# A Review of Ozone Therapy Applications

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Mayo Clinic researcher Dr. Wakim

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#### **Ozone Sauna**

The benefits of a steam sauna on the immune system and disease processes have been well documented. In addition to being relaxing and soothing, a sauna and the accompanying induced hyperthermia on the body, mimics the beneficial effects of a fever, without the discomfort. At 104 degrees F., for example, the growth rate of the polio virus is reduced up to 250 times; at 106 degrees pneumococcus, a bacterium responsible for pneumonia dies.

Although the effects of this artificial method of increasing the body temperature are not as comprehensive as a natural fever, there are definite system wide effects. There is evidence that artificial fever works as an immune system stimulant by increasing the number of white blood cells in the body. In a 1959-review of studies on the effects of heat treatments, Mayo Clinic researcher Dr. Wakim and colleagues cite findings indicating that the number of white blood cells in the blood cells in the blood cells in the blood cells in the blood increased by an average of 58% during artificially induced fever. Researchers also have found increases in the activity of the white blood cells during induced fever.

Apart from the immune system-stimulating effects of sweat therapy, many thought it as one of the most effective and painless detoxifying treatments available. Sweat contains almost the same elements as urine, and for this reason, the skin is sometimes called the third kidney. It is estimated that as much as 30% of bodily wastes are eliminated by way of perspiration, and during a steam sauna, the body perspires profusely.

By adding ozone into this environment, the ozone is easily absorbed into the skin and lymphatic system because of the open pores. This provides an excellent detoxifying effect and it is also reported that the effects are once again not limited to detoxification, but may induce the desirable system wide effects that is desired in the medical use of ozone: oxygenation of all the tissues, organs, and cells of the body, boosting the immune system, stimulation of the release of anti-cancer substances from the white blood cells of the immune system, enhancement of blood and oxygen delivery throughout the body.

It is very important to point out that the sauna used for this treatment is of the type where the individual's head protrudes from the top of the sauna, and the individual is therefore not breathing the ozone / steam mixture. Concentrations used for this type of treatment are usually approximately 40ug/ml, and the ozone is introduced into the sauna at a rate of 1/4LPM.

Using the steam sauna is one of the most popular methods of taking advantage of this therapy. The steam sauna ozone system for applying ozone has many advantages:

It is a relaxing and non-invasive approach to ozone therapy

It cleanses the skin, pores, and lymphatic system The user will take advantage of 2 therapies at the same time: sweat therapy and ozone therapy (both individually with their own health benefits) You feel clean, refreshed, and rejuvenated.

#### **Auricular Insufflations:**

Many individuals have found it beneficial to irrigate the ear canal with the ozone / oxygen mixture from a medical ozone generator. As with every use of ozone for medical purposes the individual must ensure: the purity of the oxygen supply, that all parts of the ozone generator in contact with the gas stream are ozone resistant (eg. kynar, Teflon, glass, silicone), and that they know the ozone output (concentration of the ozone) of the ozone generator. This is extremely important - too little ozone and there will be no effect; too much ozone and there can be irritation to the ear canal.

The patient may first apply a small amount of water to the ear canal to assist in the absorption of the ozone. The ozone must be humidified by bubbling the gas through water. The usual concentration used for this protocol is 15ug/ml - 30ug/ml. The flow rate used is usually <sup>1</sup>/<sub>4</sub> Litre per minute or perhaps 1/8 LPM.

The output tube of the ozone generator is held up to the entrance of the ear. At no time should the tube come into proximity of the eyes, nose, or mouth. Doing so may cause discomfort. At no time should the output tube be placed inside the ear, or sealed into the entrance way of the ear.

The ozone should be allowed to flow into the ear and out of the ear. Each ear is usually treated for 2-5 minutes per treatment.

Treatment schedule depends on the disease of the patient, and the effect on each individual patient. This therapy should not be performed more than once per day, and in most cases is performed 2-3 times per week.

Patients should individually modify the treatment protocol depending on their reaction. If any discomfort, redness, or "chapping" occurs, it is suggested that the patient increase the length of time between treatments, and decrease the ozone concentration coming from the ozone generator.

Many physicians have indicated that the ozone enters the lymphatic and blood system this way. Many patients have reported a wide variety of results including relief of allergies, relief of colds, clearing of sore throats and swollen glands. Vaginal Insufflations: A vaginal cannula is used to introduce the ozone gas to the patient. Unlike Rectal Insufflation, there is no danger of pressure buildup. The ozone concentration used is usually 25-30ug/ml, and the flow rate is usually 1/4LPM (litres per minute) or 1/8LPM. Treatment time is usually 5 - 15 minutes. The patient may lower the ozone concentration, and the duration of the treatment if any discomfort occurs. This treatment should not be performed more than once per day, and is usually only performed 2-3 times per week.

Many women have reported relief from yeast infections and various sexually transmitted diseases including herpes. Many women also use this method as an alternative to rectal insufflation as it is theorized that the ozone not only affects the pelvic region, but also enters the general circulation causing a body wide effect.

Women must not use this method close to, or during the time of menstruation as ozone at these concentrations increases blood flow.

## **Rectal Insufflation**

Rectal Insufflation is "95% as effective as Major Autohemotherapy" (Renate Viebahn). This method is used by many physicians in their clinics and by those at home as well.

The ozone gas (usually at a concentration between 25ug/ml - 40ug/ml, and a flow rate of 1/8 litre per minute) is infused rectally using a urethral catheter. The procedure is usually performed following a bowel movement or a colonic treatment in order to ensure the colon is relatively free of fecal matter. The ozone enters the lower intestine, is held for at least 30 minutes, and over this period it is absorbed into the system.

The treatment is performed using the above guidelines (25-40ug/ml) if the desired effects are the immune modulation and other "system wide" effects typically desired of Ozone Therapy.

Infusing gas rectally is much like blowing up a balloon. For safety and comfort reasons the physician and patient must always ensure that only the desired volume of ozone gas is infused. A typical starting point for many users is 125cc of gas (which can be obtained if the flow rate is 1/8 litre per minute as above, and the treatment is performed for one minute). The ozone gas is infused through the catheter which is inserted into the rectum approximately 4 to 6 inches. Using the example above, the flow is then stopped within one minute, the catheter withdrawn, and the patient then holds this gas for a period of at least 30 minutes.

Why 30 minutes?

Dr. Michael Carpendale has shown us through studies that the ozone gas is absorbed over a period of 30-40 minutes as it is held in the body. If the ozone escapes before that time, the full benefit of the treatment has not been obtained. The gas is slowly absorbed into the body, and the "system wide" effects of ozone therapy are obtained. Most users of this method have mentioned that little or no discomfort is caused by this method, and most find they have no gas to release at the end of the 30 minute period.

The only time this technique varies is if the desired outcome of the rectal insufflation is to stop the bleeding associated with "Bleeding Colitis". In this case, the German standards indicate that the concentration of ozone should be 60ug/ml and the amount of ozone infused should only be 60cc. This higher ozone concentration will stop the bleeding, but will not heal the colon. Therefore the goal is to first stop the bleeding with the higher concentration (60ug/ml) and once stopped, the technique above is used to heal the affected parts of the colon. The basic guidelines are that ozone at higher concentrations (60 ug/ml) are used to stop bleeding and to sterilize. After this is accomplished the ozone concentration should be lowered to the levels known to cause healing, that is, 30 - 40 ug/ml.

A recent publication encouraging a "45 minute rectal insufflation" should never be attempted. The author of this technique is under the impression that "more is better" and therefore performing an insufflation for this length of time should be preferable to the short rectal insufflation. The guidelines instruct someone to use two catheters, one deep inside the colon, and one only inserted a few inches. One catheter is used to infuse the ozone, while the other is used to allow the ozone to escape. This prevents the build up of any pressure within the colon, and allows the user to infuse ozone for as long as desired. Again, this method is assuming that 'more is better'. Unfortunately this logic is flawed and has absolutely no scientific basis. There is no increase in benefit in using this method, and in fact, the user attempting this method runs a very clear risk of massive irritation of the sensitive tissue within the colon. Ozone in proper amounts is a wonderful healing tool, however attempting a 45 minute rectal insufflation can actually cause irritation and damage of this sensitive tissue.

## **Body Suit**

One of the easiest and most pleasurable of the methods of using ozone, the body suit is both effective and relaxing. The ozone is absorbed through the skin, cleansing the lymphatic system, and reportedly inducing the body wide effects of ozone generally seen with other treatment protocols.

The patient first opens the pores of the skin by taking a warm/hot shower, after which they immediately enter the body suit.

The body suit must be sealed at the ankles and wrists to reduce leaking. Usually a towel is wrapped around the neck to increase comfort and to reduce leaking around the neck. If necessary, a fan may be used to gently blow any leaking ozone away from the individual. The ozone generator is set to produce a concentration of 25 - 35ug/ml at a flow rate of 1/4LPM.

The ozone must be humidified (run through water) and is introduced into the body suit.

The patient remains in the body suit for 15 - 40 minutes (one usually starts with a 15 minute treatment and the treatment time remains that or is gradually increased depending on the desire and comfort of the individual during and after treatments). Treatment is usually individualized depending on the individual effects of the treatments and the desired effect, be it in treatment of a disease, or for general health. Individuals should be encouraged to use their own bodies and common sense as an indication of whether treatment times and concentrations should be increased or lowered. This treatment is usually performed 2-3 times per week, and never more than once per day.

## **Ozonated Olive Oil**

Ozonated Olive Oil is used around the world for a variety of uses: acne, skin lesions, burns, fungal infections (eg. Of the toe nail), herpes, eczema, leg sores, bed sores, gingivitis, hemorrhoids, STD's, cold sores, and many others.

This appears to be the only way to stabilize ozone without adding artificial stabilizers, chemicals, or preservatives. Ozone is bubbled at very high concentrations, under a controlled environment for days until it slowly begins to solidify. This solid form of olive oil forms a Vaseline or salve like substance and will keep for many months on the shelf. If kept refrigerated, it maintains its full effectiveness almost indefinitely.

Some individuals even choose to ingest ozonated olive oil in order to obtain the system wide effects of using ozone medically.

