



SerenaGroup Newsletter



September
2020

SERENAGROUP MONTHLY UPDATE

ISSUE 31



SerenaGroup Advanced Wound Care Research

SerenaGroup® and SerenaGroup® Research Foundation continue as a world leader in wound healing and related research. After publishing the first worldwide case study on the use of hyperbaric oxygen therapy to reduce mechanical ventilation in patients with severe COVID19, our registry has continued to treat patients and collect data, passing the 100-treatment mark in July.

Wound care is essential. Providing access to limb and lifesaving clinical trials has continued throughout the pandemic. Ideally positioned for virtual trials, our pre-COVID use of remote monitoring and virtual data collection allowed our research to proceed with minimal interruption. SerenaGroup® recently completed a trial on topical oxygen therapy (Natrox) in the treatment of nonhealing diabetic foot ulcers (NCT03905863). We have expanded another diabetic foot ulcer trial that explores the healing and bacterial killing properties of a porcine-derived graft. A large multicenter trial evaluating a novel dual-layer graft derived from amniotic membrane (NCT04457752) is scheduled to launch this fall. In addition, there are at least two diabetic foot ulcer trials, one venous leg ulcer trial and a multinational trial on critical limb ischemia starting this year or early next.

SerenaGroup® is expanding its international hegemony in “combination clinical trials” by

extending a study on pressure ulcers undergoing treatment with the antibiofilm agent BlastX combined with negative pressure wound therapy (NCT04265170). This is only the beginning: several clinical trials evaluating products used together or in a series are planned for 2020 and 2021.

SerenaGroup® recently completed a study investigating the reduction in bacterial burden in wounds treated with topical antiseptics. The goal was to provide solid evidence for our antimicrobial stewardship program. Debridement, an essential step in preparing the wound, is typically carried out in the hospital setting. A trial conducted at a skilled nursing facility explored the use of a novel debridement device in nursing homes. A similar trial will study dressings that reduce the need for nurse visits in home health.

SerenaGroup’s® groundbreaking work on point-of-care diagnostics has expanded to include several trials that analyze devices that test perfusion and oxygenation. Stay tuned for further updates on our ever-expanding research program.



**September Blue Star
Winner**

Beth South

“Beth has done our new hire training for our inpatient teams and stepped up as a leader for us in ostomy care and education.” – *CHI Health Inpatient*

SerenaGroup® Centers are encouraged to recognize those around them who go above and beyond their job description. Recognizing hard work is a priority for SerenaGroup and we sincerely thank those who continue to be compassionate about their work in healing wound care and hyperbaric medicine patients.

Improving HBO Utilization

Tim Mayhugh, National Safety Director



Start a "Time to Tank" Initiative

The overall goal of the Advanced Wound Care & Hyperbaric Center is to create a sense of urgency and importance in establishing HBO treatment quickly for all patients. Once a patient is identified for HBOT, there are several tests, assessments, and insurance checks that must occur. The goal is to minimize the time to complete the tests and prep work and to effectively communicate with the patient about the importance of the HBO treatment to their quality of life.

Start a "Save the Dive" Program

save

The goal of this program is to create an awareness and sense of urgency among all staff and physicians/providers to maintain consistency of treatment so that there is maximum impact on the healing process. The objective of this program is for the staff to strive to reduce the number of missed HBO treatments. The Advanced Wound Care & Hyperbaric Medicine Center must work together to insure a successful hyperbaric medicine program. The important tasks include rearranging appointments (be flexible), communication and reminders, relationship building with each patient, involvement by the physician/provider and creative interventions when necessary

HBOT Understanding



Hyperbaric oxygen therapy an effective treatment in wound healing. When the patients are educated about the therapy, they develop confidence in their provider and feel comfortable with the hyperbaric technician, it is ten times more likely that they will attend all their scheduled treatments when the confidence is gained.

If a patient cancels treatment, questions that the clinician needs to ask are:

- **How well was the HBOT explained?** Are the staff and ordering physician/provider active in "selling" clinical necessity to the patient?
- **Is there flexibility if the patient is uncertain?** The provider should suggest a trial period to the patient so that the patient does not feel overwhelmed in the beginning. Usually after the first 1-2 treatments, the patient has a better understanding of the routine and feels more comfortable with the treatment.
- **Is the HBO environment as comfortable as possible?** Ensure that the provider and hyperbaric tech make the environment friendly and welcoming for all patients. Give the patients a tour of the area and answer all their questions before starting treatments.
- **Does staff work with patients to reduce anxiety?** The staff can help reduce patient anxiety by giving them a tour of the suite, give the patient a "mock" trial in the chamber without pressurizing, and discuss anxiety

reducing options with the patient and the provider.

- **Did the physician discuss the importance of keeping O₂ levels high in the body by consistent five-day-per-week attendance?** Ensure that the provider explains thoroughly the importance of consistent daily treatment to insure patient knowledge of the treatments.
- **If a session is missed, does the physician address it with the patient?** Make sure the physician/provider stays involved with the patient care path. Missed treatments can delay the wound healing process. Keep the physician/provider involved with the patient to help reinforce the acceptance of HBOT and assure compliance throughout the treatment.
- **Is there a policy on missing a certain number of treatments before the slot is given to someone else?** If the center has continuous patient absenteeism, it is recommended that a policy is put into place and reviewed with the patient prior to starting treatments.
- **If insurance is an obstacle, are there alternative plans discussed and financial counseling offered?** If insurance is not an option, work with the hospital regarding a financial assistance program.





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I am so happy, I can open my mouth and even yawn now! Hyperbarics was my last hope! Thank you for being so kind!

