

# Diagnosed with HIV at a low CD4 count

Last updated December 2011/ Due for review December 2012

In the UK, it's recommended people with HIV start treatment before their CD4 count falls below 350, to control HIV before it damages the immune system to an extent that people are at risk of serious illnesses.

Every year several thousand people learn that they are HIV-positive when their CD4 count is already below 350 (over half of all people diagnosed in the UK in 2010). HIV may be making them ill, or they may have another condition associated with HIV.

If you are diagnosed with HIV with a CD4 count under 350, you will be recommended to start HIV treatment very soon or even straight away. You may need additional treatment and monitoring, but there is a good chance that you will respond well and your immune system will start recovering.

## The immune system and HIV

The immune system's different cells work together to protect the body against pathogens such as viruses and bacteria.

The human immunodeficiency virus (HIV) mainly infects the CD4 cells in the immune system. Over years of HIV infection, CD4 cell numbers usually drop gradually, but constantly, and the immune system is weakened. If nothing is done to slow or halt this destruction, it becomes unable to fight infections and you become ill.

Antiretroviral drugs interrupt this process. The aim of treatment is to reduce levels of HIV (often called your 'viral load'), so your CD4 count increases and your body's ability to fight infections improves.

## Starting HIV treatment after diagnosis

If your CD4 count is under 350 when you are diagnosed, you will be encouraged to start treatment soon. Your healthcare team can discuss this with you and answer questions.

If your CD4 count is below 200 your doctor will recommend starting HIV treatment immediately. You have a risk of developing serious – and potentially life-threatening – illnesses. You may also need to take antibiotics (a treatment called prophylaxis) to prevent you developing opportunistic infections. Once your CD4 count has increased to above 200, you stop taking the prophylaxis. If you are already ill with an infection, you usually will start treatment for this before you start HIV treatment.

## How effective is HIV treatment in people with low CD4 counts?

HIV treatment is highly effective. Many people's CD4 count will start to climb after starting treatment. Long-term HIV therapy can result in your CD4 count returning to the normal level for your age. Once your CD4 count improves, with continued treatment and care, your life expectancy is very good.

Other factors, such as age, viral load, genetic make-up, lifestyle and quality of health care will also affect your future health and life expectancy.

Some people's CD4 cell counts do not increase, or rise very slowly, even though their viral load is 'undetectable'. This can mean people are at greater risk of becoming ill and of dying of HIV-related illnesses. They may also be at greater risk of developing heart disease and cancers.

If this is the case, it is very important that you receive careful health monitoring so that any developing health problems can be detected and treated early.

Some research has suggested that the risk of developing health problems is linked to your lowest-ever (or 'nadir') CD4 count, even in people whose immune system has recovered well. However, other research has questioned this link.

## Co-infection with TB and IRIS

The decision when to start HIV treatment may be more complicated if you have tuberculosis (TB). There are potential interactions between anti-HIV drugs and a key TB treatment. Some doctors recommend delaying treatment with anti-HIV drugs until after two or three months of TB treatment. However, this will depend on many factors, including your CD4 cell count. If your CD4 cell count is below 100, your doctor will recommend you start HIV treatment as soon as is practicable – ideally within two weeks of starting TB treatment.

A risk after starting HIV treatment is that you could develop a condition called immune reconstitution inflammatory syndrome (IRIS). This is where someone, soon after starting HIV treatment, seems to have worsening symptoms of another infection or disease, such as TB. In fact, the illness is thought to be caused by an improvement in the immune system's ability to respond to infection. Your doctor will make a decision about how best to treat IRIS, but it is likely you will stay on HIV treatment unless you become seriously ill.

## Having a diagnosis of AIDS

Acquired immune deficiency syndrome (AIDS) is the name used to describe a range of illnesses (chiefly infections and cancers) which can develop when someone's immune system has been damaged by HIV.

In the UK, someone will be given an AIDS diagnosis if they develop an AIDS-related illness. Not all AIDS-defining conditions have the same outlook. Being diagnosed with AIDS does not mean that your health will continue to deteriorate. Many people diagnosed with AIDS have become healthy again, with good treatment and care.

## What can you do to look after yourself?

The most important thing is to start HIV treatment, and to take it exactly the way you are advised to (this is often called adherence).

Attend your HIV clinic for regular check-ups. These monitor how your treatment is working, with regular screening for other health problems. Having a good relationship with your healthcare team is important, so that you feel able to be honest about your health, lifestyle, adherence and any other issues, to help you receive the best possible care and support.

Register with a GP (family doctor) for non-HIV-related health problems. GPs can give you an annual flu vaccination (recommended for people with a weakened immune system), and provide advice on lifestyle factors that help keep you well, including healthy eating, exercise and giving up smoking.

While your CD4 count is low (under 200), ensure your drinking water is free from infection and take extra care in preparing and storing food to avoid food poisoning. Be careful to avoid infections if you are handling animals or gardening. Your healthcare team can talk to you about any risks and give you advice.

## Sexual health

Taking care of your sexual health to protect yourself and any partner(s) is important. Condoms are a very effective method of preventing HIV transmission. Being on effective HIV treatment (so that your viral load is 'undetectable') means that you are much less likely to pass on HIV.

## Mother-to-child transmission

If you are diagnosed with HIV while you are pregnant, it is extremely important you receive the right HIV treatment and care as soon as possible. Even if you are diagnosed late in pregnancy, this can prevent your baby from being infected.