). Antioxidants function to prevent cellular damage, which is a common pathway for cancer, aging, and disease (5). While this sounds paradoxical—ozone being a powerful oxidant— 0_3 therapy actually stimulates the production of antioxidant enzymes (6).

What Diseases are Treated by Ozone Therapy?

The therapeutic properties of ozone can positively impact a wide variety of diseases and conditions and can even help repair injuries. Considered alternative medicine, ozone therapy is often used alongside other treatments, when conventional medicine doesn't work, or as a preventative practice. The root cause of most conditions is chronic or abnormal inflammation. So ozone's anti-inflammatory properties are indicated for autoimmune disorders, allergies, and most inflammatory conditions (often recognized with the suffix – itis). Capable of healing wounds and fighting infection, ozone is used for dermatological and dental indications, as well as chronic infection affecting the body's systems. Viral, bacterial, and fungal diseases can be treated by ozone's antimicrobial properties. Cancer, tumors, and a variety of vascular indications benefit from ozone due to its ability to improve circulation and increase the effects of oxygen and antioxidants.

Through the years, ozone therapy has been indicated for hundreds of diseases and conditions with varying success. Improved technologies have made it even more accessible, allowing patients to use ozone therapy responsibly at home. Some diseases and conditions that may benefit from ozone therapy are as follows:

- Cancer
- Heart disease
- Tumors
- Allergies and sinusitis
- Autoimmune disease
- Multiple sclerosis

- Rheumatoid arthritis
- Lyme disease
- Raynaud's disease
- Chronic fatigue syndrome
- Alzheimer's
- Parkinson's disease
- Intestinal disease
- Degenerative joint disease
- Spine inflammation
- Chronic infections
- Hepatitis
- Cystitis
- Migraines
- Chronic pain
- Vascular surgery
- Wound healing
- Ear infections
- Dental infections
- Urologic disease
- And more (1, 4, 8)

How Is Medical Ozone Administered?

Ozone can be introduced into the body through several methods. It may be mixed with gases or liquids and combined with blood or injected intravenously (directly into the veins) or subcutaneously (under the skin). It may be applied through routes that include the rectum, the vagina, or into muscle tissue and joints. Topical approaches can include limb bagging (a controlled gas bath) and ozonated water or oils. Autohemotherapy and insufflation techniques can also be used. Your doctor will advise you on what dosage and method of administration is best for you.

All the routes of application treat systemically, locally, or both. Systemic treatments benefit the body as a whole in some manner, while local treat a specific area.

Autohemotherapy

Autohemotherapy is a systemic treatment that mixes ozone with blood taken from the patient. Major Autohemotherapy (MAHT) takes 40-200 mL of blood from the patient, combines ozone and medical oxygen with the blood, and re-infuses the patient with the mix. This can be done over a number of sessions, days apart. Minor Autohemotherapy (mAHT) takes a few cc's of blood from the patient using a syringe (already holding equal parts ozone), shakes up the syringe contents, and injects the mix back into the patient (4).

Insufflation

Insufflation means to blow the ozone gas into a body cavity. In ozone therapy, insufflation is primarily performed on the rectal

or vaginal cavity. Insufflation may also be used for administering ozone to the ear or nasal cavity. Ozone gas is infused into the patient in varying doses, depending on the therapy being administered. As you can imagine, these techniques spurred the home treatment movement. Videos on how to perform these treatments can be found on www.DrsOzone.com

Ozone Joint Therapy (OJT™)

How would you like to get rid of your joint pain with a few shots? OJT^{TM} (Ozone Joint Therapy) is potentially a great treatment for aching joints, bad backs, ripped ligaments, and the like. Joint injections are a popular treatment requiring injections into the joint space.

 OJT^{TM} can be divided into two parts. The first part is a mix of vitamins and medicine. Second, ozone is added to the mix and injection into the joint, spreading its healing therapy. This combination causes regeneration and rebuilding of new ligaments and cartilage tissue (4).

Inflammation is decreased and the weak areas of the joint are made stronger again.

