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**Ozone Therapy Proving Successful in COVID19 Patients**

**By Rhian King April 8, 2020**

**The Nuestra Señora del Rosario Polyclinica in Ibiza is the first in Spain to use the Ozone technique in treating Covid-19 patients, with success.**

In a press release the clinic said “Many patients who were about to be intubated and connected to mechanical ventilation have, thanks to ozone therapy, not only avoided it but improved to the point of not requiring oxygen with just a few treatment sessions.”

The clinic also stated that they are seeing improvements in patients after just ‘2 or 3 treatment sessions’. Ozone therapy has the benefit of improving oxygenation at the tissue level and therefore reduces the inflammatory response suffered by patients.

At the Santa María della Misericordia University Hospital in Udine, Italy, 36 patients with Covid-19 pneumonia who had respiratory failure were administered Ozone therapy. Only 3% required intubation compared to the usual 15%. …

**The First Patient**: A 49-year-old man who had already required ICU admission was deteriorating on the ward. He had deteriorated to the point that he required oxygen at the highest concentration and yet it was oxygenating his lungs poorly. Intubation and connection to a ventilator was planned, but surprisingly, after the first session of Ozone therapy, the improvement was significant and oxygen requirements could be decreased.

Dr. Alberto Hernández explained that “the improvement after the first session of Ozone treatment was spectacular. We were surprised, his respiratory rate normalized, his oxygen levels increased, and we were able to stop supplying him with as much oxygen since the patient was able to oxygenate himself. To our surprise, when we carried out an analytical control, we observed how Ferritin, an analysis determination that is being used as a prognostic marker in this disease, not only had not followed the upward trend, but had decreased significantly; that decline continued in the following days. This result encouraged us to administer it to other patients who are following the same improvement as our first patient. “

**We Will Help Other Hospitals**

Dr. Hernández said “Let no one hesitate to contact us in order to establish the appropriate circuits and structure to be able to incorporate Ozone therapy as soon as possible in the different hospital centers that wish to do so.”

From the Polyclinic Group, Francisco Vilás, its CEO, pointed out that “we will be happy to contribute and help any hospital that asks us for help, in such exceptional circumstances as those we are experiencing that we can contribute to help in this unfortunate pandemic. Full of pride, we will make our human and technical resources and our experience with Ozone therapy available to those who request it.”

# **Ozone therapy for patients with COVID-19 pneumonia: preliminary report of a prospective case-control study – MedRXiv,** posted November 28, 2020

Alberto Hernández, Montserrat Viñals, Asunción Pablos, Francisco Vilás, Peter J Papadakos, Duminda Wijeysundera, Sergio D. Bergese, Marc Vives – MedRXiv – Cold Spring Harb or Laboratory, GMJ Yale, The Preprint Server for Health Sciences, 11/28/2020

**Background** There is still no specific treatment strategies for COVID-19 other than supportive management.

**Participants** Eighteen patients with COVID-19 infection (laboratory confirmed) severe pneumonia admitted to hospital between 20th March and 19th April 2020….. **Results** Nine patients (50%) received ozonated autohemotherapy beginning on the day of admission. **Ozonated autohemotherapy was associated with shorter time to clinical improvement** (median [IQR]), 7 days vs 28 days…. In risk-adjusted analyses, ozonated autohemotherapy was associated with a shorter mean time to clinical improvement.

Google for 9-minute YouTube: ***Marc Seifer: Cure for Corona: Ozone Therapy***

This pandemic can end in 4-6 weeks if we can undertake Clinical Trials under the directorship of Dr. Howard Robins, Ozone Therapist from NYC who in 2014, cured Ebola in Sierra Leone with Ozone Therapy along with his medical colleague, Dr. Robert Rowen. See their article in **OZONE THERAPY FOR THE TREATMENT OF VIRUSES**, Healing Arts Press. For more information about setting up clinical trials in USA: contact: mseifer@verizon.net

**Ozone Produced By Antibodies During Bacterial Killing And In Inflammation**

*By Paul Wentworth, Ph.D & Richard A. Lerner, MD*

November 15, 2002 [*Article condensed Marc J. Seifer, Ph.D*. mseifer@verizon.net]

