HIV Controllers: A Call for Research Participants

An update from the AIDS Clinical Trials Network.

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In the early 1990s, reports appeared describing HIV “long-term survivors” or “non-progressors” who had preserved CD4 cell counts for years without antiretroviral treatment (ART).

When HIV viral load monitoring entered clinical practice in the late 1990s, it was noted that many (but not all) of these non-progressors were able to suppress HIV in the blood to very low levels without ART; they were eventually called “HIV controllers.”

This remarkable group of individuals has been extraordinarily generous with their time and willingness to participate in research studies. Research on HIV controllers has led to a series of critical discoveries, uncovering the immune and genetic basis behind their ability to suppress HIV.

In the past few years, the HIV research field has increasingly turned to tackling the challenge of finding a cure for HIV. Under such a scenario, patients would receive an intervention that would boost their immune system or make their cells more resistant to HIV infection so as to allow them to stop their ART. HIV controllers have been cited as a natural model of what a functional HIV cure may resemble.

However, for this to be a reasonable goal, we must have a complete understanding of what it means to be an HIV controller. Several recent studies have demonstrated that HIV replication is ongoing at low levels in HIV controllers, and that this may be associated with higher levels of chronic inflammation, cardiovascular disease and hospitalization rates. It is unknown whether these findings can be normalized if HIV controllers are treated with ART.

As the co-chairs of AIDS Clinical Trials Group (ACTG) A5308, we are hoping we can answer this important question: Is treatment of HIV controllers with ART beneficial?

We are seeking HIV controllers willing to take ART for at least 48 weeks to determine the effects of treatment on levels of immune activation, chronic inflammation and the HIV viral “reservoir” (one of the barriers to an HIV cure). We will be using the single pill regimen of Complera (tenofovir / emtricitabine / rilpivirine), as it is very well tolerated and easy to take at just one pill a day.

Our hope is that this study will both help us provide better care for HIV controllers and also advance the field of HIV cure research. Go to actgnetwork.org for more information.

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