



zone: a wide-spectrum healer

article by gary null, ph.d.

"It is my
belief that the use
of ozone
in association with
other
complementary
therapies
can convert AIDS
from a
uniformly terminal
illness to
something that is
chronically
manageable,
which is
better than what
anyone
else can offer at
this point."

—Dr. John Pittman,
medical director,
The Carolina Center
for Bio-Oxidative
Medicine

painting by dianna vandenbergh

Many feel it to be the most promising, safe, and generally efficacious treatment for major degenerative diseases, from AIDS and chronic fatigue to cancer and arthritis. It's ozone—medical ozone. Medical ozone differs from atmospheric ozone in that it is pure and concentrated. This is an important distinction because atmospheric ozone, produced from ultraviolet radiation, is combined with different nitrous-oxide and sulfur-dioxide products and is harmful. It's not used in medical practice.

Ozone (O₃) is produced by the reaction of oxygen (O) atoms with molecular oxygen (O₂). This allotrope (different form) of oxygen possesses unique properties that, while they have yet to be completely defined and understood, have been benefiting clinical practice for years—albeit mostly in Europe. Most of the states in this country have yet to legalize use of the healing powers of this nontoxic molecule.

Of course, lack of official acknowledgment in no way negates the properties of any natural substance. Ozone

ly use the treatment for a wide variety of conditions, including wound problems, gastrointestinal disorders, cancer, and AIDS. Doctors report particular success with the different types of hepatitis, as well as candida, allergies, and bladder infections. Other disorders treated with ozone therapy include herpes, arthritis, respiratory conditions, multiple sclerosis, other sexually transmitted diseases, and parasitic conditions. And this is just a partial list.

What's more, while ozone can be used to treat a wide spectrum of conditions, it can also be used prophylactically to combat harmful viruses, bacteria, and free radicals before degeneration and disease occur. Additionally, healthy people can use ozone to rejuvenate cells to stay younger longer. As science reporter Nathaniel Altman, author of *Oxygen Healing Therapies* (Health Arts Press), observes, it is unusual that one substance can treat such a tremendous range of conditions.

"First of all," Altman begins, "it stimu-

also increases the effectiveness of the antioxidant enzyme system, which scavenges excess free radicals in the body. These are just some of the things that it does."

HOW OZONE IS USED

There are several ways to dispense ozone for therapeutic purposes. One is to introduce the ozone mixture into a fixed volume of the patient's blood *ex vivo* (outside the body). This method is known as autohemotherapy, and is performed mainly in central Europe. A.H.T. is claimed to have therapeutic value in circulatory disorders, viral diseases, and cancer.

With A.H.T., 50 to 100 milliliters of blood are drawn from the patient, mixed with a dose of ozone and oxygen of a predetermined concentration, and then returned via the same intravenous catheter. Once it's returned to the patient, the ozonized blood is rapidly distributed to all tissues. While it is not known how long the ozone remains in solution, its therapeutic effects have been seen to include virucidal activity, oxygenation, and increased red-cell fluidity.

Some patients, upon receiving their own ozonized blood, report a faint background taste of ozone, which may be a sign of the ozone surviving in the solution for at least a few seconds. Of interest, notes Dr. Gerard V. Sunnen, of New York University-Bellevue Hospital Medical Center, in *The Journal of Advancement in Medicine*, are reports of A.H.T. patients who experience feelings of well-being lasting for a few minutes to several hours after treatment. Sunnen does not know if these feelings constitute a placebo effect, a metabolic alteration, or a neuropsychiatric phenomenon.

Another commonly used form of administration is rectal insufflation. Essentially, a catheter is put into the colon and gas from an ozone machine is allowed in at a determined concentration and flow rate. The ozone can also be self-administered this way, with a Teflon bag.

Beyerle, who is certified by the German Medical Ozone Society, studied the rectal-insufflation method of delivering ozone therapy in Germany with Dr. Klaus Rilling, one of the pioneers in the field. Beyerle explains, "The blood vessels in the colon, small intestine, and bladder are the mesenteric veins, which deposit into the portal vein and go straight to the liver. The simple introduction of the catheter into the colon, at a low flow rate to increase concentration, gets ozone into the systemic venous system. Rilling says that if nothing else is done but rectal insufflation, which does not really require a physician at all, you see dramatic results."

