

## Medical Report:

# OZONE THERAPY O3

Ozone Therapy is a unique and integrative treatment that is used to increase the amount of oxygen in the body through the introduction of ozone into the body. This is achieved through the process known as autohemotherapy, in which blood is drawn from a patient, exposed to ozone and re-injected intravenously (directly into the vein). The effects are shown to be both healing and detoxifying with its main purpose of suppressing infection and boosting the immune system.

The history of Ozone Therapy dates back to the early 1950's in Germany and has since gained recognition in the United States as more physicians are understanding its health benefits. Studies have shown that as part of an overall integrative treatment plan, it produces positive outcomes for treating a variety of conditions and illnesses such as chronic fatigue syndrome, Lyme disease, fibromyalgia, cardiovascular disease, diabetes, chronic hepatitis, herpes, chemical sensitivities, macular degeneration, chronic bladder conditions, colitis, and Crohn's disease.

## WHAT IS OZONE.

The form of oxygen most people are familiar with is the kind in the air we breathe. It is the single most important nutrient for the health and wellness of our body. It exists as a pair of oxygen atoms and is the most stable form of oxygen, as well as colorless. Ozone, on the other hand, is a form of oxygen that is composed of three oxygen atoms. It is the addition of the third oxygen atom that gives ozone its remarkable medical properties by making it a "supercharged" oxygen atom.

Ozone is found naturally in the body. In fact, our white blood cells make ozone as part of their immune response when we don't feel well. By using Ozone Therapy you are essentially boosting your natural immune system, as well as, supporting your system in several other ways. It works very well for many chronic conditions associated with immune dysfunction, infections or inflammation.

## BENEFITS OF OZONE THERAPY

Ozone Therapy provides many powerful and healing health benefits with little or no side effects. Studies show the following benefits:

- Suppresses infections by killing viruses, bacteria and yeast, especially those hard-to-treat, resistant pathogens that can be found in chronic conditions, such as Lyme disease;
- Improves circulation by enhancing the flow of your blood;
- Works as an immune modulator, meaning that it helps to keep your immune system in top working order;
- Increases the uptake of oxygen by stimulating the enzyme DPG (diphosphoglycerate), which helps the cells get all the oxygen they need to function properly. This aids in killing resistant, anaerobic infections and provides the cells in the area with the extra oxygen needed to heal.
- Stimulates your mitochondria, the powerhouse of your cells, increasing the cells' energy so that your body stays healthy; and
- Enhances your body's ability to increase its antioxidant capabilities and protection.

## HOW IT WORKS

One of the fundamental underlying causes of all degenerative diseases, from diabetes, heart disease, and even cancer, is decreased mitochondria cellular energy production. Ozone has been found to correct this issue. Ozone Therapy stimulates the uptake of oxygen by stimulating the DPG enzyme. The DPG enzyme supports the release of oxygen from the hemoglobin molecule so that it can be used by the cell. When cells get the optimal amount of oxygen and function properly, they help to prevent or inhibit disease.

### Ozone Is an Immune System Modulator

When we are well, our immune system is in balance. However, if someone has an auto-immune disorder, it essentially means that their immune system is working overtime to try to help the body fight off infection, bacteria or virus. Ozone supercharges the part of the immune system that often becomes dysfunctional and suppressed by chronic infections but calms down the part of the immunity that causes autoimmune disease.

On the other hand, when the immune system is under-active, with conditions such as cancer, AIDS and chronic infections, Ozone Therapy can stimulate the immune system to support the body in its healing process.

The reason ozone can modulate the immune system so well – either calm it down or stimulate it -is because of its unique action on the membranes of the white blood cells. Ozone stimulates the white blood cells to produce immune-related messenger molecules called cytokines.

### Ozone Helps Your Blood Flow Better

Enhanced circulation is key to good health. Ozone improves circulation by enhancing the ability of the blood to flow. It does this by enabling more of the

oxygen carrying hemoglobin to reach your capillaries where the cells can receive more oxygen. Medical research has found that many chronic inflammatory conditions coincide with impaired blood and oxygen circulation. Ozone Therapy is a powerful treatment for improving or preventing such conditions.

### Ozone Increases Your Antioxidant Quotient

Many people with chronic diseases have a deficiency in antioxidant defense capabilities. Ozone Therapy increases antioxidant protection and capabilities far more than your everyday Vitamin C. It accomplishes this by increasing the levels of antioxidant enzyme systems in your body helping the body to achieve an overall lowering and balancing of the oxidation levels, and thereby helping to bring the body back to a state of health.

### Detoxification

Ozone cleanses the body by oxidizing (neutralizing) toxins and facilitating the detoxification process in the liver and kidneys. Ozone can be very beneficial for liver support and help normalize abnormal liver function tests.

## What Can I Expect In An Ozone Therapy Session?

Autohemotherapy is one of the most common and effective ways Ozone Therapy is conducted. This process involves the removal of 6-12 ounces of blood via a sterilized system which is then contained in a sterilized container. Once the blood is collected, ozone is injected into the container, the container and the blood are mixed together gently, allowing the red and white blood cells to take up the ozone. The ozonated blood is then returned to the body via the sterilized delivery system. The entire process takes often less than 1 hour.

