



How to Keep HBOT Chambers Safe from Getting Infected With COVID-19

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Dear Editor,

The world has been dealing with a respiratory infection called "SARS-CoV-2" for three years. Preventing healthy, non-infected patients from being infected was a big challenge for medical staff. By the end of 2019, a new viral respiratory infection was spread in China. The WHO declared this infection a pandemic (1) after the whole world had been involved, and it was called "SARS-CoV-2". Until now, 678 million people got infected, and 6.78 million died. The most critical transmission routes are through air droplets, human-to-human, and indirect contact with contaminated objects (2). This is why most countries have set quarantine rules to prevent the spreading of the virus in society. Since the beginning of the pandemic, scientists have been trying to find convenient vaccines, and finally, different types of vaccines are available to use. A worrying factor was virus mutations. The two most important mutations were "delta" and "omicron" (3). Delta had a higher killing rate, whereas omicron showed a higher contagious rate (4).

HBOT is a treatment modality in which the patient breathes pure oxygen at oxygen pressure higher than sea level (> 1.4 ATA) (5). A high pressure-oxygen gradient leads to cellular repair and neovascularization (6). There are 14 main indications of HBOT, including Diabetic Foot Ulcer (DFU), CO poisoning, Decompression Sickness (DCS), air or gas embolism, delayed radiation injury, etc. (7). There are also many relative indications such as autism spectrum disorder (ASD), pressure ulcers, sports injuries, etc. There are two types of hyperbaric chambers, including monoplace and multiplace. The biggest issue with using HBOT chambers during the COVID era was keeping patients safe from being infected with SARS-CoV-2. We took different ac-

tions to keep our chamber clean and our patients safe.

Screening of the patients begins before accepting them. We simply request that they have a spiral chest CT scan no more than 72 hours before entering the chamber and a negative RT-PCR COVID-19 test no more than 24 hours ago. After global vaccination, one essential criterion to accept patients for therapy was getting at least two vaccine shots. Another measure to take was daily screening. The registered nurse of the clinic asks patients different questions regarding symptoms, family infection, and being in touch with infected patients, and takes the daily temperature with a digital thermometer before starting the therapy. Treating more than 40 patients in a monoplace chamber with no infection record shows that these simple actions are effective. We suggest other centers take these actions to keep their patients safe and their chambers clean of infection.

Footnotes

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