"There's too much money being made in medicine for certain companies to allow something so inexpensive ... to be introduced."

manifests bactericidal, virucidal, and fungicidal action, which may make it a treatment of choice under certain conditions and an adjunct to treatment in others. Some of its characteristics and applications are described by Dr. Stanley Beyerle, a naturopathic physician who trained with some of the pioneers of ozone research and treatment.

"Systematically," Beyerle says, "it oxidizes organic compounds. Topically, it can be used to treat burns. Ozone has hemostatic effects that stop bleeding. It accelerates wound healing, induces enzyme production, and activates immune-system response. It is also believed that ozone may have the ability to peroxidize lipids [break up fats]."

As early as World War I, ozone's bactericidal properties were used to treat infected wounds, mustard-gas burns, and fistulas, although these treatments were limited by the technology at the time. Current ozone therapy uses a mixture of ozone and pure oxygen, and with today's medical ozone generators, the ability now exists to deliver pure ozone-oxygen mixtures in precise dosages. The Medical Society for Ozone, based in Europe, and the National Center for Scientific Research, in Havana, current-

ly use the production of white blood cells and increases the production of interferon, interleukin-2, and tumor necrosis factor, which the body uses to fight infections and cancer. It is anti-neoplastic, which means that it inhibits the growth of tumors. One study performed at Baylor University in Texas, in 1962, determined that ozone can help to kill tumors and enhance the effect of different types of antitumor drugs.

"Ozone kills bacteria and viruses. In addition, it increases the amount of oxygen in the blood and helps deliver oxygen to all of the cells in the body. It also helps degrade petrochemicals. This includes different toxins that one might have in the body due to the environment or food eaten. It helps dissolve and eliminate them from the body, and hence lightens the body's toxic load. It also increases red-blood-cell membrane distensibility, making it more flexible. This is one way it is used in the treatment of heart disease. The administration of ozone changes the blood formation and helps the blood flow more effectively. In Cuba, for example, there's an ozone generator in every major hospital emergency room. It helps heart patients and stroke victims recover much quicker. It

Positive therapeutic effects on diseases of the rectum and colon have been noted with this method since 1936. Beyerle has seen people recover from irritable-bowel syndrome, colitis, and Crohn's disease, almost immediately. "There may be some initial discomfort," Beyerle says, "some bloating and gas on occasion, but as far as irritations, we have yet to see any contraindications. If you've got colitis or irritable-bowel syndrome, when ozone is administered properly, there are no negative side effects, only positive ones. It renews the mucous lining and gets to the bacterial infestation that has infiltrated the tissues of the colon."

Although ozone gas can be directly injected into veins or muscles—a process known as intra-articular or intravenous application—this method can be dangerous and is not recommended. Safer therapies involve drinking ozonized water or introducing ozone to the skin in a sauna bag, after a hot shower and a brisk rubdown.

The government won't fund ozone research, even though Cuban doctors find [it] cuts the severity of painful sickle-cell episodes in half.

OZONE AGAINST CANCER

Low concentrations of ozone have been proven to increase alpha interferon, an anticancer substance that laboratories all over the country are trying to reproduce. With ozone, the body will make its own. Beyerle elaborates on how he uses ozone in treating cancer, saying, "When I treat cancer, I want the body's immune response to take care of it and activate the immunological properties." Beyerle treats prostate cancer with an ozone protocol that he reports has yielded phenomenal results. His treatment includes taking five c.c.s of the patient's blood, mixing it with five c.c.s of ozone at a low concentration, shaking it up, aerating it, making sure it is saturated, and reinjecting it into the prostate. He performs five treatments over the course of 20 days, and the program shrinks prostatic tumors dramatically.

Beyerle states that most prostate cancer is contained until it is biopsied, and claims that often the spread of cancer within the body is due to overuse of biopsies. He prefers to check the prostate with ultrasound, and he feels that a big advantage of ozone is that it successfully treats this cancer while it is still encapsulated.

