

Ozone Therapy: Beyond Oxygen
The Most Needed Adjunct to Veterinary Medicine
Introduction of Ozone

Margo Roman, D.V.M., CVA, COT, CPT
MASH Main St Animal Services of Hopkinton
Hopkinton MA 01748 www.mashvet.com

- OZONE is a trivalent oxygen molecule. Three O₂ + electrical spark/ lightning= 2 O₃. It is very reactive and will return to 3 O₂ molecules giving high levels of O₂. Healthy cells need Oxygen
- Ozone is one of the most beneficial substances on this planet, and the BAD science you hear quoted on the news every night is causing you to subconsciously be afraid of nature, and therefore, a part of life itself. They tell you that somehow hydrogen plus nitrogen or sulfur equals ozone. H + N + S = O₃? Not on this planet it doesn't! What is ozone? Simply, oxygen. Three atoms of nature's oxygen. It exists in a very active form for about 30 minutes before breaking down into two atoms of regular oxygen - by giving up one atom of singlet oxygen. Where does ozone come from? Nature. And nature is efficient. The new growth in the forests, the trees, the grass on your front lawn, and the plankton in the ocean are continually creating oxygen.

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- If you have seen *Inconvenient Truth*, the Al Gore documentary on Global warming, there is one scene that brings it all together. In one section he discusses the CO₂ levels over the Pacific Ocean. In addition to the original measurements that began in 1965, they were able to measure the levels from hundreds of years ago by taking samples from deep within glaciers. Gore shows a graph and needs to get on a mechanical cherry picker to show you the levels in 2006. The levels 5 years later go off the screen. We are now 9 years past that and we see the global changes and the CO₂ level going up as predicted.

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What this clearly shows is that we live in an anaerobic environment very different than 40 years ago. CANCER thrives on CO₂. Thus, if we live in an environment that has high CO₂, we can expect more cancer. Dogs and Cats age 6 times faster than we do, and their entire lives are lived within this high CO₂ level. Should we be shocked that 46% of dogs and 39% of cats are getting cancer? They are the canaries in the coal mine and are showing us what Cancer rates will be in Humans. The World Health Organization ("WHO") estimates that the rate of cancer in Humans will be 50% by the year 2020. We need to bring more oxygen to the tissues so they can respond.

Interestingly, in the news recently, they talked about how soft drinks, either diet or sugar based, increased heart attacks. If you are ingesting CO₂ every time you drink, it may be what causes inflammation. Whether it is your heart or any of your tissue, you are putting yourself in an anaerobic state. That should be contrary to homeopathy as well. Giving yourself an oxygen state must be positive and thus helps the vital energy move towards healing by giving it more oxygen.

- As you read this, oxygen is rising up into the atmosphere to where the ozone layer is. In the region of the ozone layer, our rising oxygen is bombarded by the sun's photo chemical energy in the form of ultraviolet (UV rays). The UV energy bombardment changes the oxygen from O₂ - two atoms of stable oxygen, into O₃ - three atoms of unstable active oxygen. We call this pure form of oxygen "ozone." Using up the UV rays to create ozone is how the ozone layer shields us from the harmful effects of the UV rays. This is all part of the natural process of life on this living biosphere called earth. The chemical formula for this is 3 O₂ > UV > 2 O₃.

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Bringing in Ozone therapy into a veterinary practice is one of the best and easiest ways to enhance therapies which we may already be practicing. Wherever we have inflammation there is an increase in CO₂ in the tissue, and oxygen would benefit healing in that location. After doing over 9,000 ozone treatments at my clinic, the overwhelming success is readily noticeable. Veterinary medicine can enhance the healing of the body and its tissues with ozone. It is affordable, easy to administer and potentiates our medicine. It brings down the inflammation and disinfects with oxygen and no harsh chemicals. One can actually see the change in the color of the venous blood after the administration of ozone. The blood turns more bright red because of the higher amount of O₂ in the blood.

A Brief History of Ozone

Discovery History of ozone

Ozone was discovered in 1785 by Dutch physicist Martinus Van Marum (1750-1837) as he perceived a peculiar odor that was generated near electrostatic machines.

It was not until May 1840 that the German chemist Christian Friedrich Schönbein (1799-1868) synthesized it.

In 1857 Werner von Siemens built the first superior induction tube with which Kleinmann made the first attempt to destroy microorganisms and also performed the first gas insufflations in animals and humans.

In 1870, the German doctor Lender published the first paper ever on practical biological effects relating to water disinfection. The discovery of the antimicrobial properties of ozone revolutionized medicine during this time as it would still be seventy years before the emergence of penicillin.

