Study on the conventional risk factors in patients with coronary artery disease in tertiary care hospitals, Pokhara, Nepal

Bijaya Adhikari
Kist Medical College, Nepal

Background: Coronary artery disease (CAD) has shown a remarkable decline in the developed world in past few years but has shown an alarming increase in the developing world especially South Asia.

Objectives: To study the four conventional risk factors: hypertension, diabetes mellitus, dyslipidemia and smoking in patients with coronary heart disease in tertiary care hospitals of Pokhara valley, Nepal.

Methods: This study was conducted after getting approval from institutional research committee of Manipal College of Medical Sciences, Pokhara. 100 patients (63 males and 37 females) with CAD who were admitted in the wards and C.C.U participated in the study. Their demographic information was noted. Height, weight and blood pressure were recorded with standard methods. Blood glucose and lipid profile were estimated by using XL-300 auto-analyzer after 12 hours of fasting overnight. History of smoking was taken in pack years along with history of hypertension, diabetes mellitus and medication history in the past. Risk factors were determined using the measurements, laboratory values and also from the past history of the same illness and medications if any. SPSS-16 was used for statistical analysis.

Results: Mean age of the patients was 64.61±11.363 years with minimum age 40 and maximum 94 years. Overall distribution of risk factors in descending order was smoking (55%), hypertension (50%), dyslipidemia (49%) and diabetes mellitus (32%). Distribution of risk factors was maximum in the age group 55-69 years. Most of the patients had combination of more than one risk factor. Only 27% of the patients had single risk factor and 4% were found to have no conventional risk factor. Significant association was found between age and hypertension and age and dyslipidemia. Similarly gender was found to be highly associated with smoking. Except diabetes mellitus no other risk factor was found to have significant association with ethnicity.

Conclusion: This study shows that most of the patients with coronary heart disease have conventional risk factors and they play a major role in the development of the disease. All the risk factors were found to be more in males. Significant association was found between age and hypertension and in between age and dyslipidemia. So, beside the four modifiable risk factors, our study also shows that age and gender can be major contributors of the disease which cannot be modified.

bijaykusam@gmail.com