Beyerle reports major improvement using ozone for other types of cancers as well, including tonsillar, throat, ovarian, colon, and breast. "I have three breast-cancer patients now who were supposed to be dead a year ago," he says. Also, he is seeing improvement in breast-cancer patients where there is metastasis to the bones, liver, and spinal column. "We are seeing patients who were bedridden two years ago and sent home to die. They are becoming ambulatory. Their energy level is coming up. They are gaining weight. And we see these spontaneous fractures in the spine are gradually disappearing. Strength is returning to the musculature. There is no spinal pain."

H.I.V. AND AIDS

Recent studies support the use of ozone therapy for people who are H.I.V.-positive or have AIDS. In one study, Dr. Michael Carpendale treated two male H.I.V.-positive asymptomatic patients with colonic insufflations of an ozone-oxygen mixture intermittently for 180

weeks. Both patients increased their CD4 (T4) cell counts and one, after the 160th week, became polymerase-chain-reaction-negative. According to the doctor, both patients have remained in the best of health, with no infections and no adverse symptoms or malaise.

Carpendale's program consisted of insufflating ozone produced from a portable medical ozone generator through a Teflon catheter into the patient's colon. For two years the patients treated themselves daily, then weekly, with a booster dose. CD4 cell counts were monitored about every two months. Studies showed that low doses of ozone in serum stimulated cell growth, and larger doses began to suppress it. Furthermore, ozone was shown to reduce H.I.V. in serum, and did not adversely affect healthy cells.

In another study, Carpendale and other researchers used colonic insufflations of medical ozone to treat five AIDS or AIDS-related-complex patients with intractable diarrhea. Treatments were given daily for 21 to 28 days, with doses of ozone ranging from 2.7 to three milligrams. Three patients, whose diarrhea was of unknown cause, experienced complete resolution; the fourth

improved markedly. The fifth patient, whose diarrhea was due to cryptosporidium, experienced no change. No adverse systemic effects were noted during treatment. Carpendale and his colleagues feel that the results of the study reinforce the findings of previous research on colonic-insufflation ozone therapy—i.e., that it is simple, safe, and effective. Further, they assert that the treatment should be used routinely to treat chronic intractable A.R.C.-AIDS diarrhea.

H.I.V. reversal is no small matter. Altman explains, "When I was in Cuba, I interviewed one of the chemists doing research on the subject. She said if a person infected with H.I.V. receives ozone before it gets into the lymphatic and bone systems, H.I.V. can be killed and stopped right on the spot."

In Germany, H. Vetter, a naturopathic practitioner, studied the results of ozone therapy with 100 patients in different stages of AIDS. He concluded, "None of the patients developed any new opportunistic infections or deteriorated, compared to their initial condition. Other infections occurred and were overcome, as in the H.I.V.-negative population." Vetter reported that H.I.V.-positive patients need high concentrations of ozone, and that added vitamin C enables a patient to tolerate this without the risk of hemolysis (the breakdown of red blood cells). Success was also attributed to uninterrupted ozone administration, and slow reinfusion of ozonized blood.

Various protocols have been developed for treating AIDS patients with ozone. One doctor recommends 12 treatments on 12 consecutive days. "Virtually all the people I have treated—and I have treated over 170—have reversed their condition within days," he reports. "People come in on a stretcher, and within days their general condition dramatically improves." This doctor strongly believes that with AIDS, ozone is the most important modality of all, because it removes infections and that, at least in Western countries, AIDS is a conglomerate of 30 or more infectious diseases—the result of drug use or malnutrition.

ANTI-AGING

An important benefit of ozone is that it increases the effectiveness of the antioxidant enzyme system, which scavenges excess free radicals in the body. Free radicals are molecules with unpaired electrons in their outer ring. Their structure enables them to latch on to other molecules and damage cells, tissues, and organs. Once this occurs, they weaken physical vitality and can damage body systems, including the neurological, cardiovascular, and immune systems.

Unlike bacteria, viruses, and parasites, which can co-exist with the body, free radicals only damage the system, causing a variety of symptoms and degenerative conditions. According to Dr. Lamar Rosquist, free radicals contribute to more than 60 diseases or health-related symptoms, ranging from aging of the skin to chronic fatigue to damage of cell membranes, leading to cell destruction, which leads to damage to D.N.A., which can cause precancerous conditions.

