Immunotherapy does not increase the risk of severe COVID-19 course

MHH study examines disease courses of more than 800 SARS-CoV-2-infected multiple sclerosis patients

The risk of developing a severe COVID-19 course after a SARS-CoV-2 infection is significantly increased for people with risk factors such as advanced age, severe obesity, diabetes, high blood pressure or heart failure. A challenge for the treating physicians, however, is also the handling of chronically ill neuroimmunological patients who are treated with drugs that suppress the immune system. Scientists from the Department of Neurology at the Hannover Medical School (MHH) have now investigated whether the risk of a severe course of the disease increases for patients with multiple sclerosis (MS) when infected with the coronavirus as a result of the immunomodulating therapy. The study, led by Professor Dr. Thomas Skripuletz in cooperation with the University Hospital Essen and the Charité Berlin, has been published in the Journal of Clinical Medicine. The first author is Dr Nora Möhn.

There is a lot of uncertainty among those who treat and those affected by the disease

"For fear of possibly harming their patients, some treating physicians have even refrained from immunotherapy since the beginning of the pandemic," explains Professor Skripuletz. Even MS patients themselves have suspended their treatment out of uncertainty and postponed appointments at the MHH infusion outpatient clinic, for example. The scientists wanted to change this situation. In order to create a therapy decision based on facts, the case reports of various medical publications published to date were combined in the review. "We evaluated data on 873 MS patients who tested positive for SARS-CoV-2 and compared the courses of the disease," says Dr Möhn. The scientists found that patients who continued to be treated with immunosuppressive drugs became less severely ill and died less frequently than those without treatment with MS therapeutics. "This finding fits with our observations from the clinic," emphasises the neurologist.

Drugs apparently do not negatively affect viral defence

The scientists see a possible explanation for this in the excessive immune reaction caused by SARS-COV-2, which is suspected of causing more damage than the virus itself. This undesired hyperactivity of the immune system might even be attenuated by the immunomodulating drugs. "In any case, the data indicate that the drugs do not have a decisive negative influence on the virus defence, whereas untreated and severely affected MS patients are particularly at risk," says Professor Skripuletz. Previously published studies on other neurological diseases have come to the same conclusion. "It is therefore advisable to treat chronic neuroimmunological patients as best as possible so that they are as fit as possible," emphasises the physician.

For further information, please contact Professor Dr. Thomas Skripuletz, skripuletz.thomas@mh-hannover.de, phone (0511) 532-3816.

The original paper "Experience in Multiple Sclerosis Patients with COVID-19 and Disease-Modifying Therapies: A Review of 873 Published Cases" can be found here: https://www.mdpi.com/2077-0383/9/12/4067
Dr. Nora Möhn and Professor Dr. Thomas Skripuletz during treatment in the MHH Infusion Outpatient Clinic. Copyright: "Karin Kaiser/MHH".