## Bagging

"Bagging" with ozone refers to the method of isolating a body part by surrounding it with a bag (such as hand, arm, leg, foot, torso, pelvis, but NEVER head), and introducing ozone. This can be used to treat gangrene, diabetic foot ulcers, bed sores, burns, any wounds that are infected or slow healing or those that refuse to heal. This method is not intended to generate an immune modulating effect on the individual as in the methods above.

The bag is placed around or over the affected area, the output tube from the ozone generator placed through the top of the bag, and the top sealed as effectively as possible. Ozone at the desired concentration must first be humidified (simply bubbled through water) and then enters the bag; the ozone generator constantly runs during this treatment. Treatment times vary depending on the type of wounds being treated but typically range from 10 - 30 minutes. As leaking will occur from the bag it is suggested that this process occurs in a well ventilated area. After the treatment the bag will still contain a high concentration of ozone, irritating to the lungs, nose, and eyes if it escapes from the bag. This is usually disposed of in a safe manner. (In European medical clinics, a specially designed bag is used to ensure no leaking occurs, and after treatment the ozone is sucked from the bag by a vacuum pump so neither the patient, nor the attendant ever breathes in the ozone).

In this method the ozone kills any bacteria, viruses, fungus, or molds infecting the open wound, increase blood flow to the wound, and stimulates the healing process. It has been documented that many a body part has been spared amputation through the application of ozone in this method.

High concentrations of ozone applied through bagging (60ug/ml - 90ug/ml) tend to have a sterilization effect on the wound, but if used for prolonged periods will have a negative effect on healing. Mid range ozone concentrations (30-40 ug/ml) will have a healing effect on the wounds. Therefore the protocol as suggested by German researchers is to begin with the infected wound at 75-90ug/ml for the sterilizing effect, and as the treatments begin to clear the wound of infection, to gradually drop the concentration towards 35ug/ml. This gradual drop in the concentration will maintain the sterility of the wound, and stimulate healing. Individual differences in this protocol are taken into account by watching the effect of the ozone on the wound, and the rate at which it closes.

## Major Autohemotherapy

This procedure is performed only by trained professionals, usually only in a clinic setting. Approximately 200cc of the patients blood is withdrawn into an evacuated bottle. The bottle is then hung upside down, and ozone gas (the same volume as the blood withdrawn) is infused into the bottle, usually at a concentration of 40ug/ml. The blood is then given back to the patient, much like a transfusion.

In this procedure the trained professional constantly monitors the patient, and ensures the purity of the ozone gas, and the sterility of all equipment used. For the trained professional, this treatment is actually quite easy, and very safe for the patient.

Major Autohemotherapy is the preferred method of many practitioners, and it is used in well over 150 diseases. In Germany, even the ambulances are equipped with ozone generators; if ozone is administered within 24 hours of a stroke, 95% of patients suffer no permanent paralysis

# **Ozone- Oxygen Therapies** Back to Articles List

# By Nathaniel Altman Author of Oxygen Healing Therapies

Although used by an estimated ten million patients in Europe since the early 1960's, the therapeutic use of medical ozone and hydrogen peroxide (technically known as "bio-oxidative therapies") is largely a mystery to North Americans. Hailed as a safe, eff ective and low-cost treatment for a wide spectrum of diseases- including candida, cancer, heart problems and HIV- related infections- in Europe, proponents feel that they can go far in resolving America's health care crisis. However, physicians who have tr ied to utilize these therapies in this country are often harassed by local medical societies and threatened with loss of license. As a result, every year hundreds of patients have been forced to seek out physicians in Germany, Russia and even Cuba where t hese therapies

are an accepted part of the medical mainstream.. Others spend tens of thousands of dollars to receive bogus ozone cures from unlicensed practitioners here and abroad who ignore established protocols. Many end their lives in both poverty and despair. What is the truth behind bio-oxidative therapies? Are they a panacea to our health-care crisis, or are ozone and hydrogen peroxide ineffective and even dangerous to health? And despite decades of clinical success, why are they considered "experimental" and not approved by the FDA? On the following pages, let's examine some of the major questions about bio-oxidative therapies and their role in human health care picture.

Q: Exactly what are bio-oxidative therapies?

A: Bio-oxidative therapies involve administering small amounts of diluted ozone and hydrogen peroxide into the body for the prevention and treatment of disease. Ozone therapy has been used by licensed physicians in Germany since the early 1960's, while hydrogen peroxide therapy was developed in the United States primarily by Dr. C.H. Farr, nominee for the 1993 Nobel prize in Medicine.

Q: What is the scientific basis for bio-oxidative therapies?

A: The philosophy behind bio-oxidative therapies is a simple one. The use of hydrogen peroxide and ozone in medicine is based on the belief that the accumulation of toxins in the body is normally burnt up by the process of oxidation, a process wherein a substance is changed chemically because of the effect of oxygen on it. Oxidation breaks the toxins down into carbon dioxide and water, and eliminates them from the body. However, if the oxygen system of the body is weak or deficient (whether through lack o f exercise, environmental pollution, poor diet, smoking, or improper breathing), our bodies cannot eliminate them adequately and a toxic reaction can occur. In minor cases, a toxic buildup can lead to fatigue, while a wide range of diseases can result when poor oxygenation is chronic.

Q: Are these considered "new" therapies?

A: Although few of us have ever heard of them, bio-oxidative therapies have been around for a long time. They have been used clinically by European physicians for over a century, and were first reported by Dr. T.H. Oliver in the British medical publication The Lancet in 1920.1 Since that time, they have been studied in major medical research centers throughout the world, including Baylor University, Yale University, The University of California (Los Angeles) and Harvard University in the United States, as well as in medical schools and laboratories in Great Britain, Germany, Italy, Russia, Canada, Japan and Cuba. Today, between fifty and one hundred scientific articles are published each month about the chemical and biological effects of ozone and hydrogen peroxide.

Q: How do they work?

A: Bio-oxidative therapies are used to provide the body with active forms of oxygen orally, intravenously or through the skin. Once in the body, the hydrogen peroxide or ozone breaks down into various oxygen subspecies which contact anaerobic viruses and microbes

[i.e. viruses and microbes which have the ability to live without air, as well as diseased or deficient tissue cells. It oxidizes these cells while leaving the healthy cells alone. When the body becomes saturated with these special forms of oxygen, it reaches a state of purity wherein disease microorganisms are killed, while the underlying toxicity is oxidized and eliminated.

According to Frank Shallenberger, M.D., who is best known in the United States for treating AIDS patients with a holistic protocol including ozone, bio-oxidative therapies have affect the human body in the following ways:

1. They stimulate the production of white blood cells, which are necessary to fight infection.

2. Ozone and hydrogen peroxide are anti-virucidal.

3. They increase oxygen and hemoglobin disassociation, thus increasing the delivery of oxygen from the blood to the cells.

4. Ozone and hydrogen peroxide are anti-neoplastic, which means that they inhibit the growth of new tissues like tumors.

5. They oxidize and degrade petrochemicals.

6. They increase red blood cell membrane distensibility, thus enhancing their flexibility and effectiveness.

7. Bio-oxidative therapies increase the production of interferon and Tumor Necrosis Factor, which the body uses to fight infections and cancers.

8. They increase the efficiency of the anti-oxidant enzyme system, which scavenges excess free radicals in the body.

9. They accelerate the Citric Acid Cycle, which is the main cycle for the liberation of energy from sugars. This then stimulates basic metabolism. It also breaks down proteins, carbohydrates and fats to be used as energy.

10. Bio-oxidative therapies increase tissue oxygenation, thus bringing about patient improvement.2

Q: What exactly is hydrogen peroxide and how is it used therapeutically?

A: Hydrogen peroxide (H202) is made up of two hydrogen atoms and two oxygen atoms. A powerful oxidizer, hydrogen peroxide kills bacteria, viruses and fungi; most of us have used a 3% solution of hydrogen peroxide externally to disinfect wounds. Higher concentrations of hydrogen peroxide are used extensively in the agricultural, food and chemical industries as a disinfectant, water purifier and bleaching agent. It is also a common ingredient in contact lens cleaners, eye drops and mouthwashes.

Hydrogen peroxide is involved in all of life's vital processes, and must be present for the immune system to function properly. The cells in the body that fight infection (known as granulocytes) produce hydrogen peroxide as a first line of defense against invading organisms like parasites, viruses, bacteria and yeast. It is also required for the metabolism of protein, carbohydrates, fats, vitamins and minerals. As a hormonal regulator, hydrogen peroxide is necessary for the body's production of estrogen, progesterone and thyroxin; it also helps regulate blood sugar and the production of energy in cells. Hydrogen peroxide has long been used medically as a disinfectant, antiseptic and oxidizer, but has only recently been found to successfully treat a wide variety of human diseases with a minimum of harmful side effects.

The most common form of hydrogen peroxide therapy used by doctors calls for small amounts of 30% reagent grade hydrogen peroxide added to purified water and administered as an intravenous drip. However, some individuals like to add a cup of 35% food grade hydrogen peroxide to a bathtub of warm water; the hydrogen peroxide is absorbed into the body through the skin while the person soaks in the tub. Others drink a glass of water to which several drops of food or reagent grade hydrogen peroxide have been ad ded. Although there have been reports of improved health with this method, physicians like Dr. Farr believe that taking hydrogen peroxide orally can have a corrosive effect on the stomach and small intestine and advise against using it. 3

Q: What about ozone? How is it used medically?

A: Ozone (O3) is an energized form of oxygen with extra electrons. It forms the protective ozone layer around the planet, yet becomes a pollutant when mixed with hydrocarbons (like carbon dioxide) and nitrogen oxide from automobile and factory emissions. Because scientists have focussed on the negative effects of inhaled ozone, the medicinal aspects of the gas when applied intravenously or through the skin have been largely overlooked.

Because ozone was found to be an effective bactericide and fungicide during the mid-1800's, it was first used to purify drinking water in a number of European cities. Today, over 2000 municipalities around the world- including Montreal, Paris, Los Angeles and Moscow- purify their drinking water with ozone. However, ozone was not used medically until 1915, when it was found to be an effective disinfectant of wounds and skin diseases in Germany during the First World War. It was later found that ozone has t he ability to "blast" holes through the membranes of viruses, yeasts, bacteria and abnormal tissue cells and therefore killing them. Ozone was the focus of considerable research in Germany during the 1930's where it was successfully used to treat patients suffering from inflammatory bowel disorders, ulcerative colitis, Crohn's disease and chronic bacterial diarrhea. The four primary ways to administer medical ozone include:

1. Autohemotherapy, which involves removing about one half pint of blood from the patient, adding ozone and oxygen to the blood, and infusing the blood back to the patient.