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Building the Nation's Leading Wound Care Team

"I would certainly recommend hyperbaric, not just for the healing, but for the kindness and friendliness that was shown to me. You all made this a wonderful experience!"

-DON, HYPERBARIC GRADUATE

Hyperbaric Oxygen Therapy (HBOT) continues the COVID-19 fight.

Dr. Thomas Serena, CEO

The Washington Post and *Modern Healthcare* have published articles in July 2020 related to HBOT in the fight against COVID-19. In both articles, we are excited to report that our publication was referenced and quoted on a national level.

As you recall, in the SerenaGroup June 2020 Newsletter Edition, Issue 28; we reported our publication on being part of "The First World-Wide

To read the full article visit:
https://www.washingtonpost.com/health/doctors-try-pressurized-oxygen-chambers-in-covid-fight/2020/07/31/b491ee84-d336-11ea-826b-cc394d824e35_story.html

The article in *The Washington Post* quoted a patient that we treated in our research study at Opelousas General Health System in Louisiana: *Kathy Fuselier, 62, who works in the pharmacy there, said she felt it helped her. "I didn't have to be put on the vent," she said. "Came close, but didn't need the vent."*

If you or your hospital would like to participate in HBOT Research on COVID-19 patients, please reach out to The SerenaGroup Research Foundation at serena@serenagroups.com or visit the SerenaGroup Research Foundation website at <http://woundresearch.org/> to learn how you can participate in the research for your center and patients.

To read the full publication, visit www.serenagroupinc.com/news

practice

Hyperbaric oxygen therapy in preventing mechanical ventilation in COVID-19 patients: a retrospective case series

Objective: A pandemic affects the entire world. The highly contagious SARS-CoV-2 was originated in Wuhan, China in late 2019 and rapidly spread across the entire globe. According to the World Health Organization (WHO), the novel Coronavirus COVID-19 has infected more than two million people worldwide, causing over 160,000 deaths. Patients with COVID-19 disease present with a wide array of symptoms, ranging from mild flu like complaints to life threatening pulmonary and cardiac complications. Older people and patients with underlying disease have an increased risk of developing severe acute respiratory syndrome (SARS) requiring mechanical ventilation. Once initiated, mortality increases exponentially. A number of pharmacologic regimens, including hydroxychloroquine-zinc, azithromycin, antiviral therapy (e.g. remdesivir), and anti-IL-6 agents (e.g. tocilizumab), have been highlighted by investigators over the course of the pandemic, based on the therapy's potential to interrupt the viral life-cycle of SARS-CoV-2 or

Case: COVID-19 positive patients (n=5) at a single institution received hyperbaric oxygen therapy (HBOT) between 13 and 20 April 2020. All the patients had tachypnea and low oxygen saturation despite receiving high FIO₂. HBOT was added to prevent the need for mechanical ventilation. A standard drive profile of 2.0ATA for 90 minutes was employed. Patients received between one and six treatments in one of two dedicated monoplace hyperbaric chambers Resuslife. All the patients recovered without the need for mechanical ventilation. Following HBOT, oxygen saturation increased, tachypnea resolved and inflammatory markers fell. At the time of writing, three of the five patients have been discharged from the hospital and two remain in stable condition.

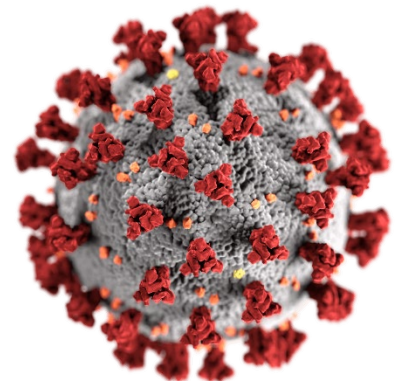
Conclusion: This small sample of patients exhibited dramatic improvement with HBOT. Most importantly, HBOT potentially prevented the need for mechanical ventilation. Larger studies are

Modern Healthcare
Article Link: <https://www.modernhealthcare.com/technology/doctors-try-pressurized-oxygen-chambers-covid-fight>

Publication of the Use of Hyperbaric Oxygen Therapy (HBOT) in Covid-19 Patients".

That publication received national recognition and was mentioned in two national journals: *The Washington Post* and *Modern Health*.

In *The Washington Post*, "Doctors try pressurized oxygen chambers in COVID fight" article written by Margie Mason and Robin McDowell on July 31, 2020, there were several references to our study.



Storytime
Prisma Health Oconee Memorial

A patient asked to speak with the manager of the wound care center. He wanted to make sure that the supervisor knew just how great the staff were at Oconee Wound Care. The patient and his wife reported how great an experience it has been to come the clinic and receive care. Both reported that it is clearly evident how much the staff, nurses and doctor enjoy doing what they do and helping people. This is his second go around with the clinic from two unrelated issues and he shared that both times he received excellent care and was treated in a great manner. He reported that he is glad that the staff are so selfless and want to be able to help people during the pandemic. He and his wife had nothing but praise to report about their overall experience, care received, and the excellence of all staff members at the Wound Clinic.



The Rise of Diagnostics in the Treatment of Chronic Wounds

Guest Editor

Dr. Thomas E. Serena

Deadline

30 April 2021

Special issue

Invitation to submit

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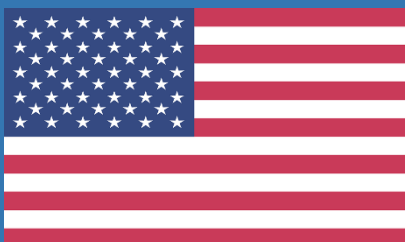
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