

## **Man Cured From HIV Infection?**

Andrew Stimpson was widely reported in the media late on 12th and all day 13th November 2005 to be perhaps the first person infected with HIV to have managed to rid himself of the virus and be "cured". The story was broken in a Sunday tabloid and two other papers, followed by a large number of other media outlets who covered various aspects of the story.

He was first diagnosed in August 2002 after blood tests at the Victoria Clinic for Sexual Health in West London, which specialises in HIV. In October 2003, a further HIV test result was negative.

It was reported that he had threatened litigation against Chelsea and Westminster Healthcare NHS Trust, after which his blood samples were tested further to make sure they were from the same person and to confirm HIV test results. The hospital told him his case was remarkable.

## **Comment on press report**

Response by Dr Patrick Dixon (on 13 November 2005) - Dr Dixon is Founder of the international AIDS agency ACET, author of two books on AIDS and has been involved in AIDS care and prevention since 1987. He is also Chairman of Global Change Ltd, a trends forecasting company.

1) This is a press report, rather than a scientific paper in a reputable journal, and important medical facts about the HIV tests were missing from the story when it first appeared.

2) One cannot of course comment on an individual set of HIV test results except in general terms, without all the information. The situation here may be complicated by the fact that the hospital is bound by duty of patient privacy and confidentiality so we may not know the full story - nor do we have the right to know.

3) There have been a number of anecdotal reports of people who appear to have rid themselves of HIV infection, many of them from Africa, but in previous cases it has been hard to

rule out errors in HIV testing. There have also been cases where the test for HIV antibodies has given a false-positive result. (Note: on 14th November the hospital issued a statement saying that they had no definite evidence so far that he had ever been infected - in other words, the first test(s) may have been false positives.)

4) Independent researchers will want to take a very close look at any case like this, firstly to be sure that there were no errors in the testing process, and if so, to make certain that there really is no HIV infection lurking in the background at a level which is hard to detect. If they are satisfied on both counts, they will try and work out what process the body has used to eliminate HIV. Antibody tests are the usual way to look for HIV infection, and measure the body's reaction to the virus. Direct tests for the virus particles themselves are more difficult and expensive, but it would be very significant if they also tested positive at first, and then negative. It is unclear from the first reports what kinds of HIV tests were positive or negative at each stage. The hospital has said that it would like to make further tests.

5) If the story is true (no medical mistake), it probably means that the immune system of this individual has discovered a weakness in HIV which holds the key to destroying it. If we could find a way of reproducing that same biological process in other people who have HIV then it could lead to a new kind of treatment or even potentially a cure. However this would be likely to take some years to develop safely.

6) An alternative explanation could be that the virus itself was defective in some way and a less dangerous strain of HIV. This may be difficult to prove if the virus has been completely eliminated.

7) The answer may turn out to be in his specific genetic code. Some individuals seem to have [genetic](#) resistance to HIV infection. Research suggests that this is linked to the CCR5-delta32 gene, carried by 20 per cent of Caucasians. Around 1 per cent of Caucasians carry two copies of this gene and these individuals seem to have a much lower risk of HIV infection, even after repeated exposure. We may find other genes which also influence HIV infection and progression to AIDS.

8) Medical researchers will be wanting to look closely at how the white blood cells behave inside this individual. The immune system is very complex and the key will be to discover exactly how this individual's immune defences are working.

9) The "holy grail" of Aids research would be to find a relatively simple way to prevent or cure HIV infection and AIDS - for example an antibody that is effective. So far the search has been frustrating, partly because the virus keeps changing shape, and seems able to hide itself away from immune attack.

10) The only real answer to AIDS globally at the moment is prevention. With 5 million new cases of HIV infection every year, the pandemic remains out of control in many of the poorest nations. We have seen devastation from AIDS in Africa, and are starting to see rapid spread in some part of India, Cambodia, Vietnam and other countries in the region, as well as in Russia and Ukraine. While antiviral therapy prolongs life for those fortunate enough to receive it, such treatment has side effects, viral resistance can develop, it has to be taken for life under medical supervision, and is not available to the majority of those with HIV worldwide who are in the poorest countries.

We are probably still more than a decade away from any kind of effective vaccine - and any kind of cure. We have made little progress on either in the last 20 years.

However we know how to prevent HIV from spreading and countries like Uganda have seen dramatic falls in infection levels from 22% to 7% in some communities - a result of total community mobilisation over more than a decade.