SARS Method Of Treatment With Ozone Therapy

Severe Acute Respiratory Syndrome (SARS) is an infectious viral disease that affects the respiratory system of humans. The <u>SARS Coronavirus</u> (SARS-CoV) is responsible for this virulent disease. It is an acute, rapidly progressing, pan-inflammatory infection which, predicated upon the quasispecies involved, may present distressful mortality outcomes. This complex syndrome makes the way to develop severe respiratory distress and desaturation of oxygen in the patient. This is where medical ozone comes into play!

Ozone: Antipathogenic properties

Recently, there has been renewed interest in the potential of ozone for viral inactivation in vivo. It has long been established that ozone neutralizes bacteria, viruses, fungi, and parasites in aqueous media. This has prompted the creation of water purification processing plants in numerous major municipalities worldwide. Ozone's unique physicochemical and biological properties, and environmentally-friendly aspects, have since been applied to a panoply of industrial uses such as the packaging of pharmaceuticals, the fumigation of homes and buildings (sick building syndrome), the treatment of indoor air in operating rooms and nursing homes, and the disinfection of large scale air conditioning systems in hospitals.

Some viruses are more susceptible to ozone's action than others. It has been found that lipid-enveloped viruses are the most sensitive. This makes intuitive sense, since enveloped viruses are designed to blend into the dynamically constant milieu of their mammalian hosts. This group includes, hepatitis B and C, herpes 1 and 2, Cytomegalus, HIV 1 and 2, Influenza A and B, West Nile virus, Togaviridae, Eastern and Western equine encephalitis, rabies, and *Filiviridae* (Ebola, Marburg), among others.

The envelopes of viruses provide for intricate cell attachment, penetration, and cell exit strategies. Peplomers, finely tuned to adjust to changing receptors on a variety of host cells, constantly elaborate slightly new glycoprotein configuration under the direction of portions of the viral genome, thus adapting to host cell defenses. Envelopes are fragile. They can be disrupted by medical ozone and its by-products.

Several studies have reported the safety and the benefits of ozone administration in vivo. Wells et al. (1991) showed that ozone-treated HIV-spiked Factor VIII maintained its biological capacity; and that, concomitantly; there was an 11 log reduction in detectable virions. The improvement of liver enzymes in hepatitis C patients after several months of ozone therapy was described. An 80% hepatitis C viral load reduction in 82 patients using AHT was reported by Luongo et al., 2000.

It is remarkable, however, that to date, no adequate double blind study has addressed ozone therapy in viral conditions such as hepatitis B and C, HIV, or herpes.

SARS and Ozone

Because of its acuteness, SARS is likely to require proactive viral culling. With an estimated 10 billion SARS viral particles generated daily - a reproductive magnitude is commonly observed in viremic episodes in enveloped viruses. It is suggested that ozone therapy administration may likely need to be more intensive than in chronic infections, such as hepatitis B and C. Whereas the latter conditions have been addressed with AHT frequencies ranging from once daily to once weekly, SARS may require more accelerated attention, either with AHT or with EBOO/RHP.

SARS and sterilization of the environment

SARS Virus can be highly concentrated in the air being spread from the infected patients and thus it creates possibility of infecting a large number of people who are within the vacinity of an infected person. So, it needs complete care in regard to the safety of the public at large to prevent mass spread of this disease. Ozone has an effective antiseptic property, it is widely used to disinfect or sterilize surgical apparatus, water and indoor or outdoor environments. And for SARS, Medical Ozone is obviously the easiest solution. Sufficient use of Medical Ozone inside or outside of the possibly infected area just confidently ensures the total disinfection from the SARS virus. It just kills the virus and keeps away any further risk of affecting any more of the public.

Back To Ozonehospital