Nikola Tesla (1856-1943) a Serb born in Croatia and later a US citizen, patented his first ozone generator in 1896 and in 1900 founded Tesla Ozone Co., manufacturer of generators for medical use. Tesla was also the first to ozonate olive oil.

Medical Ozone in the 20th Century

United States

The first American therapeutic use of ozone was by Dr. John H. Kellogg in ozone steam saunas at his Battle Creek, Michigan sanitarium in 1880 as he wrote in his book, Diphtheria: Its Nature, Causes, Prevention and Treatment.

In 1929, a book called Ozone and its Therapeutic Action was published in the US listing 114 diseases and how to treat them with ozone. Its 40 authors were leaders in many of the prominent hospitals of the time.

In 1933, the decline of a promising treatment began as the discovery of penicillin and insulin rocketed the drug market forward. Ozone and other treatments slowly lost favor as pharmaceutical giants heavy influence on the medical culture began a shift in power that still exists.

Today, there are hundreds of medical doctors and veterinarians here in the US who use ozone to treat their patients every day

In 1979 the first AIDS patient treated with ozone by George Freibott.

In 1987, the Use of Ozone in Medicine was published by Dr. Rillings and Dr. Veibahn

In 2011, Dr. Frank Schallenberger started the American Academy of Ozonotherapy to educate professional and the public on the many issues of Ozone therapy in clinical medicine www.aaot.us . After 20 years of teaching ozone to doctors, dentist, naturopaths, acupuncturist, chiropractors, veterinarians and others he gave a professional organization and certification program.

In 2015, Drs. Rowen and Robins volunteered in Sierra Leona and trained and medical professionals how to treat Ebola with Direct IV ozone.

Germany

In 1926, Dr. Otto Warburg of the Kaiser Institute of Berlin declared that cancer was caused due to lack of cellular oxygen.

In 1935, Edwin Payr (Austrian-German) showed the wound healing effect of ozone. In Germany, after the outbreak of World War II, Dr. Wolf published "Medical Ozone," which is considered THE classic book on ozone therapy

Italy

Dr. Bocci did extensive research on Ozone throughout the 1950-2000

The World Congress Of Ozone and Oxygen Therapies was started to bring together a global vision of Ozone medicine .

Russia

In the 1970s the first communications from the Russians on the successful use of ozone in burned patients appeared. At the same time, in Minsk (Belarus), the first patients were successfully treated for bronchial asthma with ozonated steam inhalations.

The most enthusiastic students and researchers of ozone in this part of the world, have been scientists, members of the Central Laboratory of Scientific Research of the State Academy of Medicine of Nizhny Novgorod (former Gorki), under the direction of the academician Ramn B. A. Koroleva. There, in October 1977, the first experiment on dogs with ozonated saline solution was performed.

As the Russians studied the potential of ozonated saline, they also began to develop new methods for the application of ozone such as the use of ozone in the preservation ozone-and-dermatology of blood, blood ozonation and the infusion of ozonated saline during periods of post-operative and post-resuscitation. (Ozone Therapy Manual, Nizhny Novgorod, 2008. Translation from Russian into Spanish Adriana Schwartz)

1992, Burn victims were treated with ozone

.In 2005, the Russians were the first to record the use of ozone in dermatology and cosmetology

Cuba

In 1982, ozone was already used in Cuba in water disinfection and other environments. At that time the Cuban Ozone Center started doing research on medical applications of ozone in the National Center for Scientific Research (CNIC), the most experienced scientific institution in the country.

1990, they had success of treating glaucoma, conjunctivitis and retinitis pigmentosis. In 1992, the Ozone Research Center was created by the CNIC Department of Ozone.

Since 2009, ozone therapy has been applied throughout all of Cuba according to the Ministerial Resolution 261 issued by the Ministry of Public Health.

Ozone Therapy Throughout the World

The World Congress of Ozone and Oxidative therapy was held in Rome in 2013. There were 92 research paper in 23 languages and at the conclusion of the Congress the delegation was invited to the Vatican and got blessed by Pope Francis as ozone is used in all the hospitals in Italy

At present there are more than 40 national and international associations that bring together the professionals who practice this therapy, as well as indexed specialized journals, continuing training

courses and ozone conferences. In the US it is the American Academy Ozone Therapy (AAOT). There are also over 26,000 ozone therapists throughout the world.

Veterinary OZONE history in US

Dr. Marty Goldstein started to use Ozone in his Integrative Practice in early 1990s. Norma Ralston and JD Norris were using it as well.

Lyle Hassell an engineer was making adaption equipment for veterinary profession in 1990s. He designed a IV saline unit for veterinarians in 2003. He was using the Longevity ozone unit.

