

Convalescent Plasma for COVID-19



Deaths from COVID-19 continue to increase, forcing clinicians to try therapies that are not backed by strong clinical evidence.

One such treatment is convalescent plasma. This century old treatment has been used on and off during infectious disease outbreaks. In 1893, German scientists used this strategy to treat patients with diphtheria. In 1901, Emil von Behring won the first Nobel Prize in Medicine or Physiology for research that demonstrated the transfer of antibodies from one person to another. Convalescent plasma has also been used against the 1918 pandemic flu, measles, MERS-CoV, SARS and Ebola.

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Preliminary communication regarding its use in five seriously ill COVID-19 patients in China was published in JAMA in March. Two more reports from Wuhan were published in April where convalescent plasma was used in 16 seriously ill COVID-19 patients. All three reports show that the therapy appeared to save lives. However, the authors recommend randomised controlled trials to confirm these findings.

A National COVID-19 Convalescent Plasma Project has been established. Arturo Casadevall, Chair of molecular microbiology and immunology at the Johns Hopkins Bloomberg School of Public Health, chairs this group. The University of Chicago has announced the launch of a 10-patient open-label trial of this treatment. The FDA has compiled resources for people who would like to donate convalescent plasma.

Stanford University researchers are expected to begin testing convalescent plasma in emergency department patients with COVID-19 who aren't sick enough to be admitted to the hospital. They expect to enrol 206 patients and this will be a double-blind, randomised controlled trial. Johns Hopkins has also launched a triple-blinded randomised controlled trial in 150 adults who aren't sick but have had close contact with a COVID-19 patient within 96 hours of enrolling in the study. Participants will receive treatment within 120 hours of close contact with a COVID-19 patient.

According to Beth Shaz, New York Blood Center's Chief Medical Officer, convalescent plasma seems more effective if given early in the course of the disease and may slow down progression and keep patients out of the ICU. However, convalescent plasma does not seem to be effective in patients who are critically ill with ARDS.

While no specific results are available yet, these convalescent plasma programmes are a step in the right direction. The science may not be perfect but it's better than doing nothing.

Source: [JAMA](#)

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