Asia Pacific Cohort Studies Collaboration. Serum Triglycerides as a Risk Factor for Cardiovascular Diseases in the Asia-Pacific Region. Circulation 2004; 110(17):2678-86.

Abstract

BACKGROUND: The importance of serum triglyceride levels as a risk factor for cardiovascular diseases is uncertain.

METHODS AND RESULTS: We performed an individual participant data meta-analysis of prospective studies conducted in the Asia-Pacific region. Cox models were applied to the combined data from 26 studies to estimate the overall and region-, sex-, and age-specific hazard ratios for major cardiovascular diseases by fifths of triglyceride values. During 796,671 person-years of follow-up among 96,224 individuals, 670 and 667 deaths as a result of coronary heart disease (CHD) and stroke, respectively, were recorded. After adjustment for major cardiovascular risk factors, participants grouped in the highest fifth of triglyceride levels had a 70% (95% CI, 47 to 96) greater risk of CHD death, an 80% (95% CI, 49 to 119) higher risk of fatal or nonfatal CHD, and a 50% (95% CI, 29% to 76%) increased risk of fatal or nonfatal stroke compared with those belonging to the lowest fifth. The association between triglycerides and CHD death was similar across subgroups defined by ethnicity, age, and sex.

CONCLUSIONS: Serum triglycerides are an important and independent predictor of CHD and stroke risk in the Asia-Pacific region. These results may have clinical implications for cardiovascular risk prediction and the use of lipid-lowering therapy.