Cure: Role of Macrophages

Any HIV cure on the horizon will have to tackle macrophage immune cells as well as CD4 T Cells, a study indicates.

July 1, 2019 By Benjamin Ryan

Macrophage immune cells, evidence now suggests, are a component of the viral reservoir. HIV cure research has principally focused on latently infected CD4 T cells as the reservoir's backbone. These nonreplicating immune cells evade antiretrovirals, which work only on active cells. Researchers studied urethral tissue from 20 people with HIV who were designated male at birth and were undergoing gender confirmation surgery. All of them had an undetectable plasma viral load. Tests showed that HIV genetic material was integrated into their latently infected urethral macrophage cells. After these cells were treated with an activating agent meant to get them to start replicating again, they began producing viable copies of the virus. A CD4-cell-activating drug did not prompt the macrophage cells to replicate. Based on these findings, experimental HIV cure therapies that use drugs that only reverse the latency of infected CD4 cells may miss the macrophage part of the reservoir.

© 2026 Smart + Strong All Rights Reserved.
http://beta.docker.poz.com/article/cure-role-macrophages