**Scripps Research Institute**, ***SCIENCE DAILY***

**SUMMARY: Professor Richard A. Lerner, M.D., Associate Professor Paul Wentworth, Jr., Ph.D., and a team of investigators at The Scripps Research Institute (TSRI) is reporting that antibodies can destroy bacteria, playing a hitherto unknown role in immune protection. Furthermore, the team found that when antibodies do this, they appear to produce the reactive gas ozone.**

Professor Richard A. Lerner, M.D., Associate Professor Paul Wentworth, Jr., Ph.D., and a team of investigators at The Scripps Research Institute (TSRI) is reporting that antibodies can destroy bacteria, playing a hitherto unknown role in immune protection. Furthermore, the team found that when antibodies do this, they appear to produce the reactive gas ozone.

"[Ozone] has never been considered a part of biology before," says Lerner, who is Lita Annenberg Hazen Professor of Immunochemistry and holds the Cecil H. and Ida M. Green Chair in Chemistry at TSRI. The report will appear in an upcoming issue of the journal Science.

The ozone may be part of a previously unrecognized killing mechanism that would enhance the defensive role of antibodies by allowing them to subject pathogens to hydrogen peroxide and participate directly in their killing. Previously, antibodies were believed only to signal an immune response….

This research opens up exciting possibilities for new antibody-mediated therapies for conditions ranging from bacterial and viral infection to cancer.

**Recognition and Killing in the Same Molecule**

Also called immunoglobulins, antibodies are secreted proteins produced by immune cells that are designed to recognize a wide range of foreign pathogens. **After a bacterium, virus, or other pathogen enters the bloodstream, antibodies target antigens… specific to that foreign invader…. and attract lethal "effector" immune cells to the site of infection**.

For the last hundred years, immunologists have firmly held that the role of antibodies was solely to recognize pathogens and signal the immune system to make an immune response. The conventional wisdom was that the dirty work of killing the pathogens was to be left to other parts of the immune system.

Now, Lerner, Wentworth and their colleagues have demonstrated that antibodies also have the ability to kill bacteria [and viruses]. This suggests that rather than simply recognizing foreign antigens and then activating other parts of the immune system to the site of infection, the antibodies may further enhance the immune response by directly killing some of the bacteria themselves.

Antibodies do this by producing the chemical oxidant hydrogen peroxide--best known as the foamy formulation used for first-aid. Hydrogen peroxide is lethal to bacterial cells because it pokes holes in their cell walls, bursting the cells and killing them….

**The Ozone Hole in Each One of Us**

**Certainly the most surprising result that Lerner, Wentworth, and their colleagues found was that antibodies appear to make ozone, which they detected through its chemical signature.** They have not yet demonstrated conclusively that what they found is ozone, but they are highly confident that ozone is what the antibodies are producing because no other known molecule has the same chemical signature.

Ozone is a particularly reactive form of oxygen that exists naturally as a trace gas in the atmosphere… perhaps better known for its crucial role absorbing ultraviolet radiation in the upper reaches of Earth's stratosphere--about 25 km above the surface--where it is concentrated in a so-called ozone layer, protecting life on earth from damaging solar radiation.

Ozone is also a familiar component of air in industrial and urban settings where the highly reactive gas is a hazardous component of smog in the summer months. Never before has ozone been detected in biology. "All our analytical data point to this oxidant possessing the chemical signature of ozone," says Wentworth, "in which case, this is a new molecule in biology and therefore may have tremendous ramifications for signaling and inflammation."

The research article, "*Evidence for Antibody-Catalyzed Ozone Formation in Bacterial Killing and Inflammation*" is authored by Paul Wentworth, Jr., Jonathan E. McDunn, Anita D. Wentworth, Cindy Takeuchi, Jorge Nieva, Teresa Jones, Cristina Bautista, Julie M. Ruedi, Abel Gutierrez, Kim D. Janda, Bernard M. Babior, Albert Eschenmoser, and Richard A. Lerner, appears in the November 18, 2002 "**Science Express**," the advanced publication edition of the journal ***Science***.… The research was funded by the National Institutes of Health, The Skaggs Institute for Chemical Biology, and an A.R.C.S. fellowship.

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