Original Article

A Study of clinical profile of the patients with myocardial ischemia at tertiary health care centre

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Abstract

Introduction: In 2003, the prevalence of CHD in India was estimated to be 3-4 per cent in rural areas (two-fold higher compared with 40 year ago), and 8-10 per cent in urban areas (six fold higher compared with 40 year ago), with a total of 29.8 million affected **Aims and Objectives:** To study clinical profile of the patients with myocardial ischemia at tertiary health care Centre **Methodology:** This was a hospital based cross-sectional study of the Patients who were admitted to tertiary health care Centre with diagnosis of Myocardial Ischemia diagnosed by ST-Elevation Myocardial Infarction during the Period of One year from June 2014 to June 2015 at tertiary health care Centre. Total 110 patients were enrolled into the study. All the Socio-demographic information and Clinical information were recorded and the associated Risk factors have also studied. **Result:** The majority of the Patients were from 40-50- 25.45 % followed by 50-60- 23.63 %; 30-40- 20.90 %; >60- 19.09 %; 20-30- 10.90 % Majority of the Patients were Male i.e. 56.36% and 43.63% were Female Most common associated factors with MI patients were H/o Smoking - 52.72% followed by H/o-Hypertension -48.18%; Obesity (BMI >30) -39.09%; H/o Tobacco Chewing -34.45%; H/o Diabetes - 22.72%; Hyper-cholestremia -21.81%Out of the Total 110 Patients 82.72%- Recovered; 10.90%- Discharge Against medical Advise; 6.36%- Died.**Conclusion:** The most common age of presentation of Myocardial infarction observed in our study is 40-50 and was associated with risk factors like Smoking, Hypertension, Obesity, Tobacco Chewing, Diabetes, Hyper-cholestremia.

Key Words: Myocardial ischemia, Obesity, Diabetes, Tobacco Chewing, CHD(Coronary Heart Disease).

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INTRODUCTION

In 2003, the prevalence of CHD in India was estimated to be 3-4 per cent in rural areas (two-fold higher compared with 40 year ago), and 8-10 per cent in urban areas (six fold higher compared with 40 year ago), with a total of 29.8 million affected (14.1 million in urban areas, and 15.7 million in rural areas) according to population-based cross-sectional surveys.[1,2] The Global Burden of Diseases (GBD) study reported the estimated mortality from coronary heart disease (CHD) in India at 1.6 million in the year 2000. [3] A total of nearly 64 million cases of CVD are likely in the year 2015, of which nearly 61 million would be CHD cases (the remaining would include stroke, rheumatic heart disease and congenital heart diseases). Deaths from this group of diseases are likely to amount to be a staggering [3], [4] million. [4] Driving this steep rise in CVD risk factor burden is the rapid increase in the proportion of urban inhabitants (currently at 30% with a projected rise to 43% in 2021). [5] Urbanization is characterized by a marked increase in the intake of energy-dense foods, a decrease in physical activity, and a heightened level of psychosocial stress, all of which promote the development of dysglycaemia, hypertension, and dyslipidaemia.[6]

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METHODOLOGY

This was a hospital based cross-sectional study of the Patients who were admitted to tertiary health care Centre with diagnosis of Myocardial Ischemia diagnosed by ST-Elevation Myocardial Infarction during the Period of One year from June 2014 to June 2015 at tertiary health care Centre. Total 110 patients were enrolled into the study. All the Socio-demographic information and Clinical information were recorded and the associated Risk factors have also studied.

RESULT

Table 1: Age wise Distribution of the MI Patients

Age	No.	Percentage (%)
20-30	12	10.90 %
30-40	23	20.90 %
40-50	28	25.45 %
50-60	26	23.63 %
>60	21	19.09 %
Total	**110**	**100.00 %**

The majority of the Patients were from 40-50- 25.45 % followed by 50-60- 23.63 %; 30-40- 20.90 %; >60- 19.09 %; 20-30- 10.90 %

Table 2: Gender wise Distribution of the MI Patients

Sex	No.	Percentage (%)
Male	62	56.36%
Female	48	43.63%
Total	**110**	**100%**

Majority of the Patients were Male i.e. 56.36% and 43.63% were Female

Table 3: Distribution of the Patients as per the Associated Risk Factors

Risk Factors	No.	Percentage (%)
H/o Smoking	58	52.72%
Obesity (BMI >30)	43	39.09%
Hyper-cholestremia	24	21.81%
H/o Tobacco Chewing	38	34.45%
H/o Diabetes	25	22.72%
H/o Hypertension	53	48.18%

Most common associated factors with MI patients were H/o Smoking - 52.72% followed by H/o- Hypertension - 48.18%; Obesity (BMI >30) -39.09%; H/o Tobacco Chewing -34.45%; H/o Diabetes - 22.72%; Hyper-cholestremia -21.81%

Table 4: Distribution of the Patients as per the Outcome

Outcome	No.	Percentage (%)
Recovered	91	82.72%
Died	7	6.36%
Discharge Against medical Advise	12	10.90%
Total	**110**	**100%**

Out of the Total 110 Patients 82.72%- Recovered; 10.90%- Discharge Against medical Advise; 6.36%- Died.

DISCUSSION

The burden of CVD and its risk factors in India calls for a sound public health approach to stem the epidemic. Efforts to put in place an intervention programme should be complemented with a robust surveillance mechanism so as to monitor evaluate and guide policies and programmes[7] . The elderly with acute myocardial infarction (AMI) have been reported to present with more atypical symptoms.[8,9] AMI is associated with significantly higher mortality in the elderly compared with the young,[9-14] yet the elderly are treated less aggressively than the young.[16] Thrombolytic therapy has the greatest effect in the elderly even though there is an increased risk of haemorrhagicstroke. [15, 16]

The majority of the Patients were from 40-50- 25.45 % followed by 50-60- 23.63 %; 30-40- 20.90 %; >60- 19.09 %; 20-30- 10.90 % Majority of the Patients were Male i.e. 56.36% and 43.63% were Female Most common associated factors with MI patients were H/o Smoking - 52.72% followed by H/o- Hypertension -48.18%; Obesity (BMI >30) -39.09%; H/o Tobacco Chewing -34.45%; H/o Diabetes - 22.72%; Hyper-cholestremia -21.81% Out of the Total 110 Patients 82.72%- Recovered; 10.90%- Discharge Against medical Advise; 6.36%- Died ; death occurred mostly in old aged persons and in whom treatment was delayed and associated with co-morbidity like diabetes, Hypertension, Obesity.

CONCLUSION

The most common age of presentation of Myocardial infarction observed in our study is 40-50 and was associated with risk factors like Smoking, Hypertension, Obesity
Tobacco Chewing ,Diabetes, Hyper-cholestremia.

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