2. Rectal insufflation, in which ozone and oxygen is administered as a rectal enema. The ozone/oxygen mixture is then absorbed through the large intestine.

3. Ozone "bagging", which involves having an airtight bag placed around the area to be treated. A mixture of ozone and oxygen is pumped into the bag and absorbed through the skin.

4. Ozone is also used externally in the form of ozonated olive or sunflower oil.

Q; What types of diseases can be treated with ozone and hydrogen peroxide?

A: Bio-oxidative therapies offer a tremendous range of medical applications. According to the International Bio-Oxidative Medical Foundation (IBOMF), an Oklahoma-based organization devoted to research and education about these therapies, the following conditions or diseases have been treated with ozone and hydrogen peroxide with varying degrees of success:

Heart and Blood Vessel Diseases

Peripheral vascular disease (poor circulation)

Cerebral vascular disease (stroke and memory loss)

Cardiovascular disease (heart disease)

Coronary spasm (angina)

Cardioconversion (heart stopped)

Cardiac arrhythmias (irregular heartbeat)

Gangrene (of fingers and toes) Raynaud's disease ("white finger") Temporal arteritis (inflammation of the temporal artery) Vascular and cluster headaches Pulmonary Diseases Chronic obstructive pulmonary disease Emphysema Asthma Bronchiectasis (dilatation of bronchus or bronchi) Pneumocystis carinii (PCP or AIDS-related pneumonia) Chronic bronchitis Infectious Diseases Influenza Herpes zoster (shingles) Herpes simplex (fever blister) Systemic chronic candidiasis (candida) Epstein-Barr virus (Chronic Fatigue Syndrome) HIV-related infections Acute and chronic viral infections Chronic unresponsive bacterial infections Parasitic infections Immune Disorders Multiple sclerosis Rheumatoid arthritis Diabetes mellitus Type II Hypersensitive reactions (environmental and universal reactors) Other Diseases Parkinson's Disease Alzheimer's Disease Migraine headaches Chronic pain syndromes (due to multiple causes) Pain of metastatic carcinoma Cancers of the blood and lymph nodes 4

Q: Is it true that ozone cures AIDS?

A: There is growing evidence that ozone (as well as hydrogen peroxide, since ozone becomes transformed into hydrogen peroxide in the body) can destroy lipid-enveloped viruses both outside and within the body, including those related to hepatitis, Epstein - Barr, cancer, herpes, cytomegalovirus and HIV. The results of a study coordinated by the Canadian Armed Forces and published in the Canadian Medical Association Journal showed that ozone kills HIV, the hepatitis and herpes viruses, and other harmful agen ts in the blood used for transfusion. The author of the article added, "The systemic use of ozone in the treatment of AIDS could not only reduce the virus load, but also possibly revitalize the immune system." 5 Although a related study on AIDS patients proved

inconclusive, Cmdr. Michael Shannon, MD, one of the coordinators of the study, wrote that "Of interest, however, the three patients (out of ten volunteers) who responded to minor autohemotherapy in the first trial, are still alive after four years p ost treatment, with CD4 counts in excess of two hundred. These patients should have theoretically succumbed to AIDS within a year post-treatment."6 In several clinics in Germany, AIDS patients are being treated successfully with different types of ozone t herapies, including rectal insufflation, ozone bagging, and autohemotherapy.

Bio-oxidative therapies can be an important part of holistic treatment for HIV-related problems, including lower T-cell counts, opportunistic infections, and AIDS-related diarrhea. Dan's was one such case. He was diagnosed HIV-positive and his T-cell count had dropped below 600. After only one month of ozone therapy as part of a protocol including vitamin supplements, anti-viral compounds and intestinal cleansing, his T-cell count rose to 900 and his swollen lymph nodes shrank for the first time in years. Although there have been other cases of improvement of AIDS patients after regular ozone treatments (and several documented cases of people who were HIV+ reverting to HIV- status) ozone and hydrogen peroxide should not be considered as a "magic bullet" against HIV and AIDS. According to Frank Shallenberger, M.D. "Ozone therapy works in AIDS by acting as a an immune system modulator. In this capacity, it is very effective, safe, inexpensive and readily available. Proper therapy for AIDS will be directed at early intervention (i.e. CD4 count > 300), ozone plus other synergistic immune-augmented therapy, intestinal cleansing is paramount due to the immuno-suppressive aspect of parasites.7

Dr. Silvia Menendez, the co-founder of Cuba's Department of Ozone Department (part of the prestigious National Center for Scientific Research in Havana), suggested that ozone works best when administered as soon as possible after HIV infection, before the virus has penetrated the lymphatic system and bone marrow. The personal, economic and social ramifications of this possibility cannot be underestimated.

Q: Are these therapies safe?

A: Although ozone and hydrogen peroxide are highly toxic in their purified state, they have been found to be both safe and effective when diluted to therapeutic levels for medical use. When administered in prescribed amounts by a qualified practitioner, t he chances of experiencing adverse reactions to bio-oxidative therapies are extremely small. For example, a German study on 384,775 patients evaluating the adverse side effects of over five million medically-administered ozone treatments found that the ra te of adverse side effects was only 0.0007 per application. This figure is far lower than any other type of medical therapy.8

It has been estimated that over ten million people (primarily in Germany, Russia and Cuba) have been given bio-oxidative therapies over the past seventy years to treat over fifty different diseases. As cited before, they include heart and blood vessel dis eases, diseases of the lungs, infectious diseases, and immune-related disorders. In some cases, bio-oxidative therapies are administered alone, while in others, they are used in addition to traditional medical procedures (such as surgery or chemotherapy) or as adjuncts to alternative health practices like megavitamin therapy, acupuncture or herbal medicine. Q: If these therapies are so great, why aren't they used more widely in Canada and The USA?

A: Despite the fact that both ozone and hydrogen peroxide therapy have been proven in

clinical trials (and in regular clinical practice) to be safe and effective in Germany, Austria, Cuba, Mexico, Italy and Russia, very few people have heard about bio-oxidative therapies in the United States and Canada. Although an estimated 15,000 European practitioners legally use bio-oxidative therapies in their practices, the number of physicians using these therapies in North America is probably fewer than 500. This is partly due to the fact that information about medical ozone and hydrogen peroxide is not provided in medical schools, and students simply do not learn about them. In addition, the medical establishment (and especially provincial and state medical boar ds) often discourages or prevents licensed physicians from using them in their medical practice. Some, like Dr. Robert Atkins, M.D., the author of the popular book Dr. Atkins' Diet Revolution, have been threatened with having their licenses revoked if th ey administer hydrogen peroxide or ozone. Clinics have been closed down and practitioners have been threatened with jail.

Q: Why is there so much prejudice against these therapies by the medical establishment? A: A major reason for this lack of interest in bio-oxidative therapies is that ozone and hydrogen peroxide are non-patentable substances that are very inexpensive to manufacture and use. In Germany, Russia and Cuba, physicians have successfully treated m any serious and chronic conditions (including cancer and heart disease) without expensive surgery. The net cost of the materials for a treatment of autohemotherapy or a medical infusion of hydrogen peroxide is under \$10. Even though physicians must include professional fees and the use of their offices and equipment, bio-oxidative therapies administered in a medical setting cost up to fifty percent less than traditional therapies, especially for patients suffering from chronic and degenerative diseases. Selfadministered treatments by patients themselves, while not recommended, can cost far less. For these reasons, ozone and hydrogen peroxide pose a threat to the continued dominance of the medical establishment: the pharmaceutical industry, medical centers and physicians who are accustomed to providing expensive drugs, complex medical procedures and long hospital stays.

Q: But why don't agencies like the FDA and Health and Welfare Canada encourage clinical trials on these therapies?

A: Because government health agencies are often influenced by the pharmaceutical industry and medical lobbies, objective investigation and development of effective protocols for bio-oxidative therapies have been difficult to undertake. However, the Canadian government has shown a greater willingness to investigate these therapies than American government agencies like the FDA or NIH, as shown by the HIV studies cited earlier. However, like the American press, the Canadian media largely ignored the important findings that ozone can completely remove HIV, hepatitis and herpes viruses from the blood supply.

Q: What is the future of bio-oxidative therapies?

A: After reviewing the laboratory and clinical evidence regarding the use of ozone and hydrogen peroxide, a recent report by the National Institutes of Health (NIH) on Alternative Medical Systems and Practices in the United States has recommended that "definitive studies be undertaken to determine whether these treatments have any utility".10 At the same time, a number of states- including New York and North

Carolina- have recently passed "freedom of medicine" laws which allow the use of experimental therapies by licensed practitioners. Many physicians who are members of IBOMF from both Canada and the United States are sharing their clinical data with the goal of presenting their findings to government agencies like the NIH and FDA. Medical ozone and hydrogen peroxide form the "cutting edge" of a new healing paradigm, involving safe, effective, natural and less costly forms of medical therapy. As more people discover the value of these therapies, there will be greater consumer demand . Because bio-oxidative therapies like hydrogen peroxide and ozone hold great promise in treating both minor health problems and some of the most devastating diseases confronting humanity today, including cardiovascular disease, cancer, and HIV-related problems at low cost, they can help solve our national health care crisis. As more physicians become acquainted with the value of these therapies, they will become a valuable part of mainstream medical practice. Notes

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Nathaniel Altman is the author over fifteen books on diet and health, including Oxygen Healing Therapies, which was published in April by Healing Arts Press, and distributed in Canada by Alive Books.

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#### Hilda Ward, Editor Alive! Canadian Journal of Health and Nutrition 4728 Byrne Road Burnaby, B.C. V5J 3H7 Canada

#### Dear Ms. Ward:

I am the author of Oxygen Healing Therapies which was recently published by Healing Arts Press, and distributed by Alive Books in Canada. You recently published a review of the book in your magazine, for which I am very grateful. I feel that my book is the most authoritative, complete, and up-to-date book about the medical use of ozone and hydrogen peroxide (known as "bio-oxidative therapies") today. I thought that your readers may wish to learn more about these therapies, and the enclosed article offers the lay reader a clear and documented introduction on what biooxidative therapies are and how they work. I hope you will find it of interest. I have no problems with revising the article according to your guidelines.