Commonly, an injured or degenerated joint will take a series of 3-5 injections over 8 to 10 weeks. You can generally expect 15% - 25% improvement each time. Actual patient videos are available at www.DrsOzone.com and there is also a list of practitioners.

"America's Connection Coach", TV Personality, Best-Selling

Author, Business Coach "Everyone laughed when I said I was going to Idaho to heal the bulging disc in my back.

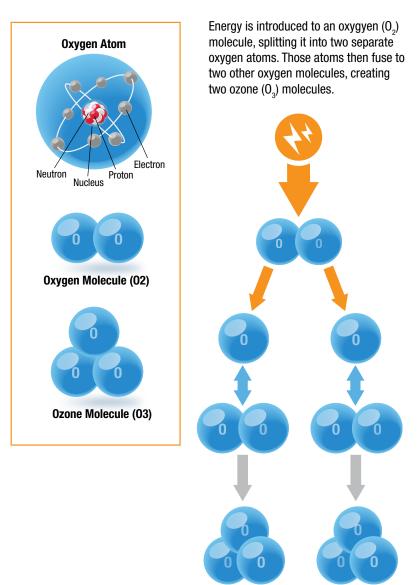
But when I was able to finally lift my arms with no pain for the first time in years. They stopped laughing"

- Herniated Disc - Jonathan Sprinkles, Texas

"I initially came to the Clinic for aches and pains associated with my chosen profession, a professional rodeo cowboy. I had both my knees treated and I saw IMMEDIATE relief.

That was last summer, and I haven't had any pain after traveling, during or after competing, and other rugged circumstances."

- Joint Pain and Inflammation - Carl T., Texas



The Formation of Ozone

To keep the body in good health is a duty... otherwise we shall not be able to keep our mind strong and clear.

— Buddha

Clinic Effects of Ozone Therapy

There is a growing desire to approach chronic illnesses with preventative or alternative medicine. Ozone therapy is understood to aid in the treatment of cancer, multiple sclerosis, Lyme disease, and more. Ozone is effective on multiple levels. In order to understand how it can help improve certain diseases and conditions, it's important to look at the different mechanisms of action by which it works.

What Are Ozone's Mechanisms of Action?

The mechanism of action (MOA) of a drug treatment is the pathway by which the drug interacts with the patient's cellular or chemical makeup. Ozone has a few MOAs that make it useful as a disinfectant and as a treatment for disease. On a very basic level, ozone activates the immune system and stimulates oxygen metabolism in cells.

Dr. Vellio Bocci is the definitive expert regarding the mechanics of ozone in the body. He has worked at the University of Sienna for over 20 years and written more research than anyone on the subject. One of the latest books (2011) is Ozone – A New Medical Drug. The first edition can be found on our website. Dr Bocci wrote concerning ozone, "On the basis of the mechanisms of action, ozone therapy can induce the following biological responses:

- 1. Ozone improves blood circulation and oxygen delivery to ischemic tissue
- 2. Improves oxygen delivery, enhancing the general metabolism;
- 3. It up-regulates the cellular antioxidant enzymes
- 4. Ozone induces a mild activation of the immune system and enhances the release of growth factors;
- Ozone has an excellent disinfectant activity when topically used, while this is negligible in the circulation owing to blood antioxidant capacity;
- 6. Ozone does not procure acute or late side effects
- 7. Ozone procures a surprising wellness probably by stimulating the neuro-endocrine system.

Antimicrobial Mechanisms

Ozone is responsible for an increase in interferons, or signaling proteins, released by the patient's host cells (4). Interferons recognize these microbial populations, along with any abnormal cells, and alerts the immune system. Ozone stimulates the immune system to produce more white blood cells, which target and destroy recognized pathogens (4).

Antineoplastic Mechanisms

Ozone has been powerful against tumors, a property called antineoplastic. In addition to interferon production, ozone

stimulates an increased output of tumor necrosis factor (TNF), another important signaling protein of the immune system (4). TNF has a complex pathway, but it is responsible for cell death by marking abnormal cells for destruction. Interleukin 2 (IL-2) is a signaling protein that regulates the activity and growth of white blood cells, specifically (7). IL-2 can be made in a laboratory and is used to boost the immune system in cancer treatments (7). But in the presence of ozone, this vital protein is secreted in larger, therapeutic amounts (4).

