

Statins in Chronic Kidney Disease

Your previous blood tests have shown that your kidneys are not performing as well as would be expected. This is not necessarily a problem, as kidney function naturally declines with age, but the medical term for this decline is chronic kidney disease (CKD).

Having CKD is known to increase the risk of cardiovascular disease, which includes heart attacks and stroke. Treatment of CKD therefore aims to prevent or slow down the progression of CKD to reduce the risk of developing more severe disease and also reduce the risk of cardiovascular disease.

What are statins?

Statins are medicines that lower the level of cholesterol in your blood. They help stop the build-up of cholesterol on the blood vessel walls that would otherwise lead to reduced blood flow or blockages in the vessels, causing heart disease and stroke.

What are the benefits of statins in people with CKD?

People with CKD are at higher risk of cardiovascular disease. This risk is further magnified if they have significant leakage of protein in the urine (albuminuria). Hence blood and urine tests are used to diagnose and monitor this condition.

Statins are recommended in all patients with CKD as they not only reduce your cholesterol (helping to reduce the risk of having a cardiovascular event such as a heart attack or stroke) but they also reduce the inflammation or leaky blood vessels throughout the body, slowing progression or worsening of kidney function.

What dose of statin is recommended?

UK guidelines recommend that patients who have chronic kidney disease are prescribed **atorvastatin 20mg daily**.

What cholesterol level should I be aiming for?

It is recommended to aim for a reduction in your **non-HDL** ('bad' cholesterol) of **greater than 40%** from your baseline. You will be offered a blood test several months after starting the statin to monitor the response. Your medication dose may be adjusted depending on your results.

What are the possible side-effects of statins?

Like all medicines, statins can cause side effects in some people. Most people taking statins will experience no or very few side effects. If you do get problems after starting your statin, please speak to one of our GPs, practice pharmacists or nurse practitioners; they can often be reversed by adjusting the dose or changing the type of statin.

- Diarrhoea, a headache or feeling sick are side-effects that are usually minor and settle with time.

Muscle pain

- Statins can cause muscle pain, but many people get muscle pain from time to time whether they take a statin or not.
- More rarely, people can get severe muscle damage. This happens anyway to about 3 in 10,000 people who do not take statins. If all 10,000 people took a statin, on average an extra 3 people would get severe muscle damage and 9,994 would not get severe muscle damage.

- If you experience severe muscle pains while taking a statin, please speak to a GP or clinical pharmacist for further discussion

Liver

- It is recommended that you have a blood test before starting, and 3 months after starting a statin. This is because a small proportion (about 4 in 1000) of people will have an elevation in some of their liver markers. In the vast majority of cases, this is harmless and usually just requires further monitoring.
- There have been some cases of serious liver disease in people who take a statin, but this is so rare that it remains uncertain whether there is a causal effect.

Are there alternatives to statins?

Statins remain the most effective cholesterol-lowering medication available. However, if they are not the right medication for you, there are other medications that can be tried. Please speak to a GP or one of our clinical pharmacists who can suggest a suitable alternative.

Of course, lifestyle changes are also very important to reduce your risk of developing cardiovascular disease. It is recommended that these are made in conjunction with taking a statin in order to minimise your risk as much as possible.

Things to think about include:

- Stopping smoking
- Being more physically active
- Eating a healthy diet
- Maintaining a healthy weight
- Avoiding drinking too much alcohol

What should I do now?

It is important that you make an informed decision about this after reading the leaflet and weighing up the benefits and risks. If you wish to discuss starting a statin, please book an appointment with one of our GPs, practice pharmacists or nurse practitioners who are more than happy to help.