CORONARY ARTERY DISEASE : AN EMERGING EPIDEMIC IN NEPAL

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ABSTRACT

Cardiovascular disease is the commonest cause of death globally and is the major contributor to the burden of premature mortality and morbidity. Coronary artery disease (CAD) is greatest killer of mankind. Coronary artery disease in western industrialized countries show a declining trend. However developing countries have shown an alarming increase. The identification of major risk factors and effective control of them through population based strategies of prevention were mainly responsible for this decline. A few cases of acute myocardial infarction were seen in Kathmandu, Nepal in 1950 and in the sixties the incidence started rising rapidly. In a study between 1960-1968 a total of 150 cases were reported with myocardial infarction in Kathmandu, Nepal. Although national data for incidence and prevalence on CAD in Nepal is not available, hospital based data on admission pattern in different hospitals of Kathmandu, capital city of Nepal show 40 fold increase in incidence of acute myocardial infarction (AMI) in last 30 years. Prevalence of coronary artery disease (CAD) estimated from these figures of AMI cases indicate that 5 % of adult population in Kathmandu suffer from CAD. Hence, Coronary artery disease is emerging as epidemic in Kathmandu, Nepal.

Key Words: *Coronary artery disease (CAD), acute myocardial infarction (AMI), Epidemic.*

INTRODUCTION

Cardiovascular diseases (CVD) accounts for approximately 12 millions deaths annually and is commonest cause of death globally. CVD is also the major contributor to the burden of premature mortality and morbidity and accounted for 85 millions disability adjusted (DALYs) life years in 1990.¹ It has been estimated that during the past 25 years period from 1965-1990 coronary artery diseases (CAD) mortality fell by 50% in Australia, Canada, France & US and 60% in Japan and Finland.² The identification of major risk factors and effective control of them through population based strategies of prevention were mainly responsible for this decline. CAD

is the greatest killer of mankind. The rise and subsequent decline in CAD epidemic in almost all industrialized country in the later half of twentieth century has been well documented. However, developing countries have experienced alarming increase.

GLOBAL SCENARIO

Coronary artery disease (CAD) show a declining trend in Western industrialized countries. CAD was a rare cause of death in the US at the turn of the century, accounting for <10% of all deaths in 1910. By 1965, the CAD mortalities rates increased more than five fold to 55% of all death, with only

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male and 26% female. Among them 82% were smokers, 40% hypertensive, 22% diabetic, 20% showed raised LDL and 10% showed raised triglyceride. In National heart centre Kathmandu CAD (21.7%) was second most common cause of hospital admission following rheumatic heart disease (29.3%) in first 300 cases.¹⁵ However, of 542 cases of total hospital admissions in national heart centre between 2001-2002, coronary artery disease was the commonest cause (26.5%) followed by rheumatic heart disease (25.97%). Currently an estimated acute myocardial infarction (AMI) cases admitted in 6 major hospitals of Kathmandu totals 860 in a year. This amounts to 40 fold increase in incidence of AMI in last 30 years. Prevalence of coronary artery disease (CAD) estimated from the figures of AMI cases indicate that 5 % of adult population in Kathmandu, capital city of Nepal suffer from CAD. As per definition of epidemic (an unusual occurrence in community of a disease clearly in excess of expected occurrence), this disease reached epidemic proportion in at least Kathmandu valley, if not, of whole Nepal.¹⁶

In order to overcome the limitations of the currently available data, large international multicentre hospital based incident case control study of approximately 25000 cases of Acute myocardial infarction admitted in CCU are being conducted. Nepal is also actively participating in this Inter-Heart Study.

CONCLUSION

CAD is gradually emerging as one of the major health challenge in Nepal. The rapid change in life style, unhealthy habits (smoking, sedentary life style etc), economic development are considered to be responsible for the increase. Despite decrease in cardiovascular disease mortality in developed countries, substantial increase have been experienced in developing countries. Hence large scale epidemiological study should be carried out to determine the incidence & prevalence of CAD in Nepal to identify the magnitude of the problem and timely primary and secondary prevention strategies should be vigorously pursued.

REFERENCE