

OZONE THERAPY

WHAT IS OZONE THERAPY?

OZONE AS A THERAPY

Medical Ozone is always a mixture of purest oxygen and purest Ozone.

According to its application, the Ozone concentration can vary between 1 and 100 mcg/ml (0.05 – 5% O₃). A trained physician determines the correct dosage according to the medical indication and the patient's condition.

PROPERTIES AND EFFECT

Medical Ozone has bacterial, fungicidal and virocidal properties and is widely used as a disinfectant.

Its ability to stimulate the circulation is used in the treatment of circulatory disorders.

When administrated at low concentrations, the body's resistance is mobilised, ie: Ozone (re)activates the immune system.

As a response to this activation through Ozone, the body's white cells produce protein messengers called cytokines (including important mediators such as interferons or interleukins). These inform other white cells, setting off a cascade of positive changes throughout the immune system, which is stimulated to resist diseases. This means that the application of medical Ozone is useful for immune activation in patients with low immune system activity.

Small quantities of Ozone applied in what is called "major autohaemotherapy" (external treatment of the patients blood before reinfusion) consequently activate the body's own antioxidants and radical scavengers. It is thus possible to understand why Ozone is used in diseases that involve inflammation.

INDICATIONS

Thanks to its selective properties, medical Ozone is used in several diseases.

1. The treatment of circulatory disorders, also in the field of age related diseases.
2. The treatment of diseases produced by viruses such as liver disease (Hepatitis) and herpes.
3. The treatment of infected, badly healing wounds and inflammatory processes, such as:
 - i) open ulcers on the legs (Ulcus Cruris)
 - ii) inflammatory intestinal conditions (Colitis and Proctitis)
 - iii) burns, scalds and infected wounds, fungal infections and others
4. Chronic Fatigue Syndrome.
5. Cancer, as an adjunct to other treatment modalities which stimulate immune function.

As an additive or complementary therapy in various types of cancer, Ozone is applied for general immunoactivation as low dosages in the form of "major autohaemotherapy" (reinfusion).

FORMS OF APPLICATION

NOTE: In any form of Ozone therapy, the breathing in of Ozone is forbidden.

Many decades of experience and a number of recent clinical studies have shown that the following three application methods are valid for Ozone:

1. Major autohaemotherapy (treatment of the patient's blood outside the body before re-in fusion) in age related conditions, for revitalisation, in the treatment of circulatory disorders and virus-caused diseases and for general immunoactivation.

By this method, 50 to 100ml of the patient's own blood is withdrawn in the normal manner, enriched externally with a defined quantity of Ozone (with disposable sterile material and bottles). The Ozone reacts completely ie: at a rate of 100% with specific substances making up the red and white blood cells and thereby activates their metabolism. It is this activated blood (not Ozone or oxygen) that is reintroduced into the patient's blood stream by intravenous drip.

2. External treatment is primarily achieved through a closed system using O₃ gas fed into plastic "boots" for the legs and feet, or bags, foils etc fitting various parts of the body. These are made of Ozone resistant materials. The parts of the body to be treated have previously been moistened with water as Ozone cannot act on dry areas. Other forms are ozonized pure water (eg: in dental treatments) and ozonated olive oil (for skin eruptions such as eczemas, psoriasis and conditions involving moulds, fungi).
3. O₃ gas application via the rectal route is not as inconvenient as it sounds (medically this is called insufflation). In fact, the patients feel nothing, as the O₃ gas is absorbed by intestinal membranes. In addition, the disposable tube is lubricated, which makes the method hygienic and practical as patients can apply it themselves. This method is indicated for inflammatory conditions of the intestinal tract, but is finding increasing use for general revitalisation processes.

IN WHAT DISEASES IS OZONE THERAPY USEFULLY APPLIED?

A whole number of pathological conditions exist which can be helped by Ozone. This has been confirmed by many scientific clinical studies. As a rule, medical Ozone is applied in addition to other therapeutic methods, i.e.: it belongs to the field of complementary medicine.

