Discordance between ESC guidelines and actual treatment of CAD

There is significant clinical evidence that suggests a strong association between low-density lipoprotein (LDL)-cholesterol with risk of coronary artery disease (CAD) events and the reduction of cardiovascular events in secondary prevention. Based on this evidence, the European Society of Cardiology incorporated low-density lipoprotein targets of <100mg/dl for patients with known CAD in 1994. This target was reduced to <70mg/dl in 2011.

Statins continue to be the first line of treatment for patients with CAD. However, several studies have shown a gap between the recommendations in clinical guidelines and the actual lipid profile of high risk populations.

This study was conducted to evaluate the change in patterns of lipid lowering therapy and its success in achieving LDL-targets. The study enrolled patients with known CAD and those who were on stable medical therapy for at least 30 days including stable lipid lowering therapy.

The analysis showed that the reduction of LDL-targets in ESC guidelines from 2011 led to an initial decrease in LDL-cholesterol in patients with manifest CAD. This effect was attenuated over time with LDL-cholesterols in 2015 and 2016 higher compared to 2009 and 2010.

In addition, the researchers also observed an increase of CAD-patients without statin therapy. Results thus underline the discordance between ESC guidelines and actual treatment in daily clinical routine.

Results of this study show that in patients with known manifest CAD, LDL-cholesterol above ESC-targets are accepted in majority of patients. However, an increasing proportion of patients missed LDL-targets despite high intensity statin therapy. This reflects a shift towards an increased need for aggressive treatment in this patient population.