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To study clinical profile of patients of ACS aged ≤ 45 years admitted in CCU of Department of Medicine, I.G. Medical College, Shimla.

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Abstract

Background: To study clinical profile of patients of ACS aged ≤ 45 years admitted in CCU of Department of Medicine, I.G.Medical College, Shimla.

Methods: The hospital based observational study was carried out in patients of ACS aged ≤45 years, admitted to Cardiac Care Unit (CCU) of Department of Medicine I.G. Medical College Shimla from 1st June 2013 to 31st May 2014

Results: In our study, chest pain was the most presenting complaint (100%) and association of chest pain in different types of ACS in young patients was found to be significant ($p<0.05$), followed by sweating (80%) which was significant ($p<0.05$) , palpitations (36%) , syncope (34%) , atypical symptoms like pain in epigastrium (20%) , vomiting(14%) and SOB(14%).

Conclusion: In ACS in young, chest pain was most common symptom.

Keywords: ACS, LAD, Clinical profile.

Introduction

Patients with ACS generally have symptoms and signs of myocardial ischemia either at rest or with exertion. These symptoms and signs are similar to chronic angina symptoms, consisting of sub-sternal chest pain or discomfort that may radiate to the jaw, left shoulder or arm. Dyspnea, nausea, diaphoresis or syncope may either accompany the chest discomfort or may be the only symptom of ACS. About one-third of patients with MI have no chest pain perse and they tend to be older, females and diabetics.[1]

Many hospitals have developed chest pain observation units to provide a systematic approach towards serial risk stratification to improve the triage process. In many cases, those who have not experienced new chest pain and have insignificant ECG changes and no cardiac biomarker elevation, undergo treadmill exercise tests or imaging procedures to exclude ischemia at the end of 8- to 24-hour period and are discharged directly from the Emergency Department (ED) if these tests are negative.[3]

Material and methods

The hospital based observational study was carried out in patients of ACS aged ≤ 45 years, admitted to Cardiac Care Unit (CCU) of Department of Medicine

I.G. Medical College Shimla from 1st June 2013 to 31st May 2014. Total of 50 cases (male= 44, female= 6) of young ACS were included in study. This study was approved by Institution Ethics Committee. The Informed consent was taken from all patients.

Patient Selection

Inclusion Criteria

- Age of patient was 45 years or below.
- Patients who fulfilled the criteria of Acute Coronary Syndrome wereincluded

Acute, evolving, or recent MI defined as the typical rise and/or fall of biochemical markers of myocardial necrosis with at least one of the following:

- Symptoms of ischemia.
- Electrocardiographic changes indicative of ischemia and/or infarction.
- Development of pathologic Q waves in the ECG.
- Imaging evidence of new loss of viable myocardium or new regional wallmotion abnormality.

Unstable Angina (USA) was defined as angina pectoris (or equivalent type of ischemic discomfort) with at least one of three features:

- Occurring at rest (or minimal exertion) and usually lasting >10 minutes.
- Being severe and of new onset (i.e. within the prior 4-6wks).
- Occurring with a crescendo pattern (i.e., pain that awakens the patient from sleep or that is more severe, prolonged, or frequent than previously).

NSTEMI- If a patient with USA develops evidence of myocardial necrosis, as reflected in elevated cardiac biomarkers.

Exclusion Criteria

- Patients not giving informed consent.
- Patients with advanced comorbid conditions, including malignancies, advanced heart failure or valvular heart diseases.
- Patients already on statins.
- Patients with secondary causes of cardiovascular diseases like thyroid disorder, renal disorders, liver disorders, Cushing's syndrome, on estrogen administration which affect lipid metabolism.
- Patients with expected transfer to another hospital within 48 hours or if followup not possible.

Statistical analysis

Data collected was managed on a Microsoft Excel spreadsheet. All analysis was performed with the SPSS 10 version. Data were expressed using mean± standard deviation for continuous variables and frequency (percentage) was used to describe distribution of categorical variables. Association of risk factors of disease was carried by using Chi- Square Test.

Results

Table 1: Distribution of patients according to clinical profile

Symptoms	No. Of Patients (N=50)	Percentage
Chest Pain	50	100%
Sweating	40	80%
Palpitations	18	36%
Syncope	17	34%
Atypical Symptoms	10	20%
Vomiting	7	14%
Sob	7	14%

In our study, chest pain was the most presenting complaint (100%) and association of chest pain in different types of ACS in young patients was found to be significant ($p<0.05$), followedby sweating (80%) which was significant ($p<0.05$) , palpitations (36%) , syncope (34%) , atypical symptoms like pain in epigastrium (20%) , vomiting(14%) and SOB(14%).

Discussion

In our study, chest pain was the most presenting complaint (100%) and association of chest pain in different types of ACS in young patients was found to be significant ($p<0.05$), followedby sweating (80%) which was significant ($p<0.05$) , palpitations (36%) , syncope (34%) , atypical symptoms like pain in epigastrium (20%) , vomiting(14%) and SOB(14%) . A study by Sri Charan et al showed chest pain as the most common presenting complaint[3,4]. In anotherstudy by Singh PS et al chest pain was a predominant symptom (90%) followed by sweating (75%), and breathlessness (60%). Other nonspecific symptoms like abdominal pain, giddiness,and syncope were observed in the higher age group.[5]

Conclusion

In ACS in young, chest pain was most common symptom.

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