CIRCULATORY DISORDERS

In this therapeutic category, Ozone shows its greatest effect in circulatory disorders. This form of treatment has avoided amputations in a number of clinically recorded cases.

INFECTED WOUNDS

Open leg ulcers (Ulcus Cruris, bed sores) and burns can be treated by Ozone. Clinical studies have shown that gangrene can be helped.

AGE RELATED CONDITIONS

Thanks to its general revitalising capacity, including nerve and brain functions, Ozone can be used successfully for poor concentration, forgetfulness, general reduction in mental and physical performance, insecurity in walking (balancing problems) and dizziness or vertigo. Elderly persons in particular experience an improvement in well-being.

MACULAR DEGENERATION

O₃ can be used to help this condition.

INTESTINAL CONDITIONS

Inflammatory conditions of the large intestine such as colitis, fistulas and proctitis (inflammation of the rectum) can be helped. A local application of Ozone gas introduced via insufflation, can give relief.

VIRUS-PRODUCED DISEASES

A series of clinical trials have to demonstrate success in painful, virus-produced conditions such as Hepatitis and Herpes.

RHEUMATISM/ARTHRITIS

In the whole complex of "rheumatic/arthritis" conditions, all of which attack the skeletal and locomotory systems to a varying degree, Ozone can treat pain and inflammation. Repeated treatments can produce long term relief.

CANCER

In this context, it must be emphasised that Ozone is not a cure, it is only a complementary measure applied in addition to standard methods. Having said this, case histories have shown that Ozone can produce impressive results due to its function as an immuno-stimulatory agent.

WHAT SHOULD THE PATIENT KNOW?

Before undergoing any form of Ozone therapy, you should inform your doctor about any medication or special dietary measure you are taking or have been taking recently. You should only discontinue a regimen of this kind if your doctor advises you to do so.

Ozone therapy is low risk and usually applied as a complementary additive or restorative method ie: as an accompaniment to standard medical treatments.

OZONE THERAPY – A BRIEF SURVEY

EFFECT	MEDICAL USES
Activation of red blood cell metabolism = improved oxygen supply	→ arterial circulatory disorders (peripheral and cerebral in particular) revitalisation
Activation of immune cells = the body releases its own vital cytokines, such as interferons and interleukins	→ additional/complementary therapy in various kinds of cancer. Revitalisation and general immune weakness
Increase and activation of the body's own antioxidants and radical scavengers	→ inflammatory processes, eg: Arthritis, reactivated Arthrosis, vascular conditions; age-related processes.

OXIDATIVE THERAPY

PATIENT INFORMATION

WHAT IS OXIDATION?

Most biochemical reactions in the body are balanced through redox mechanisms. Redox means (red)uction (ox)idations. Any time a substance is reduced (chemically changed) something else must be oxidised (chemically changed the other way) for the reactions to stay on balance. Oxidation, for example is the process which causes rust (slow oxidation) and fire (rapid oxidation).

In the body, some types of oxidation are thought to be harmful as they produce Free Radicals (patients can take Vitamins C and E to help reduce Free Radical formation). We know there can be no life if oxidation does not occur. Oxidation is the process through which the body converts sugar into energy. The body also uses oxidation as its first defence against bacteria, viruses, yeasts and parasites. Even breathing *oxygen* is an oxidative process. Without *oxygen* for more than a few seconds, serious consequences result. Without oxidation we die very quickly. When we use the principles of oxidation to bring about improvements in the body it is called a therapy, referred to as Oxidative Therapy.

The patient is usually checked in one to three months to evaluate the benefits and to determine if additional treatments are necessary. Some patients, especially with chronic illnesses may need to take follow-up treatments, in a series of five to ten, or may need maintaining indefinitely on a regular monthly schedule. As many as fifty treatments have been administered to patients without complications. An experienced physician must decide how *many* treatments are necessary in each individual case.