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**Hope for Aids cure as drug flushes out virus**

Scientists in the United States say they had used a cancer drug to flush out the Aids virus lurking dormant in trial patients’ white blood cells — a tentative step towards a cure.

The ability of the HIV genome, or reproductive code, to hide in cells and be revived after decades poses a major obstacle in the quest for a cure.

Being able to expose the virus in its hiding place would allow scientists to target the host white blood cells in a killing blitz.

“It is the beginning of work toward a cure for Aids,” said David Margolis, co-author of the study published in the J*ournal Nature*, as the International Aids Conference was under way in Washington.

HIV is a retrovirus, inserting its DNA into the genome of host white blood cells, CD4+T cells in this case, and turning them into virus factories. Sometimes it goes into hiding in some cells even as others keep on producing.

Some 34 million people around the world are living with HIV, which destroys the immune system and has caused about 30 million Aids-related deaths since the disease first emerged in the early 1980s.

In the latest study, researchers in the United States used the chemotherapy drug vorinostat to revive and so unmask latent HIV in the CD4+T cells of eight trial patients.

The patients were also on antiretroviral drugs, which stops HIV from multiplying but have to be taken for life because they do not kill the virus hidden away in reservoirs.

“After a single dose of the drug (vorinostat), at least for a moment in time, is flushing the virus out of hiding,” Margolis said of the trial results — the first drug ever shown to do so.

“This is proof of the concept, of the idea that the virus can be specifically targeted in a patient by a drug, and essentially opens up the way for this class of drugs to be studied for use in this way.”

The drug targets an enzyme that allows the virus to lie latent.

The researchers cautioned that vorinostat may, however, have some toxic effects and stressed this was merely an early indication of feasibility that had to be explored further.

Exactly what would happen after the virus was unveiled in reservoir cells was also not certain, Margolis said.

“We know that many cells that produce HIV die in the process. We know many cells that produce HIV can be identified and killed by the immune system. As far as we can tell, all the viruses floating around while patients are taking therapy don’t get into cells because they are blocked by the therapy,” he said.

Without a host cell, the virus would die within a few minutes. *(AFP)*