Some doctors envision ozone being used by the general population for its rejuvenating effects. One doctor, from a state in which ozone use is not approved, says, in fact, "This is the main application I would like to use it for in the future."

This doctor goes on to explain his enthusiasm for ozone as an anti-aging factor, saying, "Ozone, first of all, has what I have called the homeopathic ozone effect. This reverses most latent overt aging factors and disease processes that happen in the body that you don't even know about. In a six-

cerned ... many researchers say that a person is as old as the immune system. If you can have a perfectly young immune system, the rest of the body will follow suit, and you will be as young as your immune system again."

ONE PART OF THE PICTURE

Clinicians usually recommend ozone as part of a larger holistic protocol in the treatment of seriously ill patients. Thus, it is a supplemental therapy used in conjunction with other treatment modalities. As Dr. John Pittman explains, "I rarely give ozone treatments unless they are combined with some other supportive therapy. Admittedly, the shortcoming of doing this is that you don't always know which component is most beneficial. But I certainly know from experience which things generally help the most. Combining ozone with proper dietary therapies and addressing other cofactors, particularly in the G.I. [gastrointestinal] tract, you can see tremendous changes in a person's constitution. Their blood work can turn around, and it definitely can improve the

option. In fact, most states prohibit the use of ozone therapy, the rationale being that researchers must first prove that the process will not harm people. The fact that it has been used safely in Europe for decades doesn't seem to count.

Funding for research is continually denied by the National Institutes of Health, while exorbitant sums are earmarked for less effective, but more conventional, treatments. The situation doesn't seem to make sense. For instance, State University of New York virologist Bernard Poesz has found that ozone could be used for "almost seemingly complete destruction" of H.I.V. without affecting blood protein, yet the N.I.H. has refused funding, saying it was not a priority. Dr. Kwaku Ohene-Frempon, head of the Children's Hospital Sickle-Cell Center, in Philadelphia, says that "ozone kills bacteria" and "supplies a lot of oxygen to tissues that need to be repaired." In the United States alone, 72,000 people suffer from sickle-cell anemia, and the N.I.H. spends about \$70 million a year to try to alleviate the disease. However, it will not fund ozone research, even though Cuban doctors find that ozone cuts the length and severity of painful sickle-cell episodes in half. Nor will research on ozone for diabetic conditions be funded, despite the fact that Germany has been healing diabetic wounds with ozone for quite some time.

Beyerle expresses the sentiments of the frustrated practitioners. "Extensive studies have been done in other countries," he points out. "It amazes me to see the literature that is being published and utilized in Germany and Europe but has failed to appear in literature or clinics in this country.

"In my opinion, it's all politics," he continues. "It starts at the beginning with our F.D.A., which is tremendously influenced by our drug companies. Drug companies give almost 80 to 90 percent of funding for medical schools. That's a fact. If drug companies have an influence on medical schools and medical research, then this information will never get there. Ozone's cheap. All you need is pure oxygen, an ozone generator, and the proper training. I just recently met with two professors from Frankfurt [who have been] using ozone with cancer for over 15 years, and having spectacular results. Why isn't it here? We have a medical mafia. There's too much money being made in medicine for certain companies to allow something so inexpensive and so worthwhile to be introduced."

Overseas, the picture is different. Medical ozone is used in Germany, Austria, Switzerland, Italy, Russia, and Cuba. In England and France, while they don't use ozone medically, they do treat drinking water with it.

Not long ago, at the 12th World Congress of the International Ozone

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month period, after just one ozone application, virtually every single person tells me of dramatic improvements.

"The second thing is the immunomodulating effect of ozone and the reduction of allergic factors. An allergy is an accumulation of fluid. It prevents you from absorbing nutrients, and causes other symptoms. Any person who has significant allergies is in a constant state of nutritional deficiency.

"Third, it reverses the cross-linking of the collagen and reduces the aging pigment. ... By reversing those things, it will restore the elasticity in all tissues.