Thank you for considering this article for publication!

#### Sincerely,

# Nathaniel Altman

#### **Ozone Therapy: New breakthrough for Back Treatment** Back to Articles List

#### By Gaetano Morello, N.D.

Ozone, the gas that protects us from the sun's damaging rays but becomes toxic when inhaled, is experiencing a resurgence on the North American medical community. We are all familiar with the ozone layer and how it's thinning due to chloroflourocarbons. But the reality is that ozone production in the upper atmosphere depends on the amount energy coming from the sun. During peaks of solar activity, ozone is created at a greater rate. During low periods in the sunspot cycle, the ozone layer is thinner. At night, on the dark side of the planet, the ozone layer disappears over a period of a few hours.

The layer is reformed as the sun rises in the morning. There is no ozone over the poles in the winter, because there is no sunlight. Ozone is continuously being produced in the upper atmosphere as long as sunlight is present, and since ozone is heavier than air, it begins to fall towards the earth. As it falls, it combines with any pollutant it contacts, cleaning the air. When ozone contacts water vapor as it falls, it forms hydrogen peroxide, a component of rain water, and that is the reason why rainwater causes plants to grow better then irrigation. Ozone is also created by lightning; it is the ozone that gives air that fresh smell after a rainfall.

Therapeutic action of ozone

In medicine, ozone has a number of well-established properties: It is antibacterial, antiviral, and antifungal. The largest commercial use of ozone is in the purification of water. When you buy your next gallon jug of water at the grocery store, the label will say "ozone treated." Both the FDA and EPA certify that ozone destroys 99.9992 percent of all pathogenic germs, while oxidizing (destroying) 99.9992 percent of all pollutants in the water at the same time.

A new discovery for the treatment of herniated disc: The Discosan method In Germany, over 7,000 doctors utilize ozone in the treatment of various diseases. In Italy, orthopedic surgeons who used to perform surgery on herniated discs are now using a special mixture of ozone to treat the pathology of this condition. Dr. Cesare Verga (orthopedic surgeon) developed the system in 1984 and has treated over 6,000 patients. Dr. Verga claims that surgery really doesn't address the underlying cause. As a matter of fact, it offsets the biomechanics of the spine. Ozone, or the "Discosan method" (as it is known in Italy), represents a new approach in the treatment of herniated discs which resolves both the biological and biomedical aspect of the pathology. Dr. Verga states that this approach has a success rate of over 95 percent. Some of the principal characteristics that make this method so unique are the following:

- 1. No contraindications.
- 2. Over 95 percent success rate.

3. Virtually zero recovery time.

4. No side effects.

The treatment consists of injections of a special mixture of ozone and oxygen applied around the herniated zone. At the beginning, the therapy requires two treatments per week for a period of one to two months.

On average, a total of 14 treatments are required, depending on the patient. The Discosan method has even been shown efficacious in cases where surgery couldn't even alleviate the discomfort. An interesting analogy used in the Italian medical circles is that ozone will mean for herniated discs is what "ranitidine'meant for ulcers.

One of the main questions often asked about the Discosan method is: "How does this method work?" When we look at the anatomy of an intervertebral disc, we see an outer fibrous covering and an inner soft (pulposis) nucleus, much like a ripe cantaloupe with a hard outer shell and soft fruit inside. A herniation occurs when trauma ruptures a part of this outer fibrous covering, most commonly in the lumbosacral and cervical regions. This then causes the inner soft region to protrude and compress a nerve root, causing the pain associated with a herniated disc. The Discosan method addresses this pathology by three different modes of action:

1. The ozone-oxygen mixture has specific action on the protruding pulposus, by acting on a molecular level on the bonds holding this herniation together. This in turn causes a reduction in the herniation.

2. The method brings about a microvascularization to this area, therefore bringing more blood supply and oxygen to the region, all essential for healing. Dr. Verga also claims that ozone brings more fibroblasts to the area, which will help heal the pathology around the annulus fibrosus.

3. Reduces the edema in the area which can also contribute to the compression and inflammation.

The whole concept of treating a herniated disc without surgery is an exciting one. The fact that the Discosan method has some sound scientific principals gives real hope to people suffering from this debilitating condition.

# The Politics of AIDS and Ozone Back to Articles List

By Thomas Levy, MD

From "Extraordinary Science" Jul-Sep 1994

Possibly one of the best therapies ever discovered for AIDS, other infectious diseases, and most degenerative, or chronic illnesses (including cancer) is oxygen therapy, especially in the form of properly used ozone therapy. The main "drawbacks" in any form of ozone therapy are its simplicity and its minimal cost. The medical industry relies on therapies that are costly and require substantial expertise in their administration. Anything that comes along that appears clinically effective while remaining inexpensive is viewed skeptically, at best. The systematic and ongoing efforts at spreading disinformation and propaganda seem to know no bounds. In the Federal Register of 2/13/76, the Federal Drug Administration (FDA) asserted that "Ozone" is a toxic gas with no know medical uses."(1)

When ozone is formed from ordinary air exposed to electrical discharge or ultraviolet light, other toxic gasses, such as nitrogen oxides, are formed as well. Ozone therapies use ozone generated from pure, medical grade oxygen. The toxicity question, then, is a potential point of misunderstanding. However, stating ozone has no known medical uses is nothing short of sheer lunacy.

Ozone has been used successfully on scores of diseases in Europe, especially Germany, for over 50 years. Over 6,000 articles on the medical usage's of ozone are in the world literature. Nearly every disease process responds favorably to any therapy that effectively increases cellular oxygen content. Furthermore, the safety profile of proper administration is virtually unparalleled. I had the opportunity to witness multiple intravenous ozone treatments in the office of Dr. Horst Kief in West Germany. It is a very simple, very safe procedure. In a survey of German ozone therapists, 5,579,238 ozone treatments on 384,775 patients demonstrated a side effect rate of only 0.0007%, and the side effects were uniformly minor and not even remotely life-threatening. On the other hand, over a million patients are hospitalized annually in the US due to side effects of prescription medication, and over 100,000 of such individual die from such drug usage. If one person in the US dies even indirectly from the usage of a vitamin product or an herbal concoction, the FDA quickly moves to outlaw accessibility to such a product, but they remain strangely blinded to the carnage wrought annually by our pharmaceutical industry. Dr. Hans Nieper, an ozone-using doctor in Hanover, Germany, reports that in his medical practice on colon cancer he sees an interesting assemblage of American VIP's:

You wouldn't believe how many officials or relatives or acquaintances of FDA officials come to see me as patients in Hanover. You wouldn't believe directors of the American Medical Association, or American Cancer Association, or the presidents of orthodox cancer institutes. That's the fact.

(2) Very, very gradually mainstream American researchers are "testing the ozone waters"In 1991 a main journal for the American Society of Hematology, Blood, published an article demonstrating that ozone treatment inactivated human retroviruses( including HIV) in human body fluids and blood product preparations. The researchers concluded

"Ozone has potent anti-HIV-1 activity in cell culture media and factor V!!! preparations. Although the exact mechanism by which ozone mediates its effect remains unclear at this time, it is readily apparent that ozone may be of use in rendering factor VIII and possibly other blood products, both proteinaceous and cellular, free of HIV-1 and other infectious agents."

## What Is Ozone? Ozone - General Information Back to Articles List

Ozone is a naturally occurring component of fresh air. It can be produced by the ultraviolet rays of the sun reacting with the Earth's upper atmosphere, which creates a protective ozone layer, or it can be created artificially with an ozone generator. The ozone molecule contains three oxygen atoms whereas the oxygen molecule contains only two. Ozone is a very reactive and unstable gas with a short half-life before it reverts back to oxygen. Ozone is the most powerful and rapid acting oxidizer man can produce, and will oxidize all bacteria, mould and yeast spores, organic material and viruses.

#### A Brief History Of Ozone

Ozone has played a significant role in the waste treatment process in the past and will continue to do so in the future. The utilization of ozone in industrial situations has a long and impressive history, one that pre-dates current environmental concerns. The American Indians, for whom fishing was a central industry, recognized a correlation between a successful catch and a strange odor released by the action of lightning after an electric storm. On the other side of the globe the ever astute Greeks had also noticed the odor (and so defined it "ozein") and like the Indians, preferred fishing after a storm, which is still practiced today. The explanation for this natural phenomenon is that after an electric storm the upper layer of water in lakes is enriched with diluted oxygen and therefore naturally ozonated. The positive influence of ozone on the digestive system of different species of fish has been scientifically documented. The closed loop for fish-farming is only possible with ozone because of its ability to destroy viruses responsible for many diseases in fish culture. The most common use of ozone is for the treatment of water. In 1906 group of scientists and doctors studied the ozonation system at the Oudshoorn plant in Holland and later constructed a 19,000 m3/day (5 mgd) plant using ozonation for disinfection - at Nice, France. Nice is therefore referred to as "the birthplace of ozonation for drinking water treatment".

#### Formation Of Ozone

The formation of oxygen into ozone occurs with the use of energy. This process is carried out by an electric discharge field as in the CD-type ozone generators (corona discharge - simulation of the lightning), or by ultraviolet radiation as in UV-type ozone generators (simulation of the ultra-violet rays from the sun). In addition to these commercial methods, ozone may also be made through electrolytic and chemical reactions. Ozone And Its Applications

Ozone is not only a very powerful oxidizing agent but also a very powerful nonchemical disinfectant. It has the unique feature of decomposing to a harmless nontoxic environmentally safe material, namely oxygen. In Europe, ozone is used for many purposes: color removal, taste and odor removal, turbidity reduction, organics removal, microflocculation, iron and manganese oxidation, and most commonly, bacterial disinfection and viral inactivation. Most of these applications are based on ozone's high oxidizing power. Ozone can be introduced at different points in the water treatment process, depending on its intended application. When used for iron and manganese oxidation or to induce flocculation, it is usually introduced early, and when used for taste and odor removal it is introduced at an intermediate point. In European water treatment practices, ozonation is recognized as a preferred method of virus inactivation rather then just an alternative to the use of chlorine for disinfection.

