

The Berlin Stories

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Call it the “Berlin Patient” cloning. Italian researcher Franco Lori, MD, and his colleagues reported encouraging early findings on a handful of patients whose therapy is periodically interrupted. The Berliner is, of course, the highly publicized (but anonymous) German HIVer who was treated with hydroxyurea (Hydrea)/indinavir (Crixivan)/ddl (Videx) soon after infection. His virus dropped to undetectable and then boomeranged back when the drugs were stopped during a hospitalization. Restarting HAART again sent the virus to undetectable, where it remained despite a second drug holiday. Finally, nausea forced a cease and desist of all meds after a third restart. But in the two-plus years since, his viral load has remained undetectable, although HIV has been found in his lymph nodes and resting CD4s. Still, his immune markers—CD4 and CD8 counts and ratio, and proportion of naive cells—look remarkably normal. The presence of strong anti-HIV-specific CD4 and CD8 cytotoxic T-lymphocyte responses leads Lori to believe that the Berlin Patient’s cellular immune response is working a miracle—keeping HIV under control.

Now three more patients, all treated within a year of infection, are being studied intensively during planned treatment interruptions. Each first received three weeks of HAART that included hydroxyurea, ddl and either a protease inhibitor or d4T (Zerit), followed by a week off the drugs. Then the same combo was given for three-month cycles, followed by a break from therapy that lasted until the virus hit 5,000. The average rebound time lengthened after each cycle, going from 14 days after the first cycle to 37 days after the second. Lori thinks that allowing the virus to briefly resurface provides a kind of “self-inoculation” that restimulates appropriate immune responses—in effect, teaching the body how to keep the virus in check. Whether this on-again, off-again strategy will offer lasting suppression of the virus remains to be seen.

Other researchers are also studying therapy interruptions with their patients, so future data will clarify if these successes are a fluke. Until then, all involved warn against any Berlin Patient wannabe trying a do-it-yourself trial. For now, this is one to leave to the experts.