India's first plasma bank: In scope for a treatment against Covid-19

Delhi Chief Minister, Arvind Kejriwal inaugurated India's first plasma bank on 2nd July2020. This plasma bank is at the Institute of Liver and Biliary Sciences (ILBS). The Plasma will be extracted considering its scope in treating COVID-19 after specific trials. The bank will coordinate with patients who have recovered from COVID-19, and are eligible to donate plasma.

Plasma Bank and its necessity:

Just like a blood bank, plasma bank has been developed specifically for those who are suffering from Covid-19 and have been advised the therapy by doctors. Plasma was not easily available also people were scared of stepping into a COVID hospital in search of Plasma and hence considering the rising demand among the patients, government has set up a Centre for the donors.

Any patient suffering from COVID generates antibodies in their blood to fight against the virus. These Antibodies are available easily in COVID patient's plasma component of the blood. In plasma therapy, the antibody rich plasma from a recovered patient's blood is extracted and administered to a patient.

With the ready antibodies after isolation, the trials will be conducted to find out if the antibodies can help patients recover.

Know how plasma donation is different from blood donation:

In plasma donation, only plasma is extracted and the other components of blood are returned to the body.

Blood contains several components, including red blood cells, platelets, white blood cells, and plasma. During a whole blood donation, donors typically donate almost half a liter of blood. A specific automated machine-Apheresis, is connected using a disposable one time use kit. The machine will selectively retain the plasma and return all red blood cells and other components of blood back to the donor's body.

Important thing to note is, scientifically the plasma proteins lost during donation is recovered again in 24-72 hours.

Reference: Google Images

Criteria for donating Plasma :

As suggested and recommended by doctors, a time of three weeks between recovery and donation of blood is preferable for getting a good and viable count of antibodies.

People between the ages of 18 and 60, and weighing not less than 50 kg are eligible. Women who have recently delivered baby are not eligible.

People with having medical conditions with diabetes, hypertension, and cancer are also not qualified. The doctors are mandated to take a detailed medical history and conduct a physical examination before

considering the person a suitable for blood plasma donation.

Test that are carried out before donating plasma:

Laboratory tests are carried out to assess various conditions - serum protein and CBC, TTI testing for hepatitis B virus, Hepatitis C virus, HIV, Malaria, and Syphilis. Also tested for blood grouping and antibody screening. Serum COVID-19 specific IgG antibody concentration which is higher than 80 is preferred.

How can a donor contact the bank?

As per the guidelines shared by Government, a patient who is eligible and willing to donate plasma may call 1031 or WhatsApp details at 8800007722.

Team of doctors will contact the patient to confirm eligibility. A travel reimbursement is suggestive to the donor.

References:

1. The Indian Express-06Jul20
2. Google Images-Blood donation