

What's your problem?

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Your chance to ask an HIV-experienced doctor about any medical query you might have. We are grateful to Dr Louise Owen, medical director of the Centre Clinic in St Kilda, who will be answering your questions.

Arthritis worry

JON FROM EAST BENTLEIGH, VICTORIA WRITES:

I am 45 years old, have had HIV since 1998 and been on Truvada and Nevirapine for the past four years. Lately I have started to notice stiffening in the joints and my doctor thinks it is the beginnings of arthritis. I thought arthritis occurred a lot later in life and I was wondering if HIV or my treatments might be playing a role in bringing it on earlier?

LOUISE REPLIES:

Hi Jon, thanks for writing in. You have asked a great question about "arthritis". Arthritis is actually a non-specific term which means "inflammation of the joints"; in other words, that can mean swelling, stiffness or aching. The most commonly occurring types of arthritis are Rheumatoid and Osteo- arthritis. Each of these has certain features which helps your doctor make a diagnosis. Joints that have previously been injured (eg in sporting injuries or previous fractures) are more prone to Osteo- arthritis. Osteoarthritis becomes more common as people get older.

In HIV, some people experience aches in the joints (known as arthralgia) during seroconversion illness. HIV-associated arthritis mainly affects the knees and ankles and may cause pain and swelling. Usually simple analgesia such as paracetamol can be useful to relieve symptoms. Sometimes anti-inflammatory medication is required, but these can have side-effects, so your doctor will discuss this with you. Occasionally in people with very low CD4 counts, opportunistic infections can infect a joint and cause a single joint to become very painful and swollen.

Sometimes x-rays can be useful to determine the degree to which the joint may be affected by arthritis. Most aches and pains and stiffening as you age are probably not directly related to your HIV or treatments. This will be something to continue discussing with your GP.

Social smoker

HELEN FROM GLENELG, SA WRITES:

You are probably going to think this is a dumb question but I'm going to ask it anyway. I am a social smoker and I often have about five cigarettes on the weekend (sometimes up to 10 if I'm at a party). I can stop at that and not have any more for the week. I know it's silly asking a doctor to approve of my habit but I want to know how seriously it might affect my [cholesterol](#) [1]An essential component of cell membranes and nerve fibre insulation, cholesterol is important for the metabolism and transport of fatty acids and the production of hormones and Vitamin D. Cholesterol is manufactured by the liver, and is also present in certain foods. High blood cholesterol levels have been linked to heart disease and may be a side effect of some anti-HIV medications. and general health. I am on Truvada Atazanavir and Ritonavir and my cholesterol is occasionally on the high side (up to 7.0). I have made changes to my diet to get the cholesterol down but I haven't been able to give up those few cigarettes a week. On a scale of ten where do you think the cigarettes lie in contributing to my heart risk here?

LOUISE REPLIES:

Hi Helen, you are right, it is unlikely we will approve of your habit! There is no doubt smoking has nothing to recommend it. However, harm reduction and minimisation mean that five cigarettes on the weekend is better than 20 a day and we would acknowledge that. There are well-established risk factors for heart disease. Some of these are "fixed" – that is, you can't change them. This includes age, gender, and family history. Some risk factors are

“modifiable” – that is, can be changed or reduced to reduce the risk. These of course include smoking, cholesterol levels (managed with diet and sometimes medication) and good management of [high blood pressure](#) [2] Persistently high blood pressure, an outwardly symptomless condition which carries an increased risk of serious illnesses such as stroke, heart disease and heart attack. and [diabetes](#) [3][Diabetes mellitus] A disorder in which sugars in the diet cannot be metabolised into energy due to a lack of the enzyme insulin. Late-onset diabetes mellitus may be a long-term side effect of some anti-HIV drugs.. Some HIV medication may increase blood lipid (fat) levels and this could contribute to an increased risk.

I would need to know more about you to determine the absolute risks, such as your age, family history, blood pressure, how much you exercise and so on. It is great that you have been able to lower the cholesterol. But, the way you can most reduce your risk of heart disease immediately, is by quitting! Easier said than done, but don't forget the other risks smoking causes – stroke, kidney disease and lung disease. Each year over 20,000 Australians die from diseases caused by smoking. Smoking may increase the risk of osteoporosis in women. Ask your doctor about options to help you quit! Good luck.

