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## How do you decide when to start HIV therapy?

Antiretroviral therapies have become so effective at suppressing the HIV virus that many people who have access to treatment can expect to live healthier and longer lives. However, as more people remain on these medications for longer periods of time, new side effects and complications emerge. When to start highly active antiretroviral therapy (HAART), therefore, is one of the most important questions for people living with HIV and their doctors.

Unfortunately, there is no simple answer. As we have found out more about how HIV works and the immune system's ability to fight it, treatment recommendations have changed dramatically, especially in the past seven years. The trend has moved away from a "hit early, hit hard" approach to the present one of "watchful waiting" until a person's immune function has declined significantly. The main reason is that, while antiretroviral medications are very effective in controlling the replication of the virus, they do have side effects, toxicities (side effects caused by drugs on organs such as the liver or kidney), and complications. So in considering when to start treatment, the risks of long-term HIV infection must be weighed against the complications and toxicities of the drugs.

### When is the usual time to start HIV medications?

Generally speaking, people with advanced HIV disease that suffer from symptoms such as fevers, night sweats, weight loss and fatigue, or those who develop opportunistic (complicating) infections of AIDS, should start antiretroviral therapy as soon as possible.

The decision is less straightforward for people who are free of HIV symptoms and are generally feeling well. Concern over long-term toxicity, and the fact that eradication (getting rid) of the virus may not be achieved in the foreseeable future, have tended to point to less aggressive treatment.

Today, the "CD4 cell count" (a test that measures the number of CD4 cells in your blood, and tells you how healthy your immune system is and how much damage the HIV virus has done to your immune system) has become a more reliable signpost compared to viral load (a test that measures the amount of HIV viral material in your blood). Current treatment guidelines state that people with CD4 cell counts at or below 350 should consider starting treatment.

However, two recent studies suggest that CD4s may be safely allowed to fall lower than 350, meaning even more lead-time may be possible. Researchers looked at two groups of people. One group started treatment when they had between 350 and 500 CD4 cells. The other group started when they had between 200 and 350 CD4 cells. The researchers found that there was almost no difference between the two groups in terms of treatment success.<sup>1</sup> Other studies have clearly shown that people who start treatment when their CD4 cell count falls below 200 have a much harder time regaining their health, as well as a higher risk of disease progression and death.<sup>2</sup>

### A summary of when to start medications

If your CD4 count is **greater than 350**, it should be safe to wait to start antiretroviral therapy.

If your CD4 count is **less than 200**, then treatment should be started as soon as possible.

If your CD4 count is **between 200 and 350**, this is an important time to begin thinking about starting treatment and watching the trend of your CD4 cell count closely.

### Can I delay starting medications as long as possible?

There are many people who have had HIV infection for many years and have done well without taking any HIV medications. If you are feeling well, have not had any complicating infections, and your immune system is stable (i.e. your CD4 cell count is above 350), you may be able to delay starting HIV medications. The bottom line is if you are not ready to commit to taking the medications every day, it is best not to start.

### What are the consequences of waiting too long to start HIV medications?

If you wait too long to start treatment, there is a higher risk of developing a weaker immune system. This may make you more likely to develop complicating infections that could lead to hospitalization or even death. As well, if your CD4 cell count becomes very low, it may become harder to strengthen your immune system and reduce the effectiveness of vaccines against the flu and pneumonia. If you are sick or your immune system is weakened, it may also be harder for your body to tolerate the medications once you do start because you may be more prone to developing side effects.



## **Do I have choices about what kind of medications I can start with?**

Fortunately, there are several kinds of medications available, in various combinations. Ask your doctor which combination is best for you. There really is no best combination. It is a personal choice, depending on how many pills you are prepared to take, how many times you would like to take your pills, which side effects you can handle, and other factors.

