

Medicine for Managers

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Statins

Cholesterol and the use of statins are back in the news with discussions about the safety and value of the drugs. So, what are they, why do we take them, can they cause us harm and do GPs have to use them?

Statins are used to reduce the blood level of cholesterol. Cholesterol is essential to normal body function but may also be harmful. Cholesterol is carried round the body attached to proteins and the combined cholesterol (lipid) and protein molecule is called a *lipoprotein*. There are two types. Low-Density Lipoprotein (**LDL**) is the potentially bad one.

The molecules transport cholesterol from the liver to the cells and, in excess, it may build up in artery walls (atherosclerosis) causing damage. High-Density Lipoprotein (**HDL**)

carries cholesterol away from the cells to the liver where it is broken down. It is regarded as good and higher levels of HDL are better. Cholesterol is able to be measured by a simple blood test and both LDL and HDL cholesterol are reported.

Patients with high cholesterol are often prescribed **statins**. The drugs are used in patients with established arterial disease, past history of stroke or TIA, angina, diabetes or raised blood pressure. Some people have the inherited condition **familial hypercholesterolaemia**, where genetic makeup leads to raised cholesterol and they

too may be treated with statins.

Blood cholesterol is not necessarily treated with statins. During the course of assessment in general practice the doctor, or

more often the practice nurse, may assess the risk of a patient developing cardiovascular disease and, if the risk of having a stroke or heart attack over the next ten years is considered to be more than 20% (i.e. one in five), statins may be recommended. Some risks are unavoidable whilst others are controllable. Risks include

Individuals can measure their own risk (does need some medical information) using the QRISK2 calculator which can be found on the internet at <http://qrisk.org/> (registered trademark of the U. Nottingham and EMIS).

age, sex and ethnicity together with factors such as blood pressure and blood cholesterol level, weight, smoking and medical conditions such as diabetes, atrial fibrillation and chronic kidney disease. A healthy diet, low in saturated fats and increasing the omega-3 fatty acids in the diet, will assist in reducing cholesterol and may avoid the need for medication.

Most patients requiring statins are prescribed simvastatin or atorvastatin, but others include fluvastatin, rosuvastatin and pravastatin. The drugs are relatively safe and serious side effects are uncommon. Simvastatin should not be used if the patient is taking either erythromycin or clarithromycin antibiotic and all should be avoided during pregnancy. Common side effects include headache, nausea, insomnia and muscle aching, tenderness or pain. With muscular symptoms it is possible to test whether the symptoms are a consequence of the drug using a simple blood test (creatinase kinase, CK). CK is released from damaged or inflamed muscles. If the CK is significantly raised (five times above normal) stopping the statin may be advised.

Less common symptoms include vomiting, nightmares, dizziness, tinnitus, blurred vision, frequency of urination and lethargy. Rarely (affecting less than 1 in 1,000 people) patients may experience neurological

symptoms such as tingling, numbness or memory disturbances, visual changes or jaundice. Of course, as with all medicines, their use is a balance between benefits and side effects and risks. The British Heart Foundation estimates that statins save 7,000 lives a year and that only about one patient in every 10,000 will experience a potentially serious side effect.

The measurement of cholesterol has been a component of the QOF in past years. Up to and including the year 2013-14, it has attracted points as follows:

QOF ID	Indicator Wording	Points
CHD003	Percentage of patients with Coronary Heart Disease with cholesterol of 5 mmol/l or less in last 12 months	Up to 17
PAD003	Percentage of patients with Peripheral Arterial Disease with cholesterol of 5 mmol/l or less in last 12 months	Up to 3
STIA004	Percentage of patients with stroke or TIA with total cholesterol measured in last 12 months	Up to 2
STIA005	Percentage of patient with non-haemorrhagic stroke or TIA with total cholesterol of 5 mmol/l or less in last 12 months	Up to 5
MH004	Percentage of patients over 40 with psychoses with cholesterol/HDL ratio recorded in last 12 months.	Up to 5

All these indicators have been retired from 1st April 2014. Payments earned through

compliance with targets have now been incorporated in core payments to practices.

The only indicators which remain regarding cholesterol are:

QOF ID	Indicator Wording	Points
DM004	Percentage of patients with diabetes with cholesterol of 5 mmol/l or less recorded in last 12 months.	Up to 6 (40-75%)
CVD-PP001	In those patients with a new diagnosis of hypertension aged 30 or over and who have not attained the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an assessment tool agreed with the NHS CB) of $\geq 20\%$ in the preceding 12 months: the percentage who are currently treated with statins	Up to 10 (40-90%)

Of course, good quality medical practice requires the appropriate discussion and use of statins in any patient where the risk profile demands it, irrespective the availability of QOF points.

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