

Cholesterol lipoproteins, triglycerides, rural - Urban differences and prevalence of dyslipidaemia among males in Rajasthan

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Cholesterol lipoproteins, triglycerides, rural - Urban differences and prevalence of dyslipidaemia among males in Rajasthan

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Abstract

To develop profiles of serum cholesterol lipoproteins and triglycerides, influence of rural versus urban lifestyle in their levels and prevalence of dyslipidaemias, we studied cohorts of male population in Rajasthan. Fasting blood samples were obtained from 401 men (age range 20-73 years) randomly selected from a larger sample of 3397 during a comprehensive cardiovascular risk factor survey in rural (202 men) and urban (199 men) populations. Serum total cholesterol, low density lipoprotein (LDL) cholesterol, high density lipoprotein (HDL) cholesterol and triglycerides (TG) were determined and correlated with age and anthropometric variables. The lipid levels were classified according to US National Cholesterol Education Program (NCEP) guidelines. The mean \pm SD levels in mg/dl were, total cholesterol 170.5 \pm 40, LDL cholesterol 102.1 \pm 36, HDL cholesterol 43.6 \pm 12 and TG 124.0 \pm 50. The mean levels in rural vs. urban population were total cholesterol 165 \pm 37 vs. 176 \pm 43 ($p = 0.008$), LDL cholesterol 97 \pm 33 vs. 108 \pm 39 ($p = 0.003$), HDL cholesterol 44 \pm 13 vs. 43 \pm 12 ($p = 0.44$) and TG 122 \pm 46 vs 126 \pm 55 ($p = 0.41$). There was significant positive correlation of age and body-mass index with total and LDL cholesterol and triglycerides but not with HDL cholesterol. When classified according to the NCEP guidelines high total cholesterol (≥ 240 mg/dl) and LDL cholesterol (≥ 160 mg/dl) was in 33 (8.3%). Borderline high total cholesterol (200-239) was in 64 (16%) and borderline high LDL cholesterol (130-159) in 55 (13.7%). Borderline high triglyceride (200-400 mg/dl) was in 33 (8.2%) and severe hypertriglyceridaemia in none. Low HDL cholesterol (< 35 mg/dl) was in 96 (23.9%) and protective level of HDL cholesterol (≥ 60 mg/dl) in 47 (11.7%). In urban as compared to rural men the prevalence of hypercholesterolaemia > 200 mg/dl (28% vs 22%) and hyper LDL cholesterolaemia (26% vs 18%) were significantly more

Reference

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