## CARDIOVASCULAR RISK FACTORS IN ELDERLY NORMOLIPIDEMIC ACUTE MYOCARDIAL INFARCT PATIENTS - A CASE CONTROLLED STUDY FROM INDIA

Arun Kumar<sup>1</sup>, Suryakant Nagtilak<sup>2</sup>, Ramiah Sivakanesan<sup>3</sup> and Susil Gunasekera<sup>3</sup>

Department of Biochemistry <sup>1</sup>Manipal College of Medical Sciences, Pokhara, Nepal; <sup>2</sup>Saraswati Institute of Medical Sciences and Research, Hapur, Uttar Pradesh, India; <sup>3</sup>Department of Biochemistry, Faculty of Medicine, University of Peradeniya, Sri Lanka

Abstract. The goal of the present study was to address the various risk factors associated in normolipidemic acute myocardial infarction (AMI) patients admitted to the intensive coronary care unit (ICCU). The study compared serum lipid profiles, lipid peroxidation markers, antioxidants and inflammatory markers in acute myocardial infarction (AMI) patients and age/sex-matched controls. A lipid profile, lipid peroxidation, enzyme antioxidants, endogenous antioxidants, ischemia modified-albumin (IscMA), ceruloplasmin, C-reactive protein (CRP), fibrinogen, lipoprotein (a) and paraoxonase-1 activities were analyzed in 330 subjects, 165 acute myocardial infarction (AMI) patients and 165 age/sex-matched controls. We observed significantly higher (p < 0.0001) total cholesterol and triglyceride levels and lower highdensity lipoprotein cholesterol (HDL-C) levels in the AMI patients. The lipoprotein (a), ceruloplasmin, CRP and fibrinogen levels were higher and the bilirubin, ascorbic acid, uric acid, albumin, superoxide dismutase, catalase, glutathione peroxidase and paraoxonase-1 activities were lower in AMI patients than controls. The malondialdehyde (MDA) and conjugated diene (CD) levels were significantly higher (*p*<0.0001) in AMI patients.

Correspondence: Dr Arun Kumar, Department of Biochemistry, Manipal College of Medical Sciences, Phulbari Campus, Pokhara, Nepal. Tel: 00977 1 980651 5247; Fax: 00977 1 526416 E-mail: arun732003@gmail.com