HIV and cardiovascular risk

Did you know that people living with HIV have a 1.5–2 fold increased risk of developing cardiovascular disease?[1]

Increased cardiovascular disease (CVD) risk in people living with HIV is the result of complex interactions between traditional risk factors, antiretroviral therapy (ART) mediated adverse effects and the chronic inflammation and immune activation associated with long-term HIV infection.[1]

The Pharmaceutical Society of Australia has developed a *Screening for cardiovascular disease risk in people living with HIV checklist* that can be used to help you screen for risk factors for CVD in your patients living with HIV, and guide you to educate and refer those at increased risk to see their doctor for a comprehensive clinical assessment.

The complete screening checklist (details opposite for the launch webinar), contains an appendix with explanations of risk factors, and risks associated with different ART. The checklist can be used in a variety of clinical settings and the case scenarios demonstrate two possible situations.

CASE SCENARIO 1

Tomasz, 45 years, lives with HIV infection. He collects his medicines from your pharmacy, and on this occasion informs you that his friend recently passed away from a heart attack. He was the same age as Tomasz and was living with HIV. Tomasz is shocked and asks for help to improve his health and reduce the impact his underlying medical condition may have on his overall health.

You determine Tomasz had a cardiovascular risk assessment by his GP 6 months ago. He admits that he didn't take it seriously at the time, but recalls that his cholesterol was high.

You decide to work through the PSA *Screening for cardiovascular disease risk in people living with HIV checklist* and specifically consider the HIV-specific risk factors. Tomasz states that he has an undetectable viral load and unknown CD4 count.

He has been taking antiretroviral therapy for over 5 years, initially with *Genvoya* (elvitegravir + cobicistat + emtricitabine + tenofovir alafenamide), switched to *Biktarvy* (bictegravir + emtricitabine + tenofovir alafenamide) 4 months ago. Since commencing treatment, Tomasz reports that he seldom misses doses.

You refer to the appendix of the checklist to assess his current treatment and determine considerations. At the time of the previous cardiovascular risk assessment, Tomasz was taking *Genvoya*. You inform him that two of the medicines in *Genvoya*, elvitegravir and cobicistat, can cause increases in cholesterol. You also inform him that *Biktarvy* has fewer lipid effects than *Genvoya*.

You therefore suggest that Tomasz follows up with his GP to obtain some further information about his last assessment and consider requesting another cholesterol test following the change in medicine.

CASE SCENARIO 2

Alex, 50 years, collects his script for *Triumeq* (dolutegravir + abacavir + lamivudine). He has lived with HIV for over 15 years and his HIV management plan is well established. Other than a diagnosis of depression and gout (both well controlled), he has no other medical conditions. In speaking with Alex you discover that he has not had a regular check-up with his GP in over 3 years and currently does not see a cardiologist.

You know that people living with HIV have an increased risk of developing cardiovascular disease and take this opportunity to talk to Alex about his cardiovascular health. As Alex is eligible, you suggest a MedsCheck. During the MedsCheck you use the PSA *Screening for cardiovascular disease risk in people living with HIV checklist* and ask him about his medical history and lifestyle. You find he is smoking a packet per week and does less than 30 minutes of exercise per week. You measure his blood pressure, calculate his BMI and perform point-of-care cholesterol testing — his total cholesterol is high. Working through the checklist you factor in HIV-specific risk factors, such as the duration of his infection and prescribed ART. Referring to the appendix, you note on his action plan that abacavir has been associated with increased cardiovascular events in some studies.

You take this opportunity to counsel Alex on his lifestyle, refer him to Quitline and recommend he signs up for a Heart Foundation personal walking plan, writing these down on his MedsCheck action plan. You recommend he see his GP for a Comprehensive heart health check. With Alex's permission, you call the GP to make an appointment and email the screening checklist and MedsCheck action plan as a starting point for his upcoming appointment.

Reference:

1. Australian Society for HIV Viral Hepatitis and Sexual Health Medicine (ASHM). HIV Management in Australasia: a guide for clinical care. Darlinghurst: ASHM; 2019. At: https://hivmanagement.ashm.org.au/

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Join us for the release of our screening for cardiovascular risk in people living with HIV checklist.

Join Fiona Marple-Clark, Consultant Pharmacist – HIV, Gold Coast Sexual Health Service and Natalie Raffoul MPS, Pharmacist and Cardiovascular Risk Reduction Manager, Heart Foundation Australia, for the launch of our checklist and an in-depth discussion at our webinar on *Screening for cardiovascular disease risk in people living with HIV* on Tuesday 30 November.

To register visit: www.psa.org.au/networking-events/all-events/