Medical News

New Statin Guidelines Issued for Primary CVD Prevention

Statins are a class of drugs commonly used to treat a variety of heart-related problems. However, statins can also be used preventively. The United States Preventive Services Task Force have issued new recommendations regarding the use of statins for prevention of cardiovascular disease in adults.

Cardiovascular disease (CVD) is the leading cause of morbidity and mortality in the United States, accounting for about 610,000 - or 1 in 4 - deaths every year. CVD includes coronary heart disease and cerebrovascular disease, which ultimately result in heart attack and stroke, respectively.

Statins are a class of medicine commonly used to treat atherosclerosis, a condition where abnormally high levels of cholesterol have led to the building of plaques in the arteries. This can ultimately block the blood flow and usually leads to CVD. By treating atherosclerosis, statins help decrease the risk of stroke, heart attack, and chest pain.

Statins prevent the formation of cholesterol in the liver by blocking the enzyme HMG-CoA reductase, which is responsible for producing cholesterol.

According to the Centers for Disease Control and Prevention (CDC), the number of patients who have been prescribed statins has increased in the past decade.

During 2003-2012, the percentage of adults over 40 years of age who had used statin medication in the preceding 30 days increased from 20 percent to 28 percent. Overall, the use of statins has increased from 18 percent to 26 percent, with the average age of the patients also increasing over time.

After considering the evidence for both the benefits and the disadvantages of preventive statin use, the United States Preventive Services Task Force (USPSTF) have issued a new set of recommendations.

The USPSTF are an independent, volunteer panel of experts working in prevention and evidence-based medicine. The aim of the task force is to improve the health of Americans by making recommendations about clinical preventive practices, such as screenings, counseling, and other preventive medications.

The USPSTF recommendations are based on peer-reviewed evidence, and they were recently published in JAMA.

These guidelines include a grade B recommendation, which relates to patients who have a 10 percent or higher risk of developing a CVD event over the course of 10 years. In this case, a slow-to-moderate dose of statins should be offered to all adults aged between 40-75 years old without a history of CVD, but who have one or more risk factors for CVD, such as dyslipidemia, diabetes, hypertension, or smoking.

The new guidelines include a grade C recommendation for patients who have a calculated 10-year event risk of 7.5-10 percent of developing heart disease. In this case, the USPSTF recommend that doctors selectively offer low-to-moderate doses of statins to adults aged between 40-75 years without a history of CVD, but who have one or more risk factors.

Finally, the USPSTF do not have any recommendations regarding the use of statins in adults of 76 years of age and older, as they consider the evidence insufficient in this regard.

Evidence-based benefits and harms of statin therapy

The new recommendations are an update of the previous guidelines the USPSTF published in 2008.

In the meantime, the panel has revised the peer-reviewed evidence on the benefits and harms of certain screening and treatment practices.

They have assessed evidence on screening for and treating dyslipidemia in adults of 21 years of age and older and those without a history of CVD. They have also examined the evidence on whether the benefits of statins vary with dosage, clinical characteristics, or by demographic and clinical subgroups.

Their review found that the degree of benefit from statin therapy will be the greatest in people with the highest baseline risk of experiencing a CVD event.

The USPSTF analysis also revealed that the use of low-to-moderate statins reduces the risk of heart disease events, such as a heart attack or stroke, as well as the risk of death by at least a moderate amount. These results benefit adults aged 40-75 years with one or more CVD risk factors and a 10 percent chance of developing heart disease over a 10-year period.

A low-to-moderate dose also reduces the risk of CVD events and mortality by at least a small amount in adults aged between 40-75 years who have one or more CVD risk factors. These individuals would also have a 7.5-10 percent chance of developing a CVD event over a 10-year period.

Based on the evidence, the experts also established that the harms of low-to-moderate dosage of statins in adults aged 40-75 years are small.

Courtesy: medicalnewstoday.com