Troubling [trigs](#) [4]A type of fat in the blood. Elevated triglyceride levels may be a side effect of some anti-HIV drugs.

DAVID FROM BRISBANE, QLD WRITES:

My triglycerides are out of control! I have readings up around the 7 mark and I am told they should be around 2! What should I do? I am on Truvada and Kaletra. I know the two proteases are contributing but my [viral load](#) [5]A measurement of the quantity of HIV RNA in the blood. Viral load blood test results are expressed as the number of copies (of HIV) per milliliter of blood plasma. is under control and I'm hesitant to change. I've been told fish oil tablets can help – what do you think? Can you suggest other things to get my counts down? I can't believe I could die from a [heart attack](#) [6]A life-threatening emergency in which the blood supply to the heart is suddenly cut off, causing the heart muscle (myocardium) to die from lack of oxygen. from taking drugs that are trying to keep me alive from HIV!

LOUISE REPLIES:

Thanks for this question, David: It is not new news that elevated [blood fats](#) [7]A fat. (lipids) are a risk factor for heart disease. The two main types of blood lipids are cholesterol and triglycerides. One type of lipid is known as High Density Lipoprotein (HDL) and this is the 'good cholesterol'.

Ideally these levels are measured regularly in HIV positive people. This should be a fasting blood test and we would check the blood sugar level too (to exclude diabetes). We are finding that dyslipidaemia (abnormal lipid level) is being more frequently observed in HIV-positive people. This seems to be caused by a number of different factors. These include the direct effects of the [virus](#) [8]A small infective organism which is incapable of reproducing outside a host cell., effects of some antiretroviral medications (ARVs) and also other metabolic changes that can occur. As this is a risk factor for heart disease, along with smoking, diabetes and high blood pressure, it is essential that these things are checked regularly.

The alteration of blood lipids, including elevated triglycerides, had been observed in HIV before the widespread use of protease inhibitors. The role of the ARV medications in causing increases in blood lipid levels is complex and seems to be related to some direct drug effects and also possibly genetic predisposition and hormonal influences. Not everyone taking medications has disturbances in the lipid profiles, so it is proposed that there may be a genetic predisposition.

The management of this situation is not easy; as you mention we have to balance an excellent virological control (undetectable viral load) with the abnormal lipids to come up with the best plan. It is important to always take into account all the other risk factors for heart disease, as some of these we might be able to modify. Unfortunately ageing is a risk factor in itself!

Non-drug interventions are important first steps – exercise, dietary modification and maintenance of an ideal body-weight. Consulting a dietician and reducing fat calorie intake can be helpful.

Switching [antiviral](#) [9]A medication or substance which is active against one or more viruses. May include anti-HIV

drugs, but these are more accurately termed antiretrovirals. agents is another strategy to try to improve the profiles. Protease Inhibitors (PI) as a class are generally associated with more severe lipid disturbances, particularly the triglycerides. Sometimes changing to another PI within the class can improve things without compromising virological control. Sometimes changing the class completely is a strategy used. These are strategies that need to be discussed between you and your doctor as the possibility of other side effects with the alternative medications needs to be taken into account. For some people, due to [resistance](#) [10] HIV which has mutated and is less susceptible to the effects of one or more anti-HIV drugs is said to be resistant., or past side effects, they may have limited alternatives.

A class of drugs used to treat high cholesterol and triglycerides is known as the statins. These have been shown to reduce LDL cholesterol and improve cardiovascular risks. Some of these medications are metabolised by similar pathways as ARVs, so caution has to be taken with different combinations. The fibrates are a class of medications that can help lower the triglycerides. This might be a medication your doctor will consider. There is some evidence that omega-3 fatty acids can improve triglyceride levels. This is a difficult situation David, and usually it requires using many strategies together.

Links:

- [1] <http://www.napwa.org.au/glossary/term/88>
- [2] <http://www.napwa.org.au/glossary/term/98>
- [3] <http://www.napwa.org.au/glossary/term/95>
- [4] <http://www.napwa.org.au/glossary/term/114>
- [5] <http://www.napwa.org.au/glossary/term/416>
- [6] <http://www.napwa.org.au/glossary/term/103>
- [7] <http://www.napwa.org.au/glossary/term/100>
- [8] <http://www.napwa.org.au/glossary/term/125>
- [9] <http://www.napwa.org.au/glossary/term/123>
- [10] <http://www.napwa.org.au/glossary/term/109>