Three New Strains of Hepatitis C Found in Africa

Many contain genes that are resistant to common antiviral medications.

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Medical researchers in Africa have discovered three new, never-studied strains of hepatitis C virus (HCV) and are urging clinical trials in the area to assess the efficacy of current antiviral treatments, ScienceDaily reports.

Recently published in Hepatology, the findings suggest that certain antiviral drugs commonly used in the United States and Europe may not work as well against these new strains. They also could inform hepatitis C vaccine development and assist the World Health Organization (WHO) in its aim to eliminate hepatitis C globally by 2030.

The study, conducted by researchers at the Wellcome Trust Sanger Institute, the MRC-University of Glasgow Centre for Virus Research and other collaborators is the largest population study of hepatitis C in sub-Saharan Africa. For the study, researchers screened the blood of 7,751 people from the general population in Uganda and sequenced the HCV genomes from 20 previously undiagnosed patients. They then sequenced the genomes from these and two further blood samples from people born in the Democratic Republic of Congo and discovered three new strains of HCV in addition to several strains common in the West.

After analyzing the samples, researchers found that many of these new strains contain genes linked with resistance to common antivirals. Study authors concluded that current screening methods using antibody detection were inaccurate in Uganda and that using tests that screen for the virus itself would be a much better way to diagnose HCV infection in high-risk populations.

“Our study highlights the need for more investment on people in Africa and developing parts of the world,” wrote Manj Sandhu, PhD, a senior author of the study. “We show there are clear differences in HCV across the world, underlining the need for understanding HCV globally.”