Oxygen Metabolism

Ozone is also known to stimulate oxygen metabolism as a therapeutic effect. In red blood cells, ozone increases the rate of glycolysis—the process of breaking down glucose or sugar molecules—which provides energy to the cell. Glycolysis stimulates red blood cells to make a substance called 2,3-diphosphoglycerate that controls movement of oxygen from red blood cells to body tissues (8). Ozone thereby effectively increases oxygen levels.

Furthermore, O_3 activates the Krebs cycle which is another way cells produce energy. Enzymes that are stimulated by this process have a number of functions including protecting the cell walls of the host and inducing vasodilation (widening of the blood vessels) for better circulation (1).

What Is the Efficacy of Medical Ozone?

Most clinicians administering ozone therapy confirm the treatment is well-tolerated with minimal side effects. When

ozone therapy is properly indicated, correctly dosed, and applied using optimal administration techniques, it proves to be safer than aspirin (9).

While the applications of ozone therapy are versatile, the therapeutic efficacy of medical O_3 is best demonstrated in vascular and degenerative diseases (10). According to an article published by the National Institute of Health in December 2011, ozone therapy is said to "procure a surprising wellness in most patients" (10)

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CHRONIC PAIN	TOP FIVE AREAS OF CHRONIC PAIN1. LOW BACK27%2. NECK25%3. JOINTS19%4. HEADACHES / MIGRAINES12%5. FACIAL10%27% OF AMERICANS SUFFER FROM BACK PAIN	2ND MOST COMMON REASON FOR MEDICAL VISITS
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4.6 HOURS of productive time are LOST PER WORKER DUE TO CHRONIC PAIN	AMERICANS SPEND OVER \$50 BILLION A YEAR ON BACK PAIN ALDRE. WITH THE DECLINE OF NUTRITION AND EXERCISE, THAT COST DEALINE WITH CHRONIC PAIN WILL ONLY INCREASE.	FEEL LOWER ENDOWAENT OF LIFE 59% REPORTED DEPRESSION 77% HAD TROUBLE CONCENTRATING 70% AFFECTED ENERGY LEVEL 74% INABILITY TO SLEEP WELL 86%

Health is a state of complete harmony of the body, mind and spirit. When one is free from physical disabilities and mental distractions, the gates of the soul open.

– B.K.S. lyengar

Receiving Ozone Therapy

The first choice is getting ozone therapy in a clinic. They can provide more effective therapy, more therapy choices, and administer it in a safe, professional environment. For those who are looking to do ozone therapy at home, there are many options but one sticks out as superior. Not glamourous but effective, rectal ozone insufflations are easy and safe to do at home. Rectal ozone therapy is a good option because it is safe, effective, and systemic. It promotes healing to the whole body, not just one area. However, we recommend that you consult your physician before attempting any ozone therapy at home!

Rectal ozone has been the therapy of choice in Cuba for decades. Why Cuba? Since they do not have the finances for drugs and other treatments, they found medicine that was efficacious and inexpensive. Ozone therapy stood out as the best option. As a result we have decades of data and studies done at Cuba's ozone hospital and research facility. For just pennies per treatment, they have astounding and unbelievable outcomes.

A few studies done by Dr. Silvia Menendez and her team:

Ozone Therapy in Patients with Retinitis Pigmentosa

"Results demonstrated a significant improvement in 88.2 % of patients treated with ozone in comparison with 23.5 % achieved in the control group. A temporal positive effect of ozone therapy, over the natural course of RP, was found. It could be useful to apply ozone therapy in the first stages of the disease and at six-month intervals in order to enhance visual capabilities in RP patients."

Retinitis Pigmentosa National Reference Center. "Dr. Salvador Allende" Hospital. Calzada del Cerro Ave. and Domínguez, Cerro, Havana, Cuba

Ozone Therapy: A Useful Alternative on Virulent Hepatitis Treatment

"Ozone was administered, daily, by rectal way for a total of 15 sessions. Comparing these results, we can say that ozone therapy is a suitable treatment against hepatitis, improving the patient's health and the healing time of the disease."

