

Laser treatment for coronavirus shows positive results in patient with severe disease

[Alexi Cohan](#) August 11, 2020 at 7:43 p.m.

A patient receives laser treatment as part of a promising new therapy to treat COVID-19. (Photo courtesy American Journal of Case Reports)

A pain-free laser treatment traditionally used to reduce inflammation could now help coronavirus patients after it showed positive results in a severe COVID-19 patient on a path to intubation who instead was discharged from the hospital.

“This was a man who was really failing to thrive, had not been eating, was not able to get out of bed,” said Dr. Scott Sigman, orthopedic surgeon and team physician at UMass Lowell.

The patient in Sigman’s study, published in the American Journal of Case Reports, was a 57-year-old Black man diagnosed with coronavirus and was admitted to the ICU for respiratory distress.

Sigman said the patient was bedridden with a severe cough and couldn't walk prior to the laser treatment, "The prediction was that he would have been intubated," said Sigman.

Top Articles

[Massachusetts 4th Congressional District primary: Jake Auchincloss declared winner](#)

[Read More](#)

[Read More](#)

[Read More](#)

[Read More](#)

[Read More](#)

[Read More](#) **Skip Ad**

The laser treatment is photobiomodulation therapy, or PMBT, which patients can't feel, hear or see and it causes no side effects, according to Sigman.

After Sigman had used the therapy for years as a pain management technique for patients with inflammation in areas such as the ankle or knees, he thought it could work for severe COVID patients too, who suffer from intense inflammation caused by the disease.

Sigman said right after the first laser treatment, the very ill patient sat up and said, "Hey doc is it OK if I order a strawberry milkshake?"

The man got treatment once a day for 28 minutes for four days in a row, according to the study. After finishing the therapy, the patient's cough was gone and he was able to walk with physical therapy.

On the following day, he was discharged to a rehabilitation facility on minimum supportive oxygen and just one day later, the patient was able to complete two trials of stair climbing with physical therapy.

"It really was pretty amazing watching that evolution," said Sigman, who added that he had just spoken with the patient on Monday, who reported he was feeling well and walked a mile that day.

The laser treatment works by creating a light energy across damaged tissues in the body. That energy is absorbed by cells which improves function and enhances the body's healing process.

A mobile scanner uses two laser wavelengths that work simultaneously and are placed 20 centimeters above the patient across the lungs while the patient is on their stomach.

Sigman said the laser therapy is cost effective, safe and non-invasive. In fact, the scanner doesn't even touch the patient, which is always a plus in the pandemic.

Now, Sigman hopes to launch a larger trial to prove safety and efficacy in more coronavirus patients, "I don't see a lot of potential downsides to the use of a laser, and again, the goal is to have more studies."