

Small study supports donor plasma therapy for severe COVID-19

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(HealthDay)—Using the donated blood plasma of COVID-19 survivors to treat patients in the throes of severe coronavirus illness has met with some controversy. But a small new study suggests it could have real merit.

The study of 39 patients with severe COVID-19 who were treated at one New York City hospital found the treatment appeared to bump up survival, researchers said.

Plasma is the component of blood that contains immune system antibodies. So-called "convalescent plasma" from COVID-19 survivors is rich in antibodies against SARS-CoV-2, and it's thought that infusing the plasma into COVID-19 patients might help them battle their illness.

On Aug. 23, the U.S. Food and Drug Administration made the unusual and controversial move of granting emergency approval for the use of convalescent plasma for COVID-19—despite a lack of proof of efficacy from randomized clinical

trials.

Those trials are underway, but in the meantime anecdotal evidence has suggested that at the very least, the therapy is safe, one expert said.

"I cannot think of one shred of data that I have seen that would suggest harm," said Dr. Liise-anne Pirofski, chair of biomedical research at the Albert Einstein College of Medicine and Montefiore Medical Center, in New York City.

But does convalescent therapy actually help speed recovery from severe COVID-19?

To help find out, a team led by Dr. Nicole Bouvier, of Mount Sinai Hospital in New York City, tracked outcomes for 39 patients hospitalized with COVID-19. They were all very ill: By the time these patients were given a donor plasma transfusion, 87% required supplemental oxygen to breathe, and 10% were on ventilators.

Outcomes for the 39 transfused patients were compared to those of 156 other COVID-19 patients with similar symptoms and medical histories who had not received the experimental treatment.

Reporting Sept. 15 in the journal *Nature Medicine*, Bouvier's group concluded that "convalescent plasma is potentially effective against COVID-19."

The researchers found that by day 14 after receiving the plasma therapy, 18% of patients still required oxygen supplementation, compared to 28% of those in the "control" group who hadn't gotten the infusion.

By the end of the study in May, 13% of people who got convalescent plasma had died compared with 24% of those who hadn't, the study authors said.

Still, the study was not a large, randomized clinical trial, Bouvier's group said, so the findings are not



definitive. "Additional studies are needed to confirm these findings and draw more definitive conclusions about the efficacy of convalescent <u>plasma</u> transfusion for the treatment of COVID-19 in different populations," the team concluded.

Pirofski agreed. "What I think everybody agrees on is the gaps of knowledge that exist can best be addressed by high-quality trials," she said.

More information: The American Society of Hematology has more about <u>convalescent plasma</u> and <u>COVID-19</u>.

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