Y. Betancourt, J.M. Toledo, E. Recio, A. Gómez, M. Rodríguez

Experiences in the Use of Ozone Therapy in the Elderly

"During five years (1991-1995) we have used ozone therapy in the treatment of different diseases that are present in the elderly, for example upper and lower respiratory infections, arthrosis, pneumonia, immunodeficiency. A statistical analysis showed improvement in more than 80 % of the treated patients. No side-effects or intolerance was present among the patients treated with ozone. It is concluded that ozone therapy is an important therapeutic option to be considered in geriatric patients."

M. Casas, B. Conde, Provincial Hospital, Sancti Spiritus, Cuba.

Ozone therapy continues to be shunned by conventional medicine in the USA. But consider there are over 2,000 medical studies and over 10 books written on its efficacy and safety. Often ignored is the fact that tens of thousands of doctors use ozone daily. Case after case we see many benefits to ozone therapy. This overlooked therapy can be done in the comfort of your own home!

Getting Started with Ozone at Home

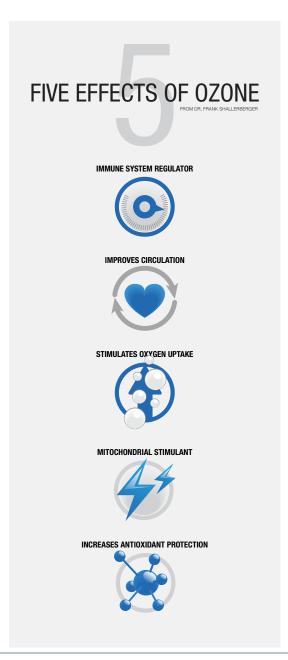
If you decide to do ozone therapy at home, consult your physician.

Ozone therapies done at home may include:

- 1. Rectal Insufflation
- 2. Vaginal Insufflation
- 3. Ear Insufflation
- 4. Ozone Oils

- 5. Ozone Sauna
- 6. Limb bagging
- 7. Eye drops
- 8. Ozone water

For about \$800 you can have all the equipment for ozone therapy at home. If you want to get education on how to do ozone therapy at home and which is best for you, visit www.DrsOzone.com. The primary equipment we use is from www.SimplyO3.com out of Michigan, USA. There are other ozone companies out there that provide similar equipment that can be found around the Internet.



The best and most efficient pharmacy is within your own system.

- Robert C. Peale

Safety and Side Effects of Ozone Therapy

Before starting ozone therapy, it is important to talk to a doctor or find a clinician at www.drozone.com who has used ozone therapy in his or her practice. While ozone therapy can now be safely administered, users should first understand any potential dangers of ozone therapy in order to avoid them. Dosage and concentration, as well as proper techniques for administration, are key to safe and effective treatment. Minimal side effects are associated with medical ozone therapy, but users should be aware of a few contraindications.

Is Ozone Therapy Safe?

It bears repeating. Ozone therapy—when properly indicated, dosed, and administered—is considered safer than any other drug including aspirin (9). In practice, only the amount of medical ozone needed for treatment will be generated, keeping concentrations extremely low. And because of its short half-life, medical ozone typically lasts less than 30 minutes.

What is not consumed will revert back to oxygen, leaving no residual ozone in the environment (3). Furthermore, no long-term effects from ozone exposure have ever been reported (3).

Medical ozone is commonly used as an alternative to antibiotics, which are known to cause undesirable side effects for many. When used properly, ozone therapy is considered a wholesome treatment with proven effects that are consistent and safe (1). Quality of life has been evaluated in a small sample of ozone therapy patients, and in accordance with the International Quality of Life Assessment, these patients reported an excellent quality of life following ozone therapy (10). Because of this feeling of wellness, patients also demonstrate excellent compliance rates (10).

