HIV Can Hide in Bone Marrow, Evade Treatment

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HIV can infect bone marrow cells and remain hidden to avoid treatment, according to a new study reported on by The Associated Press. The study, led by Kathleen Collins, MD, of the University of Michigan, is published this week in the journal *Nature Medicine*.

According to the study, HIV is dormant in the bone marrow cells, also known as progenitor cells. But when those cells convert into blood cells, the virus can reactivate, kill the new blood cells and move on to other cells.

Previously discovered HIV hiding places include memory CD4 cells and blood cells called macrophages. But even those spots don't account for the amount of virus that returns in the body of people who stop taking antiretroviral medication. The search for other hiding places led Collins and her colleagues to investigate the bone marrow cells.

"If we're ever going to be able to find a way to get rid of [HIV], the first step is to understand" where latent virus can hide, Collins said. She hopes this research will lead to new treatments that can eliminate HIV in the body completely.

"I don't know how many people realize that although the drugs have reduced mortality we still have a long way to go," Collins said. "That is mainly because we can't stop the drugs, people have to take it for a lifetime."