

Scientists find New Strain of HIV

Gorillas have been found, for the first time, to be a source of HIV.

Previous research had shown the HIV-1 strain, the main source of human infections, with 33m cases worldwide, originated from a virus in chimpanzees. But researchers have now discovered an HIV infection in a Cameroonian woman which is clearly linked to a gorilla strain, Nature Medicine reports. A researcher told the BBC that, though it was a new type of HIV, current drugs might still help combat its effects. HIV originated from a similar virus in chimpanzees called Simian Immunodeficiency Virus (SIV). "There's no reason to believe this virus will present any new problems, as it were, that we don't already face" Dr David Robertson researcher. Although HIV/Aids was first recognised by scientists in the 1980s, it is thought to have first entered the human population early in the 20th Century in the region of the Democratic Republic of Congo. The virus probably originally jumped into humans after people came into contact with infected bush meat. SIV viruses have been reported in other primates, including gorillas.

Unusual case

French doctors treating the 62-year-old Cameroonian woman who was living in Paris said they initially spotted some discrepancies in routine viral load tests.

Further analysis of the HIV strain she was infected with showed it was more closely related to SIV from gorillas than HIV from humans.

She is the only person known to be infected with the new strain, but the researchers expect to find other cases.

Before moving to Paris, she had lived in a semi-urban area of Cameroon and had no contact with gorillas or bush meat, suggesting she caught the virus from someone else who was carrying the gorilla strain.

Analysis of the virus in the laboratory has confirmed that it can replicate in human cells.

Co-author Dr David Robertson, from the University of Manchester, said it was the first definitive transfer of HIV seen from a source other than a chimpanzee, and highlighted the need to monitor for the emergence of new strains.

"This demonstrates that HIV evolution is an ongoing process.

"The virus can jump from species to species, from primate to primate, and that includes us; pathogens have been with us for millions of years and routinely switch host species."

The fact the patient had been diagnosed in France showed how human mobility can rapidly transfer a virus from one area of the world to another, he said.

New problems 'unlikely'

Speaking to the BBC's World Today programme, Dr Robertson said there was no reason to believe that existing drugs would not work on the new virus.

"If some day we do manage to develop a vaccine, there's no reason to believe it wouldn't work," he said.

"There's no reason to believe this virus will present any new problems, as it were, that we don't already face."

Professor Paul Sharp, from the University of Edinburgh, said the virus probably initially transferred from chimpanzees to gorillas.

He said the latest finding was interesting but perhaps not surprising.

"The medical implication is that, because this virus is not very closely related to the other three HIV-1 groups, it is not detected by conventional tests.

"So the virus could be cryptically spreading in the population."

However, he said that he would guess it would not spread widely and become a major problem.

"Although the patient with this virus was not ill, there is no reason to believe that it will not lead to Aids," he added. BBC