New Virus in a Large Percentage of ME/CFS Patients

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The recent discovery that a very large percentage of ME/CFS patients show evidence of infection with a human retrovirus is an exciting finding. Researchers at the Whittemore Peterson Institute (WPI), the Cleveland Clinic and the National Cancer Institute (NCI) reported in the Oct. 8, 2009 issue of *Science* that blood samples from 67% of 101 Chronic Fatigue Syndrome (CFS) patients were found to contain DNA from a xenotropic murine retrovirus (XMRV). They also found that 3.7% of 218 healthy people tested positive for the virus. Further studies showed that 95% of people with ME/CFS have antibodies to this virus. This retrovirus has also been found in a subset of aggressive prostate cancer tumors.

This study also showed that XMRV can be found in human blood cells and is infectious. It is important that this virus, which appears to be present in the blood of the majority of ME/CFS patients, should not contaminate the blood supply. Consequently, patients who have suffered from ME/CFS at any time are strongly advised to refrain from donating blood.

The exact relationship of XMRV to ME/CFS needs to be explored. XMRV could be the virus that causes ME/CFS. Alternatively, XMRV could be present as a passenger virus in ME/CFS patients because their immune systems have been compromised by infection with another causal, infectious agent. If XMRV were the cause of ME/CFS, it would be compromising the immune system of patients by itself, enabling other infectious agents to flourish.

In order to determine the relationship between XMRV and ME/CFS, the recent study needs to be repeated by other researchers using different groups of ME/CFS patients, and different groups of healthy people. If the recent study is confirmed, then the possibilities of whether XMRV causes ME/CFS, is a co-precipitant of ME/CFS, or merely a passenger virus in ME/CFS patients will need to be explored. XMRV has also been found in a subgroup of patients with prostate cancer. It is important to discover whether XMRV is also present in any other diseases.

This recent finding does not help in the diagnosis or treatment of patients with ME/CFS. While some patients may wish to be tested for the presence of XMRV, the knowledge of the presence, or absence, of that viral DNA in their genomes would not confirm or refute the diagnosis of ME/CFS, nor will it affect their treatment. There is no known treatment, which will target this particular virus.

For now, proper scientific research is required to determine whether XMRV plays a role in ME/CFS. Patients with ME/CFS need to wait until the facts about this virus are established, and they should be supportive of the scientific research that is necessary.

Reference: Lombardi VC, Ruscetti FW, Gupta JD, Pfost MA, Hagen KS, Peterson DL, Ruscetti SK, Bagni RK, Petrow-Sadowski C, Gold B, Dean M, Silverman RH, and Mikovits JA. Detection of Infectious Retrovirus, XMRV, in Blood Cells of Patients with Chronic Fatigue Syndrome. Online October 8, 2009. Science.

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