A Report of Three HIV-Infected Patients Who Became Acutely Ill after Stopping Their Anti-HIV Treatment

What is the problem and what is known about it so far?
Antiretroviral (anti-HIV) therapy consists of combinations of drugs that slow the growth of the virus. Two laboratory tests, CD4 count and viral load, help to monitor patients’ response to anti-HIV treatment. The CD4 count is a measure of immune cells; high counts are better than low ones. The viral load reflects the amount of the virus’s genetic material in a person’s blood; the lower the viral load, the better. It is well known that the virus starts multiplying rapidly throughout the body when an HIV-infected person stops anti-HIV therapy and that the viral load in the bloodstream increases as a result. However, an acute illness has not been described in this setting.

Why did the researchers do this particular study?
To describe several patients who became acutely ill after stopping anti-HIV treatment.

Who was studied?
Three patients with HIV infection who discontinued anti-HIV therapy that had been effective in keeping the amount of virus in their blood undetectable.

How was the study done?
The researchers describe the clinical course, including CD4 cell count and viral load, before the patients received anti-HIV therapy, during this therapy, and after the patients stopped taking this therapy.

What did the researchers find?
Within 6 weeks of stopping treatment, each patient developed an illness that included rash, fever, upper respiratory tract symptoms, headache, and muscle aches. This syndrome was similar to the illness that some people develop shortly after first becoming infected with HIV. Viral load increased dramatically in all three patients, and two of them had decreases in CD4 cell counts. After anti-HIV therapy was restarted, symptoms, viral load, and CD4 cell counts improved in all three patients.

What were the limitations of the study?
This report describes only three patients, so it can’t tell us how frequently this type of syndrome occurs when anti-HIV treatment is stopped.

What are the implications of the study?
It appears that an illness similar to that seen with initial HIV infection, along with a rapid increase in the amount of virus in the blood, can occur with discontinuation of anti-HIV treatment.