Early HIV Replication in the Brain Supports Hasty Treatment Start

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HIV can replicate and evolve in the brain soon after infection, according to a recent analysis of cerebral spinal fluid (CSF), which helps illuminate such activity in the brain. Publishing their findings in PLOS Pathogens, researchers analyzed the CSF of 72 treatment-naive people during the first two years they lived with the virus.

Between 10 and 25 percent of the individuals showed evidence of HIV replication or inflammation in the brain at different points throughout those first two years of infection. These signs endured over time in about 16 percent of the study participants.

The researchers theorized that the brain may be a cordoned-off reservoir in which the virus can replicate and mutate, away from the channels of the rest of the body, and where treatment-resistant forms of the virus may incubate.

“These results underscore the importance of early diagnosis and treatment with antiretroviral therapy,” Dianne Rausch, PhD, director of the division of AIDS research of the National Institutes of Health’s National Institute of Mental Health, said in a press release. “Any delay runs the risk that the virus could find refuge and cause damage in the brain, where some medications are less effective—potentially enabling it to re-emerge, even after it is suppressed in the periphery.”

To read the press release, click here.

To read the study abstract, click here.

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http://beta.docker.poz.com/article/brain-replication-27055-8639