



Low HDL cholesterol increases the risk of cardiovascular events or stroke despite statin therapy

Even with statin therapy, many patients fail to achieve all lipid targets and therefore may be at increased risk of cardiovascular events or stroke, according to a study reported at the European Society of Cardiology Annual Congress, Vienna 2007.¹

In this retrospective cohort study using the UK General Practice Research Database (January 2000 to December 2004), 6,823 (34.4%) statin-treated patients were identified as being not at goal for LDL cholesterol (≥ 2.5 mmol/L in patients with diabetes and/or prior cardiovascular/cerebrovascular events, and ≥ 3.0 mmol/L in other patients). These patients were aged >35 years, had been initially prescribed a statin during this period for at least 6 weeks and had experienced either a cardiovascular or cerebrovascular event (myocardial infarction, stroke, angina, or revascularization) during follow-up. None of the patients were taking other lipid-modifying therapy.

Overall, 10.5% (n=715) patients of this sample experienced a cardiovascular or cerebrovascular event during follow-up. These patients were older, more likely to be male, had a higher prevalence of pre-existing cardiovascular disease, and had lower HDL cholesterol levels although LDL cholesterol tended to be at goal, compared with patients without an event. Multivariate analysis showed that low HDL cholesterol and/or elevated triglycerides significantly increased the risk of an event by 24% (hazard ratio=1.24; 95% Confidence Interval 1.06-1.46), in patients who failed to achieve LDL cholesterol targets despite statin use.

These data highlight the importance of achieving all lipid goals to reduce cardiovascular/cerebrovascular risk.

Reference

1. Sazonov V, Beetsch J, Wentworth C et al. Mixed dyslipidemia is associated with higher rate of cardiovascular/cerebrovascular events among statin-treated patients. *Eur Heart J* 2007;28(Abstr suppl):208. Abstract P1346.