


Treatment Questions and answers


by Simon Collin

The following issues were all raised at a recent treatment support workshop organised by ACIA. Some have a specific African focus while others are common to all people living with HIV.


The questions and answers below are only brief summaries of the discussions, but they show why treatment knowledge is important. Each issue is quite complex and we could have written a page on each. Hopefully this will help you to think about treatment in a new way and answer some of your own questions.

 **Does someone who is HIV-positive have one virus or many different viruses?**

Most people are only infected with one HIV virus. At the start of the infection, the virus that is produced is all very similar. However, the virus produces millions of new copies of itself each day, making tiny mistakes or mutations each time. Over time, this means that an individual will develop thousands of very similar, but slightly different viruses.


 **What is the difference between HIV-1 and HIV-2?**

HIV-1 is the main family of HIV and accounts for 95% of all infections worldwide. HIV-2 is a very different virus and is only generally seen in a few West African countries. Although HIV-2 generally progresses more slowly than HIV-1, some HIV drugs (*like nevirapine and efavirenz*) will not work against HIV-2.


 **What is an HIV sub-type?**

There are different strains of HIV-1 and these are called sub-types. Most of these sub-types are still very similar. In Europe and America most infections are with sub-type B; in south East Asia Subtype E is prominent, and in Southern and Eastern Africa Sub-Type C is most prominent.

Reinfection and recombination of different viruses mean that some people are infected with two different sub-types, or a mixture of sub-types i.e. in West Africa, sub-type A plus G is a common virus.

 **Do different sub-types respond differently to HIV treatment?**

In general, sub-types all respond equally well to treatment. There may be some difference in how resistance develops. These and other differences are still being researched.

 **Can you be reinfected with a different strain of HIV?**

This is a big question. It gets everyone talking. The brief answer is 'yes' - but this has only been documented in a few cases, because it is a very difficult thing to prove, and requires special lab tests that look at the genetic structure of the virus.

Reinfection can definitely happen, but the implications are serious if the reinfection is with a virus that is resistant to different drugs, or if it is a different HIV subtype. If two HIV-positive people have the same virus (i.e. the same subtype) and have the same resistance pattern, then the implications of reinfection, if it does occur, are less likely to be significant.


Some of the documented cases of reinfection though, have resulted in treatment failure and faster disease progression. This is when one person has been reinfected with drug resistant virus, so it can be serious depending on the details. This question is important for HIV-positive people who want to decide whether they need to use condoms when sleeping with other HIV-positive partners.

In this context, it is important to remember that condoms protect you from some other sexually transmitted infections, and from pregnancy.

If you are in a monogamous relationship though AND you trust your partner AND you have the same sub-type AND

you or your partner have not developed different resistance AND pregnancy is not an issue... then you may decide not to use condoms. Your quality of life may be better, and it is unlikely to have a negative impact on your future health.

Remember though that if you are on treatment, some ARVs reduce levels of oral contraceptives, so it may still be important to use condoms if you do not want to become pregnant.

 **If my treatment was successful - i.e. it brought my viral load to undetectable levels - but it then rebounded again, could this be because I was originally infected with a resistant virus?**

This *is* a reason why treatment fails in some people.

If you were infected with a resistant virus several years ago, this may not now be detected in a resistance test. When you started treatment with one of the drugs you were resistant to, it is unlikely to work. You would therefore only be receiving two active drugs, rather than three. In working out whether it is likely that you were infected with resistant virus, consider the following points:

- i) How long have you been HIV-positive? The longer ago that you were infected, the less chance you were infected with resistant virus. This is because less people were on treatment ten, or even five years ago. If you were infected very recently, this chance is higher, as more people are using treatment now, and more people have developed resistance to at least one of the drugs.
- ii) Were you infected in a country where very few people were on treatment? The risk of being infected with resistant virus is high in countries that have had access to treatment for a long time, and low in countries where fewer people have access to treatment. In the UK 10-20% of all new HIV diagnosis, are with a virus that has resistance to at least one HIV drug.

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continued

This is likely to be much lower in every African country now, though as more people use treatment, the figures are likely to rise, as in the UK.

UK guidelines published in 2005, state that everyone should have a resistance test before they start treatment for the first time. They also say that everyone who is newly diagnosed should have a resistance test.

Many people still do not get this test. If in doubt, ask your clinic. If you ask you are more likely to get the test than if you don't ask!

Q Are there some side effects that only occur in African people?

Yes. Although most side effects can occur in anyone, independently of their racial background, there are a few side effects related to pigment changes, that particularly affect people with darker skin.

One of these is where your finger or toe nails become darker. This is mainly linked to AZT. It is also linked to the combination tablets that include AZT, like Combivir and Trizivir.

Another specific side effect is that FTC (emtricitabine) can make small changes to the skin colour in African people, usually in the form of darker spots on the palms of the hands. A recent report suggested that this happens in less than 5% of people using FTC.

The discolouration to either skin or nails does not do you any physical harm, but many people do not like it and so they switch to an alternative drug.

Other differences in side effects can be related to genetic factors including race. Efavirenz (Sustiva) can take longer for the body to process in African women. This can mean higher levels of this drug, and a higher risk of the usual side effects associated with this drug. There are other implications about how to stop treatment, that we hope to cover in a future article.

Q Does it matter if you start treatment with a low CD4 count?

Over one third of all new HIV diagnoses are in people whose CD4 count is already less than 200 cells/mm³. This is higher in African people and highest still in African men. Anyone whose CD4 count drops below 200 is at risk of serious opportunistic infections and the lower it drops, the higher the chance that the infection will require more toxic drugs, and may even be fatal. Starting treatment before the CD4 count falls below 200 is the best time to use treatment. You are likely to get less side effects and the treatment is less likely to cause 'immune reconstitution illnesses'. This is a term that describes serious illnesses become active in people whose immune system become dramatically stronger because of HIV treatment.

You can still respond well to treatment – even if you start when your CD4 count is less than 50 cells/mm³ – but you are asking the medications to do a much more difficult job.

Q Why is it so important to get my viral load to undetectable (less than 50 copies/mL)?

Most people who get their viral load to less than 50 copies/mL, AND who continue to take every dose at the right time, will be able to use the same treatment for many years – perhaps 10-20 years. If your viral load stays detectable when using HIV drugs then you are very likely to develop resistance to those drugs and they will only last for a short time – perhaps only a few months.

Q Is there an HIV phonenumber where I can talk about treatment?

Yes, the I-Base phonenumber is a free confidential service where you can talk to an HIV-positive advocate about any aspect of your HIV treatment. Calls are free from land lines and the Orange mobile network. The number is 0808 800 6013 and it is open Monday, Tuesday and Wednesday from 12.00 to 4 pm.

Many other support projects including ACIA and the THT have treatment workers or treatment advocates and may be able to offer similar information. Simon Collins is a treatment advocate at HIV i-Base. He regularly writes about HIV treatment and co-ordinates the I-Base treatment phone line.



In each edition we will focus on different aspects of treatment for HIV and related illnesses and other social issues affecting African Communities living in the UK.

If you have any suggestions please do write to:

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