As mentioned, the efficacy of ozone therapy is due to the controlled setting in which medical ozone is generated and administered. The only disadvantage of ozone lies in the potential toxicity from exposure to high concentrations, most of which are historically attributed to workers enduring industrial applications of ozone.

The toxic effect of ozone points to its potential to change membrane permeability (1). Remember that ozone is damaging to components of the cell walls of bacteria and viruses. The reason for this is that it oxidizes with the lipid layers of the wall membrane, specifically with unsaturated fatty acids that make up some the lipid layers. Unsaturated fatty acids are also present in the fluid lining the lungs and bilayers of the lung cells (1). In large concentrations and/or if improperly administered, ozone may react with these unsaturated fatty acids found in the body. This can trigger the release of enzymes that activate inflammation and lead to reactions resulting in cell injury or cell death (1). Are there side effects to properly administered ozone? As mentioned earlier, very few and non are life threatening. But there are conditions that could preclude using ozone:

- G-6PD deficiency or favism (very rare)
- Pregnancy
- Thrombocytopenia
- Serious cardio-vascular instability
- Patients being treated with ACE inhibitors which cause blood vessels to enlarge or dilate, and blood pressure is reduced
- Any bleeding disorders
- Ozone Allergy

Contraindications are signals for which ozone may be damaging rather than therapeutic. Avoid ozone therapy if you suffer from any of the following conditions: if your blood fails to coagulate, an important process in wound healing; if you experience trauma or disease that results in bleeding organs; if you have thrombocytopenia, a deficiency of blood platelets that causes internal bleeding and an inability to form blood clots; if you have had a hemorrhagic or apoplectic stroke; or if you suffer from an ozone allergy or intolerance (11).

What Are Side Effects of Ozone Therapy?

The most common complaints of patients who have undergone ozone therapy are minor side effects including weakness, slight dizziness, or sleepiness—none of which last long.

Minor irritations reported as side effects typically dissipated quickly and were proven to be caused by incorrect application. Rarely, patients experience an allergic skin reaction to a local topical application of ozone, which presents as a minor rash. A study of nearly 400,000 patients documented the frequency of side effects as occurring 1:1000-1:2000, making it statistically one of the safest drugs available (9).

Is Ozone Therapy Accepted by the FDA?

Toxicity warnings plagued early uses of medical ozone. The FDA pronounced in 1976 that ozone is a toxic gas when inhaled. They restated this position in 2006, stating that it is not safe as demonstrated for medical application. The FDA has been a primary detractor of establishing ozone therapy in public hospitals (10). This is not uncommon for innovative medical approaches. Medical ozone therapy—an inexpensive procedure which is not patentable—also faces competition by large pharmaceutical companies (10). However, available resources such as our website provide extensive information on ozone therapy. Medical ozone can be administered in a clinical setting and, with proper training, patients can use it at home.

I'm a stroke victim and Stratus was recommended to me by my naturopath who has gone to ozone conferences in a number of countries.

After I got out of the hospital, I had 15 sessions in a hyperbaric chamber. What a hassle. An hour to get there, and hour for the treatment, another hour home. Added up to 3.5 hours round trip. With the Stratus, from start to finish its a 10 minute task. After the stroke, walking was a struggle, couldn't handle using my computer or texting, had trouble speaking for months. Four months after the stroke, I was back to playing racquetball better than ever. I attribute my recovery to the hyperbaric sessions and the Stratus. I think that if I had a Stratus from the beginning, I would have done even better because I would have easily been able to use it daily.

— Lance S. Vancouver, Canada

Our greatest happiness does not depend on the condition of life in which chance has placed us, but is always the result of a good conscience, good health, occupation, and freedom in all just pursuits.

— Thomas Jefferson

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Is there an answer when medicines have failed? Ozone Therapy

A therapy with over 80 years of clinical history.

"It depresses me to think that ozone, the cheapest drug on earth, is today either badly or minimally used because orthodox medicine refuses to evaluate it and Health Authorities are antagonistic or negligent. Both are responsible for leaving millions of people suffering and dying. I must not get discouraged and continue to work and hope that ozone therapy will eventually benefit many people."

– Dr. Vellio Bocci –



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