Woman With Lupus Develops Powerful HIV Antibodies

March 18, 2014

Scientists have discovered a woman with both lupus and HIV who has developed broadly neutralizing antibodies (BNAs) that have controlled her virus—findings that may help with HIV vaccine development, LiveScience reports. Publishing their findings in The Journal of Clinical Investigation, researchers studied a 33-year-old woman who was diagnosed with HIV at the age of 19 and lupus when she was 27.

In past research, the investigators had deduced that some HIV BNAs will attack the tissues of the body. They also noticed similarities between HIV BNAs and antibodies found in HIV-negative people with lupus. This suggested that HIV BNAs come from a pool of immune cells that can also lead to autoimmune disorders such as lupus.

HIV BNAs block the receptors the virus uses to latch onto human cells before infecting them. About one in five people with HIV will eventually produce BNAs, but they will largely do so too late: after the viral population has mutated enough to evade the antibodies' effects.

Despite never having received antiretroviral treatment, the woman studied had a CD4 count of 568 and a viral load of 4,150.

The researchers hope that their study of this woman will help expand knowledge of the multiple ways that BNAs can be developed and ultimately aid in vaccine research. They caution that the study does not suggest that those with lupus are either immune to HIV or that those who are living with the virus in addition to lupus have a better prognosis than those without lupus.

To read the study, click here.

To read the LiveScience story, click here.

© 2026 Smart + Strong All Rights Reserved.

http://beta.docker.poz.com/article/lupus-antibodies-25320-9760