Drs. Tina Akin, Judith Shoemaker were doing Direct IV therapy.

In 2003, Dr. Margo Roman in used Ozone on her 26 year old horse Champ for Squamous Cell Carcinoma. She treated him both rectally and Direct IV. He lived 2 1/2 years after he was told by veterinarians on staff at Tufts University that he would be dead in 3 days. She started using Subcutaneous ozone on dogs and cats with the invention of the glass IV saline unit by Lyle Hassell. She started doing prolozone injections after attending Dr. Schallenberger's class in 2005.

Lectures on Ozone therapy have been done at AVMA, NAVC, AHVMA, Wild West, Prince Edward Island, Chulalongkorn Veterinary School in Bangkok, Thailand, and Nippon Veterinary School in Japan in 2006. After that lecture there are now 100 veterinary clinics in Japan doing ozone and the Japanese have their own organization

In 2011, a Ultraviolet Blood Therapy unit developed by Tom Lowe was prototyped to be used in veterinary medicine and trials done at MASH - Main Street Animals Services of Hopkinton. Over 1200 treatments have improved the cases.

In 2013, the Society of Ozone and Photonic Veterinarians started to bring vets together on Ozone and Biophotonic therapy www.sopvet.com

In February 2015, the World Veterinary Ozone Association was formed www.wvoa.org to bring veterinary ozone collaboration among practitioners.

Many Paths - Health & Well Being

www.spiritual-endeavors.org

13 Major Effects of Ozone On The Human Body

as reported by Dr. Frank Shallenberger

Considered one of the leading authorities on medical ozone, Dr. Shallenberger has done important work to support the hypothesis that ozone can have long-term positive effects on AIDS. He has also conducted workshops on the proper application of medical ozone at an International Ozone Symposium in Texas. He successfully treats patients with medical ozone via Major Autohemotherapy. The thirteen physiological effects are list below and are accompanied by a brief explanation.

1. Ozone stimulates the production of white blood cells. These cells protect the body from viruses, bacteria, fungi and cancer. Deprived of oxygen, these cells malfunction. They fail to eliminate invaders and even turn against normal, healthy cells (allergic reactions). Ozone significantly raises the oxygen levels in the blood for long periods after ozone administration; as a result, allergies have a tendency to become desensitized.

2. Interferon levels are significantly increased. Interferons are globular proteins. Interferons orchestrate every aspect of the immune system. Some interferons are produced by cells infected by viruses. These interferons warn adjacent, healthy cells of the likelihood of infection; in turn, they are rendered nonpermissive host cells. In other words, they inhibit viral replication. Other interferons are produced in the muscles, connective tissue and by white blood cells. Levels of gamma interferon can be elevated 400-900% by ozone. This interferon is involved in the control of phagocytic cells that engulf and kill pathogens and abnormal cells. Interferons are FDA approved for the treatment of Chronic Hepatitis B and C, Genital Warts (caused by Papillomavirus, Hairy-cell Leukemia, Karposi's Sarcoma, Relapsing-Remitting Multiple Sclerosis and Chronic Granulomatous Disease. Interferons are currently in clinical trials for Throat Warts (caused by Papillomavirus), HIV infection, Chronic Myelogenous Leukemia Leukemia, Non-Hodgkins Lymphoma, Colon tumors, Kidney tumors, Bladder Cancer, Malignant Melanoma, Basal Cell Carcinoma and Leishmaniasis. While levels induced by ozone remain safe, interferon levels that are FDA approved (and in clinical trials) are extremely toxic.

3. Ozone stimulates the production of Tumor Necrosis Factor. TNF is produced by the body when a tumor is growing. The greater the mass of the tumor the more tumor necrosis factor is produced (up to a point). When a tumor has turned metastatic, cancer cells are breaking off and being carried away by the blood and lymph. This allows the tumor to take up residence elsewhere in the body, or in other words, divide its forces. These lone cancer cells have little chance of growing due to the TNF produced to inhibit the original tumor. When the tumor is removed surgically TNF levels drop dramatically and new tumors emerge from seemingly healthy tissue.

4. Ozone stimulates the secretion of IL-2. Interleukin-2 is one of the cornerstones of the immune system. It is secreted by T-helpers. In a process known as autostimulation, the IL-2 then binds to a receptor on the T-helper and causes it to produce more IL-2. Its main duty is to induce lymphocytes to differentiate and proliferate, yielding more T-helpers, T-suppressors, cytotoxic T's, T-delayed's and T-memory cells.