Nine out of ten diseases, including the common cold and the flu, are caused by water or airborne bacteria and viruses. Like chlorine, ozone kills microorganisms. The sterilization action of ozone is by "direct kill attack" and oxidation of the biological material. The rate of bacteria killed by Ozone is 3500 times faster than with chlorine. Virus destruction with ozone is instantaneous, safe and foolproof, as ozone is nature's own purifier. Chlorine's reactive oxidant is hypochloric acid which is formed when chlorine is dissolved in water.

This powerful oxidant will have significant long term negative effects on our water sources. Ozone, on the other hand, has no side effects as far as the treatment of water is concerned. It has properly been described as the "add-nothing" sterilant. In Eastern Canada, there are approximately 100 ozone plants for the treatment of municipal water, as well as many large industrial plants for water processing and waste water treatment. The principal applications for ozonation systems (single ozone generators are rarely sold) are as follows:

Air Treatment Fish canneries Process water Aquaculture Fish hatcheries Pools and Spas Bottled water Hot springs pools Potable water Cooling towers Industrial waste Therapeutic use Fish boats Odor Control Waste water There are hundreds of commercial applications and new emerging applications being developed.

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#### **Oxygenation and Healing**

Health and Healing do not exist without oxygen. Without food human beings can survive for month. Without water we can survive for weeks. But without oxygen, we would die within 5 minutes. Oxygen is our most immediate need.

Diseases and degeneration can be prevented through proper oxygenation of the tissues and organs. Furthermore many diseases can be prevented, relieved or cured by reestablishing the delivery of oxygen to affected areas.

In today's world it is no longer sufficient to simply breathe to ensure proper oxygenation. Our bodies are constantly bombarded with toxins in our air, water, and food. In the city, oxygen levels in the air we breathe are declining. The combination of these effects results in a lack of oxygen in the body, which could result in diseases and cancers. In order to ensure proper oxygenation we must go further than simply breathing. Ozone (a less stable, more active form of oxygen) not only oxygenates the blood and issues, but is the only known therapy to enable the delivery of that oxygen to the tissues, and directly into the cells where it is needed.

In addition to oxygenation, Ozone (or "activated oxygen") has also been proven to boost the immune system, stimulate the release of anti-cancer substances from white blood cells, increase circulation of blood, and ensure that the red blood cells are flexible enough to travel through even the smallest blood vessels in order to reach the tissues and cells furthest from the heart. The end result is a strengthening of the immune system, and oxygenation of all of the tissues and cells of the body.

This therapy therefore treats the grass roots of most disease: lack of oxygen, and a weakened immune system. It is therefore not surprising, that so many diseases (over 150) respond positively to these treatments. These diseases include Chronic Fatigue, Fibromyalgia, Candida, Heart Disease, Lyme Disease, Lupus, MS, Macular Degeneration, Diabetes, Stroke, Cancers, AIDS, .the list goes on.

#### Rejuvenation & Anti-Aging – Oxygen Sauna Treatments

Many have realized that we do not have to accept the "natural" aging process as a fact of life. Many aspects of aging are a result of a built up of toxins in our tissues, poor oxygenation of the tissues, a weakening immune system no longer able to withstand the onslaught of toxins in the environment.

The secret to Longevity is preventative treatments. Oxygen Therapies are not only for those suffering from disease, but also those who wish to prevent disease and live a long, healthy, and happy life.

#### **Medical Ozone and Cancer**

Medical ozone saves lives in Europe, but the FDA continues to prevent formal testing in the United States.

#### By Ed McCabe

There are over 3000 medical references in the German literature showing the effectiveness and safety of ozone in over 5 years of applications to humans by way of millions of dosages. The International Ozone Association and the ozone machine manufacturers report over 7000 MD's in Europe using ozone safely and effectively, some for more than 40 years, yet for the past 20 years the FDA has prevented human testing and issuing any ozone-generating device approvals.

Although in Europe ozone has been used for 50 years by over 10,000 physicians, in America ozone therapy is only taught privately, or in naturopathic schools, so your family doctor is probably untrained in its use. Therefore he/she probably will have no idea (or an incorrect idea) of what you're talking about if you ask about it. So, if you are seeking opinions, always ask your medical professional what actual experience he/she has with ozone therapies – especially if he/she gives you a negative opinion without any facts to back it up. There are no legitimate studies proving ozone doesn't work.

It's so simple it befuddles the great minds. Unlike human cells that love oxygen, the disease causing viruses, bacteria, fungi and parasites – including the HIV and cancer virus, cancer cells, arthritis microbes, colds and flu, and West Nile virus carried by mosquitoes –like most primitive lower life forms, are almost all anaerobic.

That means these microbes and cancer cells cannot live in high oxygen concentrations. Therefore, what would happen to these anaerobic viruses and bacteria if they were to be completely surrounded with a very energetic form of pure oxygen for a long time? What if enough of this special form of oxygen/ozone was to be slowly and harmlessly introduced into the body daily, over the course of a few months, to eventually saturate all the bodily fluids and every cell, including those of the brain, spine and bone marrow, with it? Wouldn't the disease-causing microbes and cells that can't live in oxygen cease to exist? Why is this so hard to understand? I was speaking to a woman with AIDS in San Francisco who told me her doctor, the head of the largest hospital in that city, said ozone/oxygen won't leave the blood and get into the bone marrow where the immune cells are manufactured, so she shouldn't look into it! How can it be that the head of the largest hospital didn't know that every cell must have oxygen delivered to it constantly, so the body must continually bring oxygen to every cell, even past the blood\brain\spinal barrier, and into the bone marrow? Or was there another agenda, to discredit every treatment except drugs?

All 30 or so oxygen therapies, including medical ozone (not smog), which breaks down into oxygen, work because they flood the body with Nature's single oxygen atoms. Singlet oxygen and its by-products are very energetic oxidizers - they 'burn up' waste products, pollution, microbes and weak (cancerous) cells. They can't protect themselves against oxygen, because they either inert, lower life forms, or diseased. Normal body cells protect themselves from the oxidizing effects of oxygen by naturally producing their own protective antioxidant coatings.

We are 66% water. Most European and many American cities and businesses, including Sea World, purify their water by bubbling ozone through it to kill all the bacteria and viruses, etc. In Western Europe, over 40 full-scale municipal ozone facilities are installed each year. France alone has over 700 water treatment plants equipped with ozone. Switzerland has over 80 plants online for disinfecting contaminated water and oxidizing organics in heavily contaminated surface waters. Germany has over 70 installations using ozone. As of 1990, there were no less than 40 full-scale ozone installations in the United States. (See "Inactivation Kinetics of Viruses and Bacteria by use of Ozone," by E. Katzenelson et al., American Waterworks Society, 1974). Everybody is drinking bottled water. Did you know that most of the bottled water we drink goes through the same ozone purification methods? The FDA calls it "Food" Generally Regarded As Safe, "GRAS", in 21 CFR Sec. 184.1563. The FDA lists ozone as a Generally Regarded as Safe antimicrobial agent in Sec. 170.3 (0) (2).

Doesn't it make sense that since your body is two-thirds water (we are internally permeated with fluids), the same water purification principles would directly apply to us? Ozone is simply infused through your body liquids to sterilize and purify them, and your organs filter out the leftover particulates, just as with drinking water.

Knowledgeable doctors treating diseased persons for over one hundred years have successfully applied this body purification method to the human body. Nikola Tesla was big on it. It's simple – and it's simple because it's natural. "Natural" means high efficiency and no side effects because it enhances the natural life forces rather than fighting them. Our natural intake of oxygen from our once-natural environment's food, air and water is the way Nature intended us to keep healthy and clean, by naturally oxidizing away the microbes and toxins.

Unfortunately, due to human ego and greed, mankind has polluted the ecosystem, cut down the rainforests and ruined the oceans – the two sources where the oxygen all comes from. The ancient atmosphere had twice as much oxygen as ours does now. We are all oxygen deficient since we are surviving on less than half the oxygen our bodies are designed to run on, although most call this "normal". Our bodies can no longer take out (oxidize) the trash, so it piles up for years and we suffer.

I have personally witnessed hundreds of cancer and other patients receiving ozone infusion therapy. What I teach is very plainly evident right before your very eyes once you know what to look for. When they start out, the body fluids and blood of most patients are filthy, diseased and so empty of oxygen that the blood is almost black in color from the filth. Toxins and lack of oxygen cause disease! But keep putting the ozone back into them for a few weeks, and the blood turns back to a bright cherry red, full of color, full of life-giving oxygen, and clean again. Keep the blood this clean with medical oxygen/ozone, and the organs and cells quickly follow. Without all the garbage inside us, we usually return to the natural health we had as children, before the dirt piled up inside us with age and gave the bugs and cancer cells a place, and a reason, to grow.

#### Where Can You Go To Get Ozone Therapy?

Despite this dramatic and easy to reproduce proof, top-level human egos protecting power and greed ideologies are presently preventing us from fully exploring medical ozone's use in US medicine without great difficulty. For example, in New York City it is illegal to say any therapy helps AIDS. This law has been used as an excuse to shut down experimental ozone clinical trials in progress before they could produce the documentation. One friend of mine funded an ozone trial in Mexico and advertised in New York for volunteers to get the free treatments. He was immediately attacked by authorities seeking to make a name for themselves by chewing him up. He found himself vilified on TV, and narrowly escaped jail. Years later, doctors in New York and several other states now quietly practice some forms of ozone therapy under new health freedom laws. As of 1998, the following states have such protection: Alaska, Colorado, Georgia, Nevada, New Mexico, New York, North Carolina, Oklahoma, Texas, Washington and Minnesota. Naturopaths in Canada and America have always used ozone. The Benedict Lust School of Naturopathy is the oldest school, and offers free naturopathic school grants: www.oxytherapies.com/newpage. htm

#### Ozone and Cancer, Hand In Glove Fit

I have shown you that oxygen floods the body with oxygen, but why is that important in treating cancer? As I once said in a Canadian lecture: Doctor Otto Warburg is a two-

time Nobel Prize winner, in 1931 and 1944 (Hitler kept him from accepting). He got the Nobel Prize for discovering that the cause of cancer is no longer a mystery to us. We now know what the cause of cancer is. They were so astounded that he figured this out they awarded him the Nobel Prize for discovering these facts. Remember that because you do not have enough oxygen, your cells are constantly filling with toxicity, in some people quicker than in others. The little cell gets covered with garbage, and washed in toxic fluids constantly because it's surrounded by dirty fluids. The garbage piles up until it denies the cell 60 percent or more of its oxygen requirements. This is the root cause of cancer. Picture pouring black paint on an orange. This cell needs oxygen. Hold your breath, and when you feel short on oxygen, breathe. All your cells need oxygen, that bad, all the time. If you cover up the cell with garbage, you block the oxygen from getting into the cell. If you cover it with enough toxicity, so much that 60 percent of the oxygen it needs constantly is not there, then that cell will be so short of breath its respiratory mechanism will be damaged. In other words, if the oxygen's not there and the cell is trying to breathe, it will become so damaged that it can't breath anymore. And when the cell can't breath because of the damaged respiratory mechanism, it mutates to survive. The poor cell drops 31 steps, down to the level of a green plant-type cell that just grows and grows. The cell has lost all its higher functions: it no longer heals or regulates things, it no longer makes hormones, it no longer digests your food. Whatever part of the body this mutating cell is in, it" dropped down to the level of a plant-type cell that just grows and grows and grows. Cancer.