## **Can I start with a powerful cocktail, and then reduce to something simpler?**

We do not yet know the answer, although several studies are currently looking into this question. The general idea is to start with a potent treatment involving four or more medications to reduce the amount of HIV virus in the body. This would allow the immune system to improve quickly. Subsequently, you could take away one of the medications to make the treatment simpler. In other words, treat the HIV virus aggressively at first, when there is a lot of the virus in the body, and then make the treatment simpler to prevent side effects and make it easier to take the pills over the long term.

## **Can I take a drug holiday from time to time?**

It is generally felt that once you commit to starting HIV medications, it may be a lifelong commitment. There are studies now under way looking at whether it is safe to stop medications. Some people are starting to take breaks (drug holidays) from their medications. We do not have enough data or knowledge to indicate whether this is safe. People who originally started their medications when their immune system was very strong (for example, CD4 cell count greater than 500) may be able to safely stop their medications under close supervision. However, taking a drug holiday does not lead to a strengthening of the immune system, with the exception of

only a few rare cases. The subject of drug holidays will be covered in greater depth in the next article in this HIV Treatment Update series.

## **Will treatment interfere with my lifestyle?**

For some people, taking HIV treatment may interfere with their lifestyle including their ability to sleep, eat, work and exercise. This may be due to the side effects of the pills, the number of pills or the number of times you need to take the pills each day. Luckily, some of the treatment programs have become simpler. You may be able to take fewer pills, perhaps only once or twice a day, reducing the impact on your lifestyle. Talk to your doctor about the various side effects you may be having from your medications. Ask for suggestions about how to cope with your side effects. Your doctor may even prescribe some medication to help relieve some of your symptoms. You should work together to help make taking medications easier.

## **Will the medications lower my energy level or sex drive?**

There are many reasons people living with HIV may feel lower energy levels and sex drive (libido). One may be linked to HIV treatment. Others may be due to low hormone levels in the blood (testosterone), an under-active thyroid gland, anaemia (low blood level), an infection, depressed mood, or simply the HIV virus itself. You should always ask your health care professional about why you may have these symptoms before deciding that it must be due to your medications.

## **Can HIV medications make me less likely to transmit HIV?**

The goal of taking HIV medications is to lower the amount of HIV virus circulating in your body. This will allow your immune system to recover, making the likelihood of getting infections much less likely. We know from research studies that the

best way to decrease transmission of the virus from one person to another is to use condoms if you are having anal, oral or vaginal sexual intercourse. Another way is to have the lowest amount of virus possible circulating in your body. This can be achieved by taking HIV medications. However, the viral load test only measures the HIV virus in the blood, and not other body fluids such as semen or vaginal fluid. This means that even though the viral load may be undetectable, HIV+ persons should always ensure they continue to have protected sex so that they won't transmit HIV.

## **How do I know when it is the right time to start HIV medications?**

The answer is when you are ready. This may be the most difficult decision you may ever make, so it is important to try to get as much information and as much support as possible from people like your family, friends, counsellor or doctor. It may be helpful to attend treatment education workshops and support groups that are offered by your local AIDS community organization. Carefully weigh the benefits and risks. Ask as many questions as you can think of and have an open and honest discussion with your physician.

Understand that the treatment works best when the medications are taken every day and on schedule. Starting HIV medications is a true commitment that you must be prepared to make and stick with for a very long time.

<sup>1</sup> T. Sterling, R. Chaisson, R. Moore. Initiation of Highly Active Antiretroviral Therapy at CD4+ T Lymphocyte Counts of >350 cells/mm<sup>3</sup>: Disease Progression, Treatment Durability, and Drug Toxicity. *Clinical Infectious Diseases* 2003;36: 812–5.

<sup>2</sup> E. Wood, R.S. Hogg, B. Yip, M.V. O'Shaghnessy, J.S. Montaner. Impact of Physician Experience and Baseline CD4 Cell Count on Rates of Disease Progression Among HIV-1 Infected Patients Initiating Triple Drug Therapy. *Int. Conf. AIDS*, July 14, 2002, Abstract TuPEB4672.

**This information is provided solely as an educational resource.  
Always consult your physician before initiating or changing any treatment regimen.**