

Convalescent Plasma Therapy for COVID-19

Be the superhero the world needs right now

History

Though it is said to be an experimental treatment for Covid-19, the actual use of convalescent plasma collected from previously infected individuals to passively transfer antibodies dates back to almost a 100 years, with evidence for benefit against rabies, Hep B, Polio, Measles, Influenza and other pathogens

Success Rates

There have been a huge number of clinical trials around the world and the results have shown that the pros outweigh the cons. Plasma therapy has different effects on people, mainly depending on the way their own immunity functions and due to the limited understanding of the virus. Some may benefit from it while some may not, but currently it is the best form of treatment available.

Drawbacks

Plasma transfusions can result in transfusion-related adverse events in the patient like febrile and allergic transfusion reactions. This is an adverse event which may happen in patients who receive blood components for any reason, and can be managed well with emergency medication.



The Concept

Convalescent plasma is the term used for plasma that is removed from the blood of a person who has recovered from a disease, then transfused into a patient still battling it.

With no approved specific antiviral for this disease, plasma therapy could be the only glimmer of hope for now. When someone recovers from Covid-19 it means that their body has undergone the process of fighting off the disease, done by proteins called antibodies which are present in the plasma. When we transfuse this plasma into someone who is severely ill, it gives them a fighting chance by boosting their immune system. This



Here's why:

- The donation takes out only a small fraction of your antibodies, in fact so little that you would be perfectly fine even if we took 2 donations a week.
- Once you recover from a disease, your body now 'remembers' the proteins it has to make to fight off the virus. So, your body keeps producing more of these keeping your immunity intact.
- You may have heard about the benefits of blood donation, that is applicable here too! This includes preserving your cardio-vascular health and reducing harmful iron stores.

is called passive immunity and is the concept behind

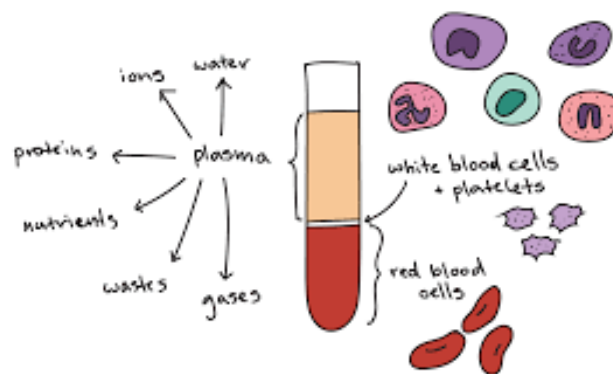


few of the known vaccines for other diseases.

Convalescent plasma could shorten the duration of a COVID-19 illness or render it less dangerous. The therapy can be administered at different stages: after exposure to a known carrier but before infection to boost immunity, and for critically and non-critically ill patients to improve their outcomes.

The Procedure

The procedure for taking your plasma would be exactly the same as the way you would donate blood. It is performed by trained staff in a highly controlled clinical environment. The plasma collection set is sterile and only used once, ensuring your complete safety.



Once the blood has been collected, it is separated in the lab into its components and stored separately. This includes Plasma, Packed Red Blood Cells, White Blood Cells and Platelets. These are all agents which are re-

quired by someone undergoing a severe disease process. So in addition to preventing this pandemic to claiming more lives, you would also be improving the quality of life for many!

“All it takes is 15 minutes to give someone the gift of life and receive blessings for a lifetime”

Article by Dr. Ritvi Arvind, B.D.S, Member of Covid Crusaders Hyderabad Deccan.



References

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