Cells do this because of our DNA-wired instinct to survive. There is not enough oxygen for it to breath, yet the cell wants to survive-since our DNA & RNA has programmed this physical vehicle/body to survive in adverse conditions-so it will stay alive in a lower form by changing to a fermentative respiratory mechanism, meaning that our cells stop breathing oxygen and start fermenting glucose to make energy. Our bodies are full of glucose sugar. Our oxygen and body sugar is where we get our energy from, our adenosine triphosphate, ATP, the energy currency of the body.

So, normal cells, when denied enough oxygen by toxic slime for long enough, mutate and drop backward, devolving into a lowly plant-type cell that only ferments sugar. Now the ATP energy the cell tries to make at this point is very substandard low oxygen ATP that leaves lots of lactic acid residue. And we get no energy – just pain from lactic acidosis, and other problems, thus damaging more cells. Around and around the damage goes and that makes more cancer cells. It's all from lack of oxygen.

Cancer is a fermentative disease caused by a compromised robust oxidative mechanism, giving you fermentation and uncontrolled cellular growth. Tumors are walled off toxic waste dumps inside the body. We've seen so many tumors injected directly with ozone melt from the inside out, dry up and fall off.

Let's ask two-time Nobel Prize winner Dr. Otto Warburg, himself. Here are excerpts from an article based on a lecture delivered at Stuttgart on May 25, 1955 before the German Central Committee for Cancer Control. It was first published in German [Naturwissenschaften 42, 401 (1955)]. This translation was prepared by Dean Burk, Jehu

Hunter and W.H. Everhardy of the US Department of Health, Education and Welfare, Public Health Service, National Institutes of Health, Bethesda, MD.

"The era in which the fermentation of the cancer cells or its importance could be disputed is over, and no-one today can doubt that we understand the origin of cancer cells if we know how their large fermentation originates, or, to express it more fully, if we know how the damaged respiration and the excessive fermentation of the cancer cells originate.

"But, even for cancer, there is only one primary cause. Summarized in a few words, the main cause of cancer is the replacement of the respiration of oxygen in normal body cells by a fermentation of sugar".

"Because no cancer cell exists, the respiration of which is intact, it cannot be disputed that cancer could be prevented if the respiration of the body cells would be kept intact."

"But nobody today can say that one does not know what cancer and its prime cause {are}. On the contrary, there is no disease whose prime cause is better known, so that today ignorance is no longer an excuse that one cannot do more about prevention.

'That the prevention of cancer will come, there is no doubt, for man wishes to survive. But how long prevention will be avoided depends on how long the prophets of agnosticism will success in inhibiting the application of scientific knowledge in the cancer filed. In the meantime, millions of men [and women] must die of cancer unnecessarily."

There is plenty of further documentation proving "ozone works" to be found in major journals, some in the US but mostly in Europe. (See my publication "O3 vs. AIDS" or my website <u>www.edmccabe.net</u> for hundreds of solid medical references about ozone treatments for all diseases). Here is how ozone is properly delivered to the body.

#### Clinical Medical Ozone Usage

The first thing to keep in mind is that not all ozone treatment is the same, and the effectiveness of any ozone treatment increases with the number of times it is given per day or week, the strength of the concentrations used, the quantities applied, and the delivery methods used. For example, 50 ccs of ozonated blood re-injected into you in a clinic every other week is nowhere near as effective as drinking ozonated water at home every day. Quantity, concentration and frequency are the keys. The aim is to safely and comfortably flood the body with oxygen by slowly building it up as you detoxify.

**General guidelines:** For best results during the treatment phase, ozone is applied once or twice daily, or perhaps every other day, in concentrations varying from 1 to 80

micrograms per cubic milliliter (mcg/ml3), in as great a quantity as can be safely and comfortably absorbed by the body. This is continued for as long as it takes, until the problems go away. Mild diseases may take a few treatments; chronic ones, several months. Very weak ozone concentrations of less than 0.05 parts per million by volume of air are commonly and safely inhaled during normal activities by hundreds of thousands of people; in fact, I'm doing it as I am writing this. Ozone air purifiers are very common, but this is a separate discussion.

The lower concentrations and quantities of ozone will aid healing and stimulate the immune system. Slightly, but these are usually ignored in favor of the real power of medical ozone, which is found to be generally centered around daily applications of 27 mcg/ml for internal work. Higher concentrations are used for external bodywork. The upper range tops out at around 70 mcg/ml3, and beyond that is controversial. These concentrations are never allowed to enter the lungs, which are too sensitive for anything other than concentrations around normal air levels of ozone or slightly higher.

I have interviewed hundreds of doctors and thousands of patients using oxygen therapy. Here are the three top clinical ozone delivery methods used worldwide, and my ranking of them, the most effective one listed first. These are for seriously ill people. Please only seek out an experienced and competently trained ozone therapist professional if you pursue them. Ozone has many subtleties, and a lot of MD's may act knowledgeable but have little idea what ozone is all about.

**Recirculatory autohemo perfusion:** Also known as polyatomic apheresis, recirculatory autohemo perfusion is the *crème de la crème* of ozone delivery. Dirty, dark, diseased blood is taken out of one arm and ozonated with 27 mcg/ml3 ozone, and filtered outside the body. Then the remaining clean, bright red, freshly sterilized and oxygenated blood is put back in the other arm. It's a complete body blood wash, highly effective in all ailments because the ozone-oxidized leftover garbage of dead microbes, diseased cells and detoxified by-products drops out of the blood into the external filters. The waste products are not sent back through the liver, kidney and lymph systems to irritate and perhaps weaken the body further, as occurs in *all* other ozone methods. All other methods are handicapped by comparison. This method is so good that the medical industrial complex immediately shuts down any attempts to test it, in any country. I knew of one dying patient who, during the first treatment, got up off the stretcher and walked out after just a few hours of this treatment.

**IV slow injections of the O3 gas:** No air, with its non-absorbable nitrogen, just pure, medical grade oxygen turned into medical grade ozone, which is injected through butterfly needles at a rate of 1 cc per minute into the blood, once or twice daily. Ten-cc syringes filled with 27 mcg/ml3 ozone are used, one at a time, and refilled as needed, until you begin to get a chest or throat tickle, or cough. When the body thus indicates it is full to overflowing, you stop the injection immediately. For safety, direct IV's are only given to patients who are lying completely flat before, during and after treatment, so the ozone/oxygen is slowly and evenly distributed throughout the body.

This was the most advanced and aggressive method around until the recirculatory autohemo perfusion came along, and is far more effective than autohemotherapy (see below). It is cheaper than both due to using less equipment. Direct IV ozone is very effective, but its not found very often because the Germans – and the Americans who learn from them – are reluctant to use direct IV work due to habit and, in some cases, their investment in the machines they already have.

**Autohemotherapy:** This involves withdrawing approximately 600 ml of blood and reinfusing it into the body after gently putting 27 mcg/ml3 ozone into it. Fifty years of safe use on millions of patients has a lot of weight. The drawback to its real effectiveness is that it is usually given only once or twice a week, because the patients can only afford that many treatments. If the doctors would switch to direct IV, the patients would pay the same but triple their bang for their bucks.

#### Home Ozone Treatments

In no particular order of effectiveness, since no studies have been done, and treatment times and dosages vary so widely that we can't really compare them, here are the most common home self supplement type ozone treatment methods that I recommend, and use myself:

**Ozone sauna suit/bagging:** Any or every body part, except the head, soaks in a bag full of humidified 27 mcg/ml3+ ozone for 15 minutes up to two hours or longer. You can use higher concentrations. Be careful not to breathe it. At a national health expo, a famous futurist's wife was so sick she couldn't leave their hotel room. A friend put her in an ozone sauna suit, and she soaked up the humidified ozone through her skin for an hour. While in the bag she was throwing up from her illness, but one hour later she was well enough to go out to dinner with us!

**Ozone steam cabinets:** This involves sitting in a small steam chamber or being washed with hot high concentration ozonated steam/water. This should be done for 20 minutes, up to one hour for the brave. Water carries ozone into the body, where the ozone saturates the body capillary networks transdermally. The entire body absorbs ozone except for the head. If used often enough, this method rivals autohemotherapy in dose loading, and it can be done at home. Be careful not to breathe it.

**Ozone rectal insufflation:** There are two methods. In the first an average of 1 ½ liters of 27 mcg/ml O3 gas is infused up to three times a day into the colon and gently held for two minutes; if you're not able to hold it for that long, repeat. You may experience cramps until you clean out. The new "Mr. Oxygen Method" uses two catheters inserted into a clean colon, one way up, the other short. Ozone continually goes into the long one and soaks into the miles of blood vessels around the colon, and any excess oxygen vents out of the short one, for up to an hour.

**Ozone charged drinking water:** Bubble O3 into water, which must be imbibed immediately all day long while the O3 is still in the glass. Be careful not to breathe it.

**Ozone vaginal insufflation:** Average 5 - 15 minutes of insufflating the body cavity.

**Ozone ear insufflation:** Average 5 minutes of letting O3 fall into the ear cavities. Don't put pressure on eardrum.

**Ozone air purification:** Continual low levels of ozone sterilize and rejuvenate the room air. O3 breathed in *very low* ambient concentrations (please seek guidance) slowly cleans the lungs and therefore the blood, over time.

