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First clinical results after HELP apheresis in Long COVID Syndrome

(#59)

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Long COVID Syndrome (LC) is a new and complex disease lacking an established treatment so far. First reports portray HELP apheresis (HELP) as a promising therapy in LC. Since 2021, we have offered HELP in two practices and treated 120 patients so far. Our objective was to evaluate patients' response to HELP in LC. **Method:** The patients' response to the HELP has been evaluated by means of a questionnaire checking for symptoms *before* and *after* apheresis, as well as the *current* state of symptoms. The intensity of symptoms was depicted in a five-tier Likert scale ranging from 1 (bad, very pronounced) – 5 (very good, asymptomatic). Inclusion criteria: LC, at least 2 sessions of apheresis in 2022. Exclusion criteria: pre-existing ME/CFS, Post Vac-Syndrome. The questionnaires were issued to 64 patients (Osnabrück 48, Bochum 16). In total 31 responses (OS 26, BO 5) have been analysed so far. Statistical significance was assessed by Friedman test and Wilcoxon test for paired samples. A test result was considered as statistically significant for p less than 0.05. Subsequently, the median of results is presented.

Results: The patients were aged between 18 and 78 years, with an average of 41 years. 18 of 31 participants are female. The overall rating increased from a score of 2 (range 1 – 3) before apheresis to 3 (1-5) after apheresis and to 4 (1.2-5) currently. Comparison of symptoms *before* and *after* HELP shows a significant and sustained alleviation of symptoms ($p < 0,0001$). Further improvement *after* HELP compared to the patient's *current* situation was not statistically significant. The evaluation of specific symptoms resulted in similar observations: patients' general condition, walking restriction, dyspnoe, chest pain, POTS, PEM, brain fog, insomnia, fatigue and depression improved significantly. The median number of treatments per patient was 5 (2-7). The median duration of symptoms before treatment was 10 months (2-23), follow-up after apheresis was 6.5 months (1-10). Side effects were limited to 1 out of 144 treatment sessions, which resulted in a patient suffering from low blood pressure. 83 percent of the patients would recommend the treatment. Two relapses were noted after a new COVID infection. No worsening of symptoms has been reported after the procedure.

The given findings show a high response rate with significant clinical improvements and long-lasting results. Thus, HELP seems to be a promising and safe treatment option for patients suffering from LC.

References

- [1] Jaeger,B, Arron,H, Kakal-Moll,W, Seidel,D: The potential of heparin-induced extracorporeal LDL/fibrinogen precipitation (H.E.L.P.)-apheresis for patients with severe acute or chronic COVID-19 2022 Front Cardiovasc Med Volume 9 - 2022 | <https://doi.org/10.3389/fcvm.2022.1007636>