Other forms of Ozone Therapy include Ozone High Dose Therapy (OHT) or 10 Pass. This is when you are given a higher dose of ozone by way of more passes (the process of the blood being removed from the individual, mixed with ozone and reintroduced to the body)

## Conditions that may benefit from treatment with Ozone Therapy include:

Cancer

Meniscal tears and joint disorders

Shingles (Herpes zoster) and Herpes Simplex

Herniated Discs

Diabetic ulcers and venous stasis

Allergies & chronic sinusitis

Lyme disease

Alzheimer's, senile dementia

Arthritis

Autoimmune diseases

Colitis and Crohn's

Tinnitus

Vaginal infections

Chronic hepatitis

Chronic Fatigue Syndrome

Fibromyalgia

Candidiasis and many more conditions

There are over 3000 medical references in the German literature showing the effectiveness and safety of ozone. In Europe ozone has been used for 50 years by over 10,000 physicians. In North America only a small number of Naturopathic and/or Medical doctors currently use medical ozone for treatment of disease.

**Intravenous ozone (major autohemotherapy).** Cancer, autoimmune diseases, herpes simplex and herpes zoster, Lyme disease, CFS, FMS, hepatitis: Ozone is infused into to blood via an intravenous route. This delivers the ozone/oxygen mix into circulation and every cell of the body has exposure to the mix. Healthy cells that have enzymes can break down ozone into oxygen. However, unhealthy cells such as cancer cells, viruses and bacteria do not survive as ozone exerts its strong oxidant effect on cell membranes essentially destroying them.

**Ozone injections.** Shingles, herniated discs, arthritis, sports injuries, joint disorders, meniscal tears and cancer: The area needing treatment is anesthetized and ozone is injected close to the affected nerve root for shingles, close to the herniated disc, into the affected joint for arthritis treatment and directly into the tumor site if accessible for cancer. This is where the powerful oxidant activity of ozone is put to use. For shingles, the virus resides in the dorsal root ganglion. A safe injection to the bony facets adjacent to the root ganglion (these injections are not into the spine itself) allows the ozone to oxidize the viral envelope and destroy the virus. For herniated discs, an Italian study of minimally invasive ozone injections showed success in over 70% of treatment cases.

**Rectal ozone.** Alzheimer's, colitis and Crohn's: Ozone gas is delivered into the rectum via a cunnula. Ozone concentrations are set according to the case. A11 higher concentration is administered when ulcerative colitis bleeding is

occurring and a lower concentration is used to directly repair the intestinal lining. In a study performed in Cuba with patients suffering from senile dementia of the Alzheimer's type, 76% of patients improved after only a month of ozone treatment.

**Instilled ozone (insufflation).** Vaginal infections are treated this way. Tinnitus and brain cancer are treated with direct instillation of ozone to the ear canal via ear buds.

**Bagged ozone.** Diabetic ulcers are treated using this method. The patient's legs are hydrated and bagged and ozone is pumped into the bag for 20 minutes. This treatment, along with IV EDTA chelation, is an incredibly effective technique for healing of diabetic ulcers and venous stasis and can even save limbs from amputation.

**Anti-cancer benefits:** Medical ozone is such a wonder for treatment of cancer in that it doesn't harm healthy cells but it oxidizes and destroys unhealthy cells including cancer cells, viruses, bacteria, fungal cells and other unwanted cells. How does it affect only the unhealthy cells? Ozone (O<sub>3</sub>) is broken down in the blood to a single oxygen and hydrogen peroxide by normal cells in the tissues of the body by enzymes such as catalase. Malignant cells lack these enzymes and ozone oxidizes the outer layer of their cells and causes tumor cell destruction (lysis). This has been demonstrated in the prestigious Journal of Science, Vol. 209, Aug 22, 1980. in a paper entitled "Ozone Selectively Inhibits Growth of Human Cancer Cells." Human lung, breast and uterine cancer cell growth was inhibited more than 90 per cent at non-toxic ozone doses.

"Even for cancer, there is only one prime cause. Summarized in a few words, the prime cause of cancer is the replacement of the respiration of oxygen on normal body cells by a fermentation of sugar." Dr. Otto Warburg, 2 time Nobel Peace Prize in Medicine recipient.

**Anti-viral, antibacterial and antifungal effects:** Ozone disrupts the viral capsid and the viral reproductive cycle by interrupting the virus-to-cell contact with peroxidation. Bacteria are destroyed as ozone first oxidizes their fatty cell wall due to bacteria lacking enzymes to break down peroxide. Ozone inhibits fungal cell growth at certain stages. The FDA and EPA say that ozone destroys 99.9992% of all pathogenic germs and 99.9992% of all pollutants in water.

Ozone enhances immunity.

Ozone improves oxygenation of portal and peripheral blood and possibly of intestinal lymph.

Ozone reduces the volume of herniated disks alleviating nerve root compression and pain.

Ozone is anti-inflammatory and improves the quality of joint surfaces essentially correcting joint disorders, including meniscal tears and arthritis.