"It removes the arterial plaque the same way it removes plaque in the pipes of heating and air-conditioning systems. It also removes the fibrin in the veins by breaking it down to pieces that are recognized by the macrophages and then scavenged away. Indirectly, it works like a Roto-Rooter by changing unnecessary fibrin deposits or arterial plaque to a point from which both the arteries and veins are cleaned out. Obviously, if you have more circulation to all parts of your body, all toxins can be removed and every cell of the body functions better.

"As far as immune modulation is con-

quality of life of an individual, as well as the length of their life."

It's Pittman's observation that the best benefits occur when ozone is taken on a daily basis. "The half-life of ozone is 45 minutes," he says. "After that time, it breaks down into oxygen. In the meantime, what it's really doing is transferring its high-energy electron to other elements in the blood and producing various peroxide formations that are continuing this oxidative effect. The powerful oxidative effect appears to last 24 hours, making a daily treatment the most effective way of using ozone."

OBSTACLES TO OZONE'S USE

While ozone is without doubt a wide-spectrum healing modality, in this country it is also widely ignored and even suppressed. Altman surmises that "because these elements are very available and also non-patented, the pharmaceutical industry has not been very happy with them." Because it isn't as easy to make money with ozone as with patented drugs, there has been no impetus for private companies to do expensive studies of its effectiveness. The unfortunate result: The general public is simply unaware of medical ozone as an

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Association, in Lille, France, research papers were presented that covered many areas in which medical ozone has proven of value. Heart disease was one; ozone treatment was shown to improve the status of patients with ischemic cardiopathy, fostering diminution or disappearance of irregular heart rhythms, decreases in coronary failure, and increased fitness levels. When used in the treatment of early-stage stroke, ozone also demonstrated benefits, according to a German study. Glaucoma was another condition for which scientists reported ozone's benefits, and central-nervous-system disorders were shown to be helped as well.

In orthopedics, ozone has a significant contribution to make, as reported by C. H. Siemsen, of Buxtehude, Germany. He stated, "The application of medical ozone in acute and chronic painful diseases of the joints is an alternative method of treatment for obtaining rapid pain relief, decongestion, subsidence of effusion, a reduction in temperature, and an increase in motility." Siemsen reported that a number of therapy-resistant painful joint conditions were recently treated with ozone for the first time, not-

ing that the treatment is a low-risk one.


The Cubans, in particular, seem to be keeping abreast of ozone's possibilities. The Ozone Research Center at the Cuban National Center for Scientific Research recently investigated the cholesterol-lowering effect of the substance. Cuban researchers reported ozone's positive effect found on cholesterol metabolism, as well as in the stimulation of the antioxidative defense system. Other researchers from Cuba reported on clinical improvements in humoral immunity for children who received ozone treatments.

Children with hearing loss benefited from ozone, too, according to Cuban researchers. In a double-blind study with 34 children, hearing loss was reduced in the ozone-treated group. Ozonized oils were used in still other Cuban studies to successfully treat candidiasis, a fungal infection, and giardiasis, a parasitic condition.

Other reports at Lille concerned ozone's use in dermatology, and its disinfectant uses in oral surgery.

But ozone's problems with the medical establishment were not ignored at the Lille symposium. V. Bocci, of the University of Siena Institute of General Physiology, suggested that the biological basis for ozone's therapeutic effectiveness needs to be further clarified.

Bocci acknowledged, too, that reports of ozone's benefits have at times tended toward the subjective and anecdotal; this is a consequence of the fact that clinical experience with ozone, although vast, has remained limited to private practice. He also acknowledges two other factors that have not worked in medical ozone's favor—unfortunately, some practitioners have used this modality improperly; and people are prejudiced against ozone because they confuse it with the pollutant type.

Despite these problems, Bocci's assessment of ozone therapy today was upbeat. The sense of his presentation was that this is a therapy that has already contributed much, and in the future it will benefit people even more. As the century draws to a close, the public is growing disenchanted with toxic and problematic "magic bullet" remedies, and more interested in holistic and natural approaches to health care. It's only a matter of time before ozone comes into its own. 

Editor's note: Please consult your physician before considering any ozone treatment. For more information on alternative treatments for AIDS and the uses of ozone, please contact: Dolores Perri, The Healing Center, 175 West 72nd Street, New York, N.Y. 10024; (212) 787-2404.