You need plenty of water and antioxidant support while doing any of the above. Many people often combine two or more of the above methods. Any one of the high-dosage home methods can be better than another if you can safely do it longer stronger, and more often. The trick is to always balance ozone dose loading versus the detoxification process that occurs as ozone moves out the garbage. Keep it mild and gentle, slow and steady, and do not waver.

I have seen many people sent home to die with cancer, who then used proper ozone therapies and ended up perfectly healthy five years later. But they stuck to a full protocol – getting it daily, in the right dosages and the right concentrations, and combining it with other significant modalities. People who are too far gone, have never tried it, have only 'dabbled' in it or have gone to a well-meaning but undertrained ozone therapist are the ones who end up being the naysayers.

Go ahead and ask anyone who is disrespecting ozone: Did you work up to using at least 150 cc (not the starting dosage) of 27-42 mcg/ml concentration strength of only pure medical ozone gas? Was it applied once or twice a day, every single day, for at least six weeks? Was the ozone delivered by IV or better? If anyone said it" dangerous or ineffective, they're doing it wrong! Ninety-nine percent of the many successful ozone-using people who I have interviewed – and written or spoken about – have received ozone only this proper way. And none were hurt. Those who use ozone correctly continue to come back for more, because they realize the benefits within their own bodies.

The German Medical Society has published that 384,775 patients were treated with ozone with a minimum of 5,579,238 applications and the side effect rate observed was only .000005 per application! The report also stated "The majority of adverse effects were caused by ignorance about ozone therapy (operator error)." The University of Innsbruck's Forensic Institute published Dr. Zacob's dissertation quoting this in The Empirical Medical Acts of Germany.

Please only work with competently trained healthcare professionals who are real ozone specialists skilled in the oxidative modalities.

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This article is a part of the much larger body of work from Ed McCabe. He has been investigating, teaching and publishing about oxygen therapies for 12 years. He wrote the revealing "Ozone vs. AIDS and Cancer", which details the history and suppression of ozone therapies in the US. His first work, the self-published bestseller *Oxygen Therapies: A New Way of Approaching Disease* has sold over 200,000 copies by word of mouth. Over the past 12 years, Ed McCabe has appeared on over 1,500 radio, TV and speaking platforms. Books and audio/video tapes of proof and testimonials are available from <u>www.edmccabe.net</u> and "The Family Health News", 9845 NE 2<sup>nd</sup> Ave., Miami Shores, FL 33138; 800/284-6261 or 305/759-8710, M-F 9-5 EST. Free sample newsletter.

# WHY OZONE THERAPY?

Because scientific studies have proven that Ozone, properly introduced into the body in repeated applications inactivates viruses, bacteria, fungi, protozoa and carcinomas in diseased cells! \*

## How Does Ozone Therapy Work?

Ozone therapy has been in use for many years by thousands of West German doctors who claim, in hundreds of scientific and clinical studies, that they are able to inactivate AIDS and other viruses and cancer through ozone therapy. They explain that diseased cells have a lowered enzyme count in their cell wall or 'lipid envelope'.

Looking at a diseased cell electrochemically, the first thing that differentiates it from normal cells is that the protein coating that surrounds it is contoured distinctly. The disease that has invaded the cell is parasitical, drawing off the cellular electricity or 'life force' of its host. This creates 'cell stress' and under these conditions, the cell can only manufacture a substandard protein coating for itself. When ozone is introduced into the blood in correct, stable concentrations <sup>\*\*</sup> it is immediately converted into hydroxyperoxides and other <u>beneficial</u> free radical scavengers.

## **Ozone Is Safe and Non-Toxic**

Medical ozone (the correct term is triatomic oxygen, but for simplicity we will call it medical ozone) is completely safe and non-toxic to humans when administered

responsibly with precise technology. It is not meant to be breathed directly, although small amounts in the air, in fact, a sterilizing technique. When introduced into the blood through rectal/vaginal insufflation or major autohemotherapy it has been shown to be completely safe even when a dosage many times greater than the proposed human dosage is administered.

Here are extracts from the extensive studies proving the non-toxicity of medical ozone:

a)An animal model treated with medical ozone in a manner analogous to the proposed human treatment regime at the Long Island College of Pharmacy revealed <u>no toxicity at concentrations up to ten times the dose proposed in man</u>.

b)Research studies: "*Effects of long-term exposure to low levels of ozone: a review*." C.W. Melton (Aviation, Space & Environmental)

"Ozone: An overview of its toxicity in man and animals." D. Menzel (Toxicol & Environ Health 1984)

"Toxicity of Ozone." S. Mittler. M. King. B. Burkhardt (AMA Arch Ind. 1957)

## **Ozone's Bad Press**

There is a somewhat negative connotation regarding ozone in uninformed sections of the public consciousness in the USA (its healing properties have been known in Europe for decades). The one-liner you may have read in the press: "Ozone is toxic" is based on the fact that ozone is highly oxidative and in the presence of any pollutants it immediately starts to oxidize them.

Ozone has been likened to some foreign element floating around covering the globe, or as a poison in smog. Actually, ozone is a natural product that, by surrounding the planet, makes our lives possible, by filtering out burning rays. Smog is created by chemical pollutants reacting as the ozone tries to oxidize them. The problem is the pollutants, not the ozone. As the joke goes, air pollution is an auto immune disease!

These hydroxyperoxides actually seek out and destroy diseased cells, where the cell wall is damaged and therefore easily penetrable, and they enhance the health of normal cells. Ozone's byproducts have this selectivity because they are the attractive opposites of diseased cells. Cells infected with a virus have a weakened vitality that shows up as lowered levels of enzyme activity. A free radical hydroxyperoxide sees the diseased cell's low enzyme 'flag' and attacks it... These diseased cells with lowered enzyme levels are incomplete and are therefore seeking to balance themselves by interacting with the free radical hydroxyperoxides, which by themselves are also unstable. Both seeking balance, they join together in their eventual mutual destruction and elimination, benefiting the patient.

## The Selectivity of Ozone Treatment Towards Infected Cells

1)O3/O2 mixture interacts with blood and immediately forms hydroxyperoxides.

2)Hydroxyperoxides have no effect on healthy cells, except the rejuvenation effect of super-oxygenating their environment and enhancing circulation.

3)Hydroxyperoxides invade diseased cells through their broken cell wall, exposing and destroying disease.

#### More About Viruses

"In each reproducing cell in our bodies there are two substances: RNA and DNA – the 'helix' form discovered by Crick and Watson. They contain the genetic blueprint for the cell, and the whole body. Viruses are not cells, they are either RNA or DNA genetic material - but not both - surrounded by a coat of protein. Since they have only half of the genetic material, they cannot reproduce on their own. They multiply by attaching themselves to the inner RNA or DNA of normal cells, taking it over and forcing the cell to make more of the virus. Picture slave labor. They wait there and emerge when our defenses are down! Outside of their host cell they are basically inert so it is clear that they are 'hiding out' in the cells, and must be uncovered within the cell to be destroyed before they manifest their destructive potential. This is where the amazing property of ozone to invade diseased cells, uncovering and destroying the disease or virus, is so effective."

## OZONE TARGETS DISEASED CELLS, LEAVING HEALTHY CELLS UNTOUCHED!

"Normal healthy cells are not lacking vitality, and do not react with the free radical agents. They have strong, balanced enzymes that, in a sense, make them 'invisible'. They are complete and not receptive to reacting.

The obvious beauty of this is that the by-products of the ozone process 'target' diseased cells. Repeated treatments are necessary because viruses seem to be more susceptible at different stages of their growth, and as an ozone reaction winds down, a new one must be introduced to react with any viruses left over from the previous treatment..."

(Adapted from Oxygen Therapies: A New Way of Approaching Disease by Ed McCabe)

## **Results From Ozone Therapy**

## O3 and Candida and Epstein-Barr

We mention these conditions together because they are both chronic, apparently incurable or difficult to cure complaints that have recently been implicated in the widespread 'unexplained ailments' that affect millions of Americans with fatigue, depression and a variety of unpleasant symptoms. Systemic candida has been widely touted as being present in epidemic proportions. Ozone's <u>fungicidal</u> properties make it the ideal treatment for candida, both local and systemic. Epstein-Barr virus has been blamed for the mysterious 'Chronic Fatigue Syndrome' affecting thousands of Americans. It is considered medically incurable but there are already scientific studies and anecdotal reports that it can be successfully treated by a lengthy course of ozone therapy.

## Some research on Candida:

"Effect of ozone on the survivability of Candida utilis cells." Navuk et al. 1981

"Fungi growth and sporulation after a single treatment of spores with ozone."

Mikol Fitopatol. 1982

#### **Research on Epstein-Barr (hot off the presses):**

"In chronic viral infections – Cytomegalic, Epstein-Barr and Retroviridae (AIDS) among others – blood ozonation performed in viremic cycles or in periods of clinical exacerbation may, through direct action, through the production of co-factors inhibitory to viral replication, or through modification of immune function, be a tool in inducing viral quiescence." (From O3 Conference 1989 Report)

In a short-term "*Study of the variation under ozone treatment of 16 patients presenting a T4/T8 lower than 1.2*", three of the patients had Epstein-Barr, and after ozone treatment showed an average 33.3% improvement during the brief experimental period.

#### O3 in Alzheimer's Disease, Parkinson's Disease, Multiple Sclerosis, etc.

Recent studies by Russian and French doctors have shown extremely dramatic results in the treatment of Alzheimer's disease with ozone therapy. One reason is that it has been found that a cause of Alzheimer's is aluminum toxicity in the brain, and ozonating of the blood has been shown to precipitate the aluminum. Also, of course, its abilities as a circulatory enhancer and cell rejuvenator come into play. In a similar vein, German doctors have also had success with Parkinson's, MS and other nervous system disorders.

#### O3 in Wound Healing and Burns

The virucidal, bactericidal and fungicidal properties of O3 make it the treatment of choice for wound healing. Excellent results are obtained, for example, with gangrene:

"Gangrene usually required a one-hour session each day, with ozone being put in the blood, and into a gas bag (topical application). Out of a total of 33 patients scheduled for surgical amputation, only 1 (with other problems) actually had to have an amputation." \*

The use of O3 tents in Burn Units is so effective in immediately halting infection and promoting healing that it is difficult to understand why this practice has not yet been applied in the US considering its widespread successful use in W. Germany for years.

