

Among young Sri Lankan patients with diabetes, how do lipid profiles differ between those with and without metabolic syndrome?

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<https://doi.org/10.1016/j.dsx.2018.07.002>

Abstract Aims

Metabolic syndrome (MetS) is a risk factor for cardiovascular disease (CVD). Apolipoproteins are emerging as powerful predictors of CVD. We aimed to study associations of metabolic syndrome and apoB, apoAI, apoB/AI ratio in young Sri Lankans with type 2 diabetes.

Materials & methods

Blood samples were available from 690 patients with type 2 diabetes in Sri Lanka Young Diabetes Study, and were analysed for apoB, apoAI, total cholesterol (TC), high-density lipoprotein cholesterol (HDL), triglycerides (TG) and glycated haemoglobin (HbA_{1c}). Their associations with MetS as per NCEP/ATPIII criteria were studied.

Results

MetS was present in 60.9% of subjects. Of those with MetS, 76.0% were women. Those with MetS had higher apoB (1.27 V s 1.19 mmol/L; p = 0.001), apoB/AI (0.80 V s 0.75; p = 0.001), non-HDL cholesterol (NHDLC) (4.15 V s 3.98 mmol/L; p = 0.002), and triglycerides (1.51 V s 1.31 mmol/L; p < 0.001) and lower apoAI (1.58 V s 1.60 mmol/L; p = 0.03) and HDL (1.02 V s 1.16 mmol/L, p < 0.001). ApoB and apoB/AI levels increased significantly as the number of MetS components increased. ApoB and apoB:AI ratio were independently associated with MetS and components.

Section snippets