Cure for sickle cell anemia within reach thanks to gene editing

A new treatment for the blood disease sickle cell anemia is possible now that scientists have figured out how to repair the mutation that causes the condition.

Researchers took blood from patients from sickle cell anemia. Then, they used…CRISPR to snip out the genetic mutation and replace it with healthy DNA…The procedure is very difficult, so only 6 percent of the cells, at most, were fully fixed. This is far from ideal, but 6 percent is theoretically still enough to help patients. The blood didn't go back in the patients, so we don't know what its effects on their condition might be. But the hope is that we can one day treat patients by giving them transfusions of their own, fixed blood, says study co-author Dana Carroll, a professor of biochemistry at the University of Utah.

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This success rate is just good enough to be potentially helpful. Previous research in sickle cell anemia shows that even if only about 5 percent of the cells are "healthy," the patient can still get better.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: A new gene-editing technique could help treat sickle cell anemia