

Treatment of vascular disease in diabetes.

Need for aggressive treatment strategy in primary and secondary prevention.

D.W. Erkelens (Utrecht, The Netherlands)

The main cause of morbidity and mortality in diabetes is macrovascular disease, which can not be differentiated from classical atherosclerosis. The sequelae such as (silent) myocardial infarction, peripheral vascular disease and cerebral infarction occur at a younger age than in non-diabetics.

The risk of major atherosclerotic events in diabetic patients is as great as in non-diabetics who have already experienced a major event. This is now confirmed in both Finnish and Italian patients. Therefore measures of secondary prevention apply for all (type 2) diabetes.

The dyslipidemia of diabetes has particular features that need to be taken into account when treatment targets are set. First the dyslipidemia frequently exists at the time of diagnosis, necessitating early treatment. Second atherogenic small dense LDL occur at triglyceride levels over 1.5 and virtually disappear below that level. Third, low HDL cholesterol levels are a reflection of prolonged residence of postprandial TG rich particles, making them atherogenic. Fourth, LDL apo B is glycated guiding LDL particles from the LDL receptor mediated pathway towards the more atherogenic scavenger pathway.

All these features are reasons to not just aim for reasonable cholesterol, triglyceride and HDL levels, but to try and reach the following targets:

Triglycerides < 1.5 mmol/l

LDL cholesterol < 2.5 mmol/l

HDL cholesterol > 1.0 mmol/l.

To reach these levels is feasible with statin treatment alone or in combination with fibrates.

Reduction of cardiovascular event has been shown in diabetic cohorts of large lipid intervention trials. This, in combination with small or no effect on macroangiopathy of hyperglycemia and hypertension treatment, justifies an aggressive lipid lowering therapy in diabetic subjects.