5. Ozone kills most bacteria at low concentrations. The metabolism of most bacteria is on average one-seventeenth as efficient as our own. Because of this, most cannot afford to produce disposable anti-oxidant enzymes such as catalase. Very few types of bacteria can live in an environment composed of more than two percent ozone.

6. Ozone is effective against all types of fungi. This includes systemic Candida albicans, athlete's foot, molds, mildews, yeasts and even mushrooms.

7. Ozone fights viruses in a variety of ways. As discussed above, ozone also goes after the viral particles directly. The part of the virus most sensitive to oxidation is the "reproductive structure." This is how the virions enter the cell. With this structure inactivated, the virus is essentially "dead." Cells already infected have a natural weakness to ozone. Due to the metabolic burden of the infection the cells can no longer produce the enzymes necessary to deal with the ozone and repair the cell.

8. Ozone is anti-neoplastic. This means that ozone inhibits the growth of new tissue because rapidly dividing cells shift their priorities away from producing the enzymes needed to protect themselves from the ozone. Cancer cells are rapidly dividing cells and are inhibited by ozone.

9. Ozone oxidizes arterial plaque. It breaks down the plaque involved in both Arteriosclerosis and Arthrosclerosis. This means ozone has a tendency to clear blockages of large and even smaller vessels.

This allows for better tissue oxygenation in deficient organs.

10. Ozone increases the flexibility and elasticity of red blood cells. When one views a red blood cell under a microscope, it looks like a disc. In the capillaries, where they pick-up (lungs) and release (tissue) oxygen, these discs stretch out into the shape of an oval or umbrella. This aids their passage through the tiny vessels and makes the exchange of gas more efficient. The increase in flexibility of the RBC's allows oxygen levels to stay elevated for days, even weeks after treatment with ozone.

11. Ozone accelerates the Citric Acid Cycle. Also known as the Krebs's Cycle or TCA Cycle, this is a very important step in the glycolysis of carbohydrate for energy. This takes place in the mitochondria of the cell. Most of the energy stored in glucose (sugar) is converted in this pathway.

12. Ozone makes the anti-oxidant enzyme system more efficient.

13. Ozone degrades petrochemicals. These chemicals have a potential to place a great burden on the immune system. They also worsen and even cause allergies and are detrimental to your long-term health.

Submitted by Dennis Richard of www.drhealth.com

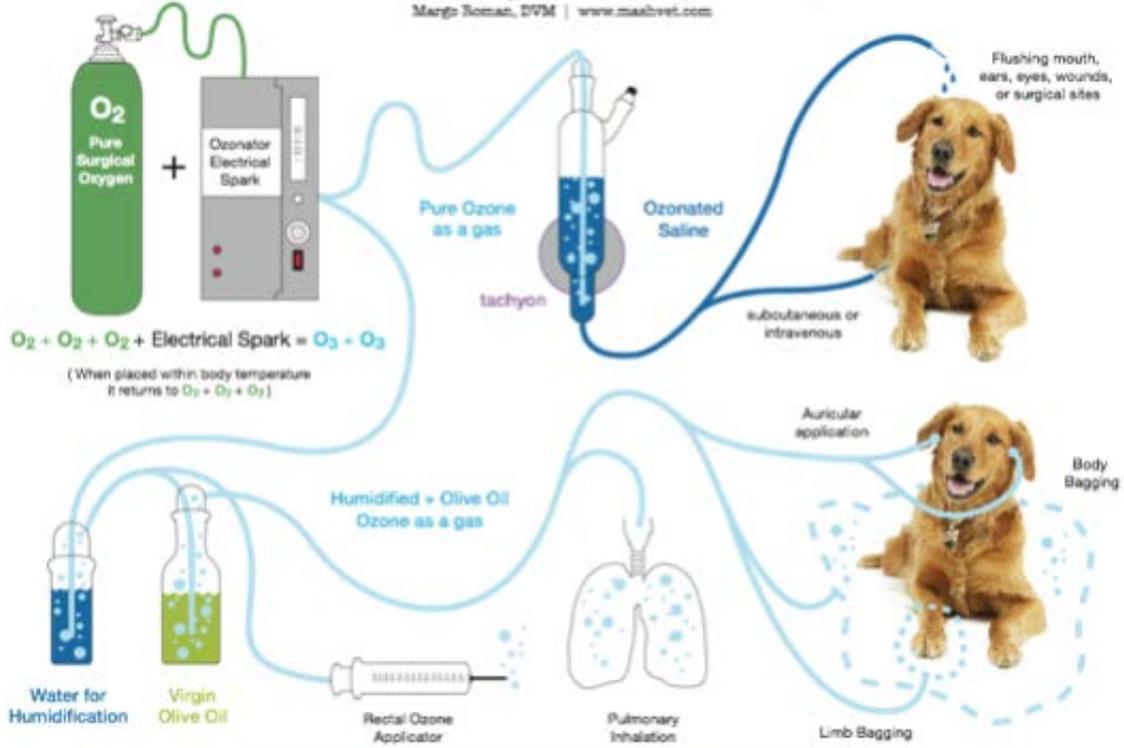
Ways of Administration:

1. Saline 0.9% percolated with Ozone
 - a. Subcutaneous fluid given to patients which gets into the blood stream and through the blood brain barrier
 - b. Flushing external wounds
 - i. hot spots, bite wounds, infected and slow healing wounds, post-surgical areas
 - c. Flushing gums and mouth before, during and after dentals with or without extractions.
 - d. Flushing eyes and other orifices
 - i. eye injuries and infections
 - ii. vaginal and preputial infections
 - e. Flushing and cleaning ears. To use as an ear cleanser
 - f. Flushing infected surgical sites including abdominal contamination
 - i. lavaging the abdomen with ozonated saline when contamination
 - ii. flushing intestinal incisions, enterotomies and intestinal anastomosis
 - g. Flushing urinary catheterized animal to bath the bladder and cleanse surface and help flush out calculi
 - h. While taking a culture of the urine in the bladder, after removing sample, inject ozonated saline directly into the bladder.
 - i. Giving the ozonated fluids over an area that is sore or bruised and then doing your acupuncture/aquapuncture through that fluid, and help driving the ozone as it is pushed through with the needle
 - j. Giving the ozonated saline as an IV treatment and running some Ozone gas directly into the line for a higher percentage
 - k. Using with Biophotonic or Ultraviolet blood therapy for a higher level of both Light Photoluminescence and O₃
 - l. Stomach lavage after ingestion of toxic material
 - i. lavaging through a stomach tube, chocolate or other substances that can be removed through stomach pumping

- ii. After bloat or gastric volvulus to reduce the toxic effects of the endotoxins on traumatized stomach
 - m. As an enema for both cats and dogs. It will bring down the irritation of the colon from the constipation and some of the pain of the procedure.
 - i. lavaging multiple times can cool the animal and can be used for hyperthermia
 - k. Bagging limbs and flushing areas that have infections or inflammation
 - i. interdigital infection, toe infections, wounds, pyoderma, malassezia, tumor
2. Insufflated rectally, it will be bubbled through water to add moisture. Keep the tail tucked and sealed over the anus to prevent the gas from escaping for about 10 minutes
 - a. For whole body administration
 - b. To get into an inflamed colon
 - c. Direct uptake into the caudal mesenteric vessels into the liver
 - i. for hepatitis and pancreatitis
 - d. Delivered when there is a concern for cooling temperature of the saline.
 - e. Delivered when there is a blood pressure or concern about too much fluid retention due to the saline
 - i. with cardiac cases
 - ii. hypothermic patients
 - iii. animals on blood pressure medications
 - iv. To give a higher amount of Ozone without the carrying fluid
 3. Ozonated air bubbled through water and virgin olive oil
 - a. Auricular Bagging or through a stethoscope
 - b. All the above limb bagging for a lessened ozone odor and lung irritation
 - c. Whole body bagging
 - d. Whole animal placed in a close cage
 - e. Any time you have others in the room as to lessen the smell and possible reaction
 4. Ozonated water
 - a. Drinking directly after making
 - b. Washing off your tables due to virus and bacteria
 - c. Giving as a water source after dentals
 - d. Putting it into your water source for you dental cavitron to flush under gum line and reducing the mouth biofilm
 5. Intravenous treatments
 - a. In Horses, IV catheter placed in jugular vein small with 25 gauge needle, bubbled as a pure O₃ gas toward heart slowly
 - b. Also given with ozonated saline charged
 6. Ozone as a gas as a 5 setting 61 gamma
 - a. Injected into a tumor
 - b. Injected into an infected area
 7. Ozonated olive oil or other oils: Jojoba, olive
 - a. Can purchase products that have been ozonated for a week
 - b. Can generate ozonated olive oil by ozonating organic virgin olive oil for about 50+ hours and keep it in refrigeration.
 - c. Better to make it up in small glass dropper bottles.
 - d. Can add before or after essential oils of lavender, frankincense, neem
 - e. These can be applied topically and to gums
 - f. Can be applied as a rectal suppository for rectal inflammation and tumors

Ozone Therapy

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Margo Roman, DVM | www.maabvet.com



Keep a window open for ventilation during treatment as O₃ may irritate the lungs

Drawing permitted by Margo Roman