

*Statins should be.....*

## **STATINS SHOULD BE ROUTINELY PRESCRIBED IN ADULTS WITH TYPE 1 DIABETES**

**Paul Durrington**

**University of Manchester Division of Cardiovascular and Endocrine Sciences, Manchester Royal Infirmary**

Statin drugs are the most important advance in diabetes care since the introduction of insulin and antibiotics. Evidence of the quality I am about to discuss does not exist for any other group of drugs used in routine medical practice. It is difficult to imagine why anyone charged with responsibility for the care of patients with type 1 diabetes would not wish to embrace it. Randomised placebo-controlled trials of statins show a linear 21% reduction in cardiovascular disease (CVD) risk for each mmol/l LDL cholesterol decrease, regardless of the source of risk (age, gender, smoking, diabetes, hypertension, dyslipidaemia etc) or the level of LDL cholesterol. In a recent meta-analysis type 1 patients (n=1460) show the same 21% decrease in risk per mmol/l LDL cholesterol reduction.

The risk of CVD in young type 1 diabetes is underestimated by epidemiological studies in which patients are typically not recruited until adulthood (survivor effect). Even so these studies clearly show that by the age of 40 years CVD risk is worse than 1 in 5 over 10 years, the level of risk when statins are recommended in the general population. The typical type 1 patient in your clinic is aged more than 40 years (e.g. Salford Diabetes Registry) so my case is proved.

After age 40, CVD rates appear to accelerate much faster than in the general population because in actual fact risk was underestimated in the young survivors in the years immediately following their recruitment, indicating disease is in reality much more advanced before 40. You can never replace the young people who die or have only a limited prospect of survival from a CVD event occurring before 40. At any age a type 1 diabetic has the CVD risk of a non-diabetic 20 years older. Although I do not have to prove the point for this motion to be proven, this means that you should also seriously consider the high life-time risk of many of your type 1 diabetes patients younger than 40 years in deciding who should receive statins, particularly now that these agents prove to be so safe and easy to use.