

On August 23, 2010, the paper, “Detection of MLV-related virus gene sequences in blood of patients with chronic fatigue syndrome and healthy blood donors” was published on-line in the prestigious Proceedings of the National Academy of Sciences.

The research paper was a collaboration of the National Institutes of Health (NIH), the U.S. Food and Drug Administration (FDA), and the Harvard Medical School. The authors include Shyh-Ching Lo of the FDA, Harvey Alter of the NIH, and Anthony Komaroff of the Harvard Medical School. Harvey Alter is the Chief of the NIH’s Infectious Disease Section.

The major finding of the paper is that there is a “strong association” between CFS/CFIDS/ME and murine leukemia virus-related viruses (MLVs)—a “genetically-diverse group of MLV viruses”. This is type of virus is a retrovirus.

The study compared 37 CFS/CFIDS/ME patients meeting “accepted diagnostic criteria” with 44 healthy volunteer blood donors. 32 of the 37 CFS/CFIDS/ME patients (86.5%) were found to have MLV-like virus gag gene sequences as compared with only 3 of 44 (6.8%) healthy controls.

The 37 CFS/CFIDS/ME blood samples were obtained in the mid-1990s and had been kept frozen. In 2010, 15 years later, 8 samples from some of the same patients were drawn and additionally tested for MLV. Of these, 7 of the 8 gag patients again tested positive.

(Of the original 37 blood samples, 25 were obtained from “an academic medical center;” the eight 2010 samples were also from the same academic center. Our understanding is that both these sample sets were provided by Dr. Komaroff’s group.)

The study states: “No evidence of mouse contamination was detected in the PCR assay system or the clinical samples.”

In October 2009, Lombardi et al. published an article in the journal Science which found a

strong association between xenotropic murine leukemia virus-related virus (XMRV) and CFS/CFIDS/ME. Since then a number of studies in both Europe and the United States (one recently published by the U.S. Centers for Disease Control) failed to confirm this association.

Alter and his colleagues in the just published PNAS study write: “Although we find evidence of a broader group of MLV-related viruses, rather than just XMRV, in patients with CFS and healthy blood donors, our results clearly support the central argument by Lombardi et al. ...that MLV-related viruses are associated with CFS and are present in some blood donors.”

Also, Dr. Alter held a telephone press conference on the day of publication in which he and other principals answered telephone questions from reporters around the country. To listen to the recorded conference, call 866-373-4990 and enter code 5711.

There is no question that the press and media around the world will be reporting on this major CFS/CFIDS/ME research finding. Dr. Alter’s position and stature give important credence to the study. His past research aided in the discovery of the hepatitis C virus.

Much further research needs to be done in order to further explore the association of CFS/CFIDS/ME with MLV found in this study. However, this study is an important step forward in the effort to better understand and treat this complex and debilitating illness.

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