



## **Young Plasma Significantly Improves Symptoms and Scores in Patients with Parkinson's Disease**

Medicine has been attempting to find a cure for Parkinson's disease since James Parkinson described the 'Shaking Palsy' in 1817. Treatment to this date has been only medication targeted 'at' the dysfunction that enables the patient to physically perform as best as possible while the disease progresses.

A placebo-controlled study held at the Texas Medical Center has now presented evidence that the administration of young Fresh Frozen Plasma (yFFP®) significantly improves multiple aspects of Parkinson's disease. Statistically significant improvements were seen in Parkinson's subjective testing (the sum of UPDRS subscales 1-3, in subscales 1 and 2 considered separately) and in the Stanford Presenteeism score (a screening that measures health and its relation to productivity).

The study included 17 patients with mild to moderate Parkinson's disease. Ten patients received a placebo, while seven received blood plasma from sex-matched 18 – 25 year old donors. The treatment was two infusions given on each of two days. The volume of each infusion was 12.5 ml per kg.

The researchers hypothesize that young plasma crossing the blood brain barrier partially modulated the inflammatory process while replacing the production of factors essential to reversing the pathogenesis of Parkinson's disease.

The realization that auto-antibodies can contribute to dysfunction of the brain has brought about a paradigm shift in understanding and targeting treatment for many neurological diseases over the

past decade. Multiple sclerosis (MS), Parkinson's disease (PD), amyotrophic lateral sclerosis (ALS), etc., are neuro-inflammatory diseases where an accumulation of inflammatory cells occurs within the central nervous system. This chronic inflammatory state is associated with destruction of the central nervous system. Plasma from young donors has been shown in research to decrease this cascade of inflammatory destruction. Inflammation, whether from disease or biological aging, can be addressed and mitigated with yFFP infusions. Clearly, the autoimmune state has a direct link to neurodegenerative diseases that can be ameliorated by transfusions of young plasma.

Plasma is an FDA approved biologic with an extraordinary history and record of safety. In use for 100 years, the United States currently transfuses approximately 6,500 units per day, 20% of which is collected from young donors. The FDA published in 2021, that in 2019 (their most recent data) only one plasma related and completely avoidable fatality occurred out of 2.1 million transfusions. Stanford University, using plasma from young donors with Alzheimer's and Parkinson's patients, found the yFFP treatments were safe, well tolerated, and feasible, without serious adverse effects. Their study also included some preliminary evidence for improvements.

Containing an organically perfected mix of proteins, peptides, hormones and other essential components, the science of plasma has advanced so far it is now understood that the composition of our plasma changes profoundly during our lifetime and those changes not only control aging, but are the cause of many age-related diseases and conditions. By simply and safely infusing plasma from young sex identified donors between the ages of 18 – 25 into a sex and blood-type matched person, all the cells in their older bodies appear to respond by actively regenerating and restoring lost function just as they did when young.

The use of plasma infusions in the United States can be safely dispensed and administered by a licensed medical practitioner. Find out more about young Fresh Frozen Plasma and if it may be the right treatment for you at our website [www.youngplasmastudy.com](http://www.youngplasmastudy.com).

