Abstract: In India, Acute myocardial infarction is one of the main causes of sudden death. In present study we have compared risk factors and outcome of acute myocardial infarction of middle age (35-60 Yr) - Group 1 to the elderly (above 60 Yr) - Group 2 patients. Both the groups were studied clinically, investigated and followed up for 1 month. In Group 1, obesity, smoking & family history were common risk factors, whereas dyslipidaemia was found to be the common risk factor in Group 2. 30% Patients had not a single known risk factor. In present study chest pain was the common presentation in all patients. But atypical presentation was common in elderly group. Anterior wall myocardial infarction was found in 36 % patients followed by inferior wall in 25 % and anterolateral infarct in 20% patients. Incidence of congestive cardiac failure, arrhythmias & cardiogenic Shock was higher in group 2.

Key words: Myocardial Infarction, cardiac failure, cardiogenic shock.

Introduction: In India, the survey in the hospital patients has shown a definite rise in the incidence of myocardial infarction in all age groups. The risk factors are obesity, hyperlipidaemia, hypertension, smoking, defective diet habits i.e. intake of excessive polyunsaturated fats etc. The role of conventional cardiovascular risk factors in older age is incompletely understood because only fragmentary and inadequate data is available in most of the instances and manifestations of acute myocardial infarction are generally atypical in elderly.

Myocardial infarction becomes notorious because of its wide distribution and the main cause of sudden death.

Aims And Objectives
1. To study the risk factors, clinical features, complications and outcome in acute myocardial infarction in patients, who were admitted in tertiary care hospital.
2. To compare risk factors, clinical features and outcome of middle age (35 to 60 yr) patients to elderly (60 yrs) patients and acute myocardial infarction.

Materials And Methods: In this study 100 cases of acute myocardial infarction were studied. Subjects were divided into two groups.
1. Age of 35 to 60 years
2. Above 60 Years.

One month follow up of all cases was done.

Eligibility criteria:
1. All patients having acute myocardial infarction including both sexes were selected above the age of 35 years.
2. Above mentioned patients were diagnosed to have acute myocardial infarction based on their history, physical examination, ECG changes raised troponin T.

Baseline clinical history, risk factors, complications, past illness was documented in prescribed proforma. A detailed clinical examination was carried out. Investigations included ECG, Chest X-ray Serum Troponin T, 2 D-echo, lipid profile, blood sugar and any other related investigation.

Patients were categorized at the time of admission according to the classification of Killip's and Kimball for signs of heart failure. The complications like cardiogenic shock, heart blocks, arrhythmias, left ventricular failure, cerebrovascular accidents were recorded. All patients were followed up for 30 days.

The common risk factors for AMI were Hypertension (25 %), Dyslipidaemia (17%), Diabetes Mellitus (13%), Smoking (13%).

Various sites of Infraction - Anterior Wall Myocardial Infarction was commonest (36%) in elderly population followed by inferior wall Myocardial Infarction (23%) in present study.
Table no.1: Comparission of risk factors for acute Myocardial infarction

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Group 1 35-60Yr</th>
<th>Group 2 &gt; 60Yr</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Hypertension</td>
<td>9</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>7</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Smoking</td>
<td>8</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Dyslipidaemias</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Obesity</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Family History of CAD</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>No risk factor</td>
<td>12</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Alcohol addiction</td>
<td>6</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

However percentage of chest pain in 35-60Yr (Group 1) i.e. 58.5% was higher than the elderly (Group 2) i.e. 25.5%. This finally correlates well with study and V.C Woonet al.

Symptoms of a typical chest pain, altered sensorium, syncope and stroke were more common in Group 2 i.e. above 60 years in present study.

Endothelial dysfunction resulting from different risk factors such as smoking, dyslipidaemia and diabetes mellitus, hypertension associated with coronary spasm and thrombosis play important role in the genesis of Acute myocardial infarction.

Summary And Conclusion:
- Chest pain was the most common presentation of AMI in all groups.
- Most common atypical presentation in elderly (60 Yr) patients was shortness of breath.
- A typical presentation of AMI was found to be more common in elderly age group (Group 2) than young. (group 1).
- Among the risk factors, hypertension, diabetes mellitus, smoking, obesity, and family history of coronary artery disease were common in 35-60 year male patients. Dyslipidaemia was more common risk factor in group II i.e. above 60 Yrs.
- The most important thing to note was that 30% of the patients in the study had no risk factor at all.
- Anterior wall myocardial infarction was commonest site of infraction (36%) than inferior wall myocardial infarction (25%) followed by of anteroseptal wall myocardial infarction (20%)
- The incidence of congestive cardiac failure was higher in elderly patients. Most of them presented with congestive cardiac failure-killip's class II followed by various arrhythmias and cardiogenic shock.

In the present study Mortality was higher in elderly age group of patients.

References:
3. Paul S.D., O Gara PT, Mahjoub ZA, et at. geriatric patients with acute myocardial infarction: cardiac


10. VC Woon, K H Lim: acute myocardial infarction in elderly- the differences compared with the young; Singapore Med J 2003 Vol 44(8):414-418

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