#### **O3** in Arthritis

"Arthritis was usually treated every other day, and within 3 days there was significant reduction of pain, and by the end of the patient's stay, deformed joints were reduced as a matter of course." \*

In *The Use of Ozone in Medicine*, West German doctors Rilling and Viebahn describe the specific protocol used successfully in arthritis, referring to the numerous papers on the subject by Dr. H. Wolff.

#### **O3** and AIDS

# "OZONE MAY HELP VICTIMS OF AIDS"

## "STUDIES FIND OZONE MAY FIGHT AIDS VIRUS"

## "OZONE MAY BECOME AIDS TREATMENT"

## "TESTS FIND OZONE MAY CURB AIDS SYMPTOMS"

## "OZONE MAY AID TREATMENT OF AIDS"

Headlines announcing New England Journal of Medicine study by Dr. Kenneth Wagner. Released Oct. 27, 1988.

AIDS is a virus, and ozone has been proven in countless studies to be virucidal (as well as fungicidal, bactericidal, etc.). There has been a great deal of research suggesting that O3 is effective in the eradication of the AIDS virus, both *in vitro* (in a test tube) and *in vivo* (more significantly, in people!)

Anglo-American Research has to date conducted three scientific human studies, under strict scientific protocol, involving patients with AIDS, with excellent results. (Results are available on file for examination).

In the first study, a research facility 'over the border' was set up for 5 AIDS patients whose disease was in a very advanced stage (2 of them 'didn't have a T-4 between them" – their levels were 0.3 and 0.4). The study, which was funded by the researchers themselves, lasted 10 days, after which the patients were again tested at the University of Arizona and then went home with their doctor, who took with him equipment to continue treatment. The results were nothing less than astounding! All of the patients are still alive and well except one, who has since died of tuberculosis (not AIDS-related).

After these results, the Anglo-American team had no difficulty getting funding for continued research and they held another human study with 8 persons in Alaska. This study included patients with a variety of diseases – several AIDS patients,

#### **O3** and Cancer

Cancer cells have disturbed metabolisms. Nobel Prize winner Dr. Otto Warburg discovered as far back as 1925 that cancer cells function best in the absence of oxygen, in effect, living on fermentation rather than respiration. Some authors report that tumor cells don't have enough of the proper enzymes to resist ozone's actions.

There are many scientific and anecdotal reports of successful treatment of cancer with ozone therapy. "The logic sustaining the use of oxygen-ozone application to the treatment of carcinomas rests on the strategy of capitalizing on the disturbed metabolism of cancer cells.... In one study, cultured cells of different carcinoma types were compared with non-cancerous human lung fibroblasts on exposure to ozonated air...Lung carcinoma, adenocarcinoma, breast adenocarcinoma, uterine carcinosarcoma and endometrial carcinoma showed 40-90

% growth inhibition (depending on the concentration of ozone used)... The noncancerous cells were relatively unaffected. The authors postulate that cancer cells are less able to compensate for the oxidative challenge of ozone than normal cells, possibly by way of a less functional glutathione system.

There are many clinical and anecdotal reports (see below) of ozone...being prescribed on a daily basis for several weeks, applied to the treatment of various carcinomatous conditions.

(From Ozone in Medicine: Overview and Future Directions by Gerard V. Sunnen MD)

## **References:**

Rilling S. Viebahn R: The Use of Ozone in Medicine. Haug. New York. 1987

Ozone Application in Cancer Cases Dr. Joachim Varro

Research – Effects of Ozone/Oxygen Gas Mixture Injected Into the Mammary carcinoma of Mice – Dr. Migdalia Arnan (O.I.M.T.)

Research – Biochemical Reaction of an O3/O2 Mixture on Tumor Tissue-

Dr. Joseph Washutt (O.I.M.T.)

Research - Ozone Treatment of Acute Leukemia and Mammary Cancer in Rats-

Dr. Robert A. Mayer (O.I.M.T.)

Ozone Selectively Inhibits Growth of Human Cancer Cells

J. Sweet, MS Kao, D. Lee, W. Hagar (Science 1980; 209: 931-933)

#### **O3** in Rejuvenation and Cosmetic Therapy

Members of Anglo-American's team attending a recent International Ozone Symposium in Europe witnessed a French doctor, Paul Musarella, presenting a paper on his use of O3 in cosmetic therapy for cosmetic purposes.

O3 has also been injected directly into warts, tumors, cysts, moles, etc. whether malignant or benign-but-ugly, and is reported to cause them to dissolve in a matter of days. \*

The general effect of superoxygenating the body is a rejuvenating one for obvious reasons. The increase in energy levels after O3 treatments is directly experienced by most people and can be measured in before/after stamina tests with an exercise bike, or before/after mental acuity tests.

## **O3** and Herpes

There are a number of scientific studies and papers documenting excellent results in the treatment of Herpes Simplex and Herpes Zoster with ozone therapy. It is reported that when an attack is in progress, treatments on a daily basis for 7 - 10 days usually cause complete disappearance of symptoms. If treatments are taken for 4 to 6 weeks on a daily basis, whether the symptoms are present or not, the viruses can be eradicated from the patient's system.

#### **References:**

Ozone vs. Hepatitis and Herpes – The Choice

Dr. Heinz Konrad, Brazil

Ozone as Therapy in Herpes Simplex and Herpes Zoster

Dr. K. Kattassi. Et al (O.I.M.T.)

Ozone as Therapy in Herpes Simplex, Herpes Zoster and Hepatitis

Dr. Heinz Konrad (O.I.M.T.)

#### **O3** and Hepatitis

Successful treatment of hepatitis has been reported in many studies, including the following:

The Successful Treatment of Viral Hepatitis with O3/O2 mixture

Dr. Kartaut Dorstewits (O.I.M.T.)

Study of Chronic Hepatitis and Ozone Therapy Dr. Horst Kief (O.I.M.T.)

#### **Ozone/Cancer**

Over 30 % of our population is afflicted with cancer and the percentage is increasing, in spite of the \$billions being spent on cancer treatment and research. Unfortunately, remedies to treat the symptoms of cancer have been sought while the causes of cancer have been virtually ignored up until now.

What is most disturbing, is that the cause of cancer was discovered back in 1923 by a German biochemist, Dr. Otto Warburg, who received the 1931 Nobel Prize for doing so. In his book, "The Metabolism of Tumors" (London: Constable and Company. 1930), Dr. Warburg demonstrated that the primary cause of cancer was the replacement of oxygen in the respiratory chemistry of normal cells by the fermentation of sugar. The growth of cancer cells is a fermentation process, which can be initiated, only in the relative absence of oxygen, which means that a cancer cell is a plant cell.

Ever since Warburg's discovery, researchers have been attempting to stop the fermentation process through drugs, radiation and surgery, which, in some cases, has been temporarily successful. Although the National Cancer Institute verified Warburg's theories in the 1950s, very little work has been done to determine the causes of a lack of oxygen to the human body. Along with finding ways to stop the fermentation process,

we must also determine ways of getting more oxygen to all our healthy cells to prevent the initiation of the fermentation process.

All normal cells (animal cells) within our bodies need oxygen to survive, and give off carbon dioxide as a waste product. If we upset this delicate balance within our bodies, nature's way of reacting is the growth of plant cells (cancer, fungi, candida, etc.)

When one considers the monumental increase of carbon dioxide (over 20%) in the atmosphere during the past several decades and the alarming decrease of oxygen content in the air we breathe (from 38% down to 19%) one can understand the seemingly inexorable rise of cancer among us.

The good news is that 50 years of practice in Europe and numerous test studies utilizing oxygen/ozone therapy have proven that by increasing the oxygen content within our bodies, we will displace more carbon dioxide. We then become much healthier and do not provide an anaerobic (lack of oxygen) atmosphere for the fermentation process to produce cancer cells. I n addition to the encouraging success rate that these studies demonstrate, it must be noted that not one fatality or adverse side effect has been attributed to the proper administration of oxygen/ozone therapy.

It is unfortunate that up until now the US medical authorities have been painfully slow in their investigation of the beneficial uses of ozone. However, the sixth World Ozone Conference held in Washington, DC during May 1983, procured many astounding papers on the medical and therapeutic uses of ozone. They ran the full gamut of topics from Cancer to Herpes to Rheumatoid Arthritis, written by world-recognized specialists in their fields. These papers (we will be happy to obtain copies for you) concluded that:

1.OZONE removes unwanted bacteria and viruses from the blood, the same way it does with water.

2. The possibility of becoming infected with hepatitis, AIDS virus, syphilis or other infectious disease through blood transfusions could be eliminated by the use of OZONE.

3.OZONE is highly effective in peripheral vascular disease so that persons suffering from gangrene, or leg ulcers, may not have to have their limbs amputated.

4.OZONE is effective in cardiovascular and cerebrovascular disease, arteriosclerosis in general, and hypercholesterolemia, and promptly restores circulation, relieves angina pain, and improves brain circulation and function.

5. With OZONE, cancerous Tumors, Lymphomas and Leukemia may be eliminated without the use of surgery, radiation or chemotherapy.

6.OZONE is highly effective for all forms of Rheumatoid and Arthritis Collagen disease.

7.OZONE is very effective for Allergies of all types.

8.OZONE improves Multiple Sclerosis, and other Neurological Diseases, ameliorates the loss of brain function in Alzheimer's Disease and senility, as well as in Parkinson's Disease, by reversing the aging process.

9.External use of OZONE is very effective in treating ACNE, burns, leg ulcers, open sores and wounds, Eczema, fungus and other skin disorders.

10.Rectal insufflation with OZONE if effective for Proctitis, Colitis, Prostatitis, anal fissure, Candidiasis; vaginal insufflation is effective for Cadidiasis and other yeast infections, Trichamoniasis and other forms of vaginitis; bladder insufflation is effective for Cystitis and bladder fistulas, as well as cancer.

11.AIDS, Herpes, Hepatitis Mononucleosis, and cirrhosis of the liver have been successfully treated with OZONE, without the use of any drugs or medicines.

12. The application of OZONE is virtually painless, has no adverse side effects and is extremely cost-effective for both physicians and patients.

13.As of 1985, over fifteen countries had allowed the use of OZONE therapy, and of all the thousands of patients successfully treated, there has not been one single death or serious reaction reported clearly related to the use of OZONE.