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AFTER ACUTE MYOCARDIAL INFARCTION END RESULT OF CARDIOGENIC SHOCK IN HOSPITALIZED PATIENTS

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Abstract:

Purpose: *To investigate the in-hospital outcome of cardiogenic shock (CS) after acute myocardial infarction (AMI).*

Materials and methods: *This descriptive study was conducted at the Ch. Parvaiz Elahi Institute of cardiology (CPEIC), Multan between June 2015 and November 2016. After acute myocardial infarction, 230 consecutive patients were shocked. Group I was the largest group of 110 (47.82%) patients; They were myocardial infarction patients with ST-segment elevation (STEMI). Group II consisted of 100 (43.47%) patients, these patients were non-STEMI, group III 20 (8.69%); These were patients with acute left bundle branch block (LBBB) in CS.*

Results: *The average age of the working population was 57.5 ± 27.5 years. The total number of males in the study population was 150 (65.21%) while 80 (34.78%) were females. In-hospital mortality was 65 (59%) in Group I, 90 (90%) in Group II and 10 (50%) in Group III. Conclusion: Conclusion: Conclusion: Patients with cardiogenic shock after AMI have higher mortality during hospital stay. This depends on the presence of more risk factors in this subgroup.*

Keywords: *Cardiogenic shock, acute myocardial infarction, mortality in hospital, left branch block.*

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INTRODUCTION:

Despite impressive improvements and management over the past 40 years, myocardial infarction with ST elevation (STEMI) is a major public health problem in the industrialized world. In the United States, almost a million patients in one year suffer from an acute myocardial infarction (AMI). STEMI mortality has gradually decreased in various populations since 1960. Cardiogenic shock (CS) occurs when more than 40% of myocardium is irreversibly damaged (particularly myocardial infarction of the anterior wall). In those with cardiogenic shunts, mechanical defects such as severe left ventricular dysfunction in 80%, ventricular septal defect in 20%, mitral regurgitation and electrical complications are present. ST is seen in 8.6% of STEMI patients. STEMI no. Ile consists of 2%. The overall survival rate at hospital is 30% and mortality rate is 70% if intensive intervention is not provided. The cause of this study is an important population group because of the presence of various medical treatments that can improve the poor prognosis and survival of patients with ST. CS represents the majority of deaths after AMI. There is little information in previous literature published in Pakistan regarding the outcome of CS after an AMI, so this study is designed to assess the intravasital consequences of CS after an AMI.

MATERIALS AND METHOD:

This descriptive study was conducted at Ch. Parvaiz Elahi Institute of cardiology (CPEIC), Multan between June 2015 and November 2016 after meeting the inclusion criteria METHODS were taken to study CS 230 consecutive patients after AMI. Group I consisted of 110 (47.82%) patients with the largest group STYME CS. Group II, 100 (43.47%) non STEMI group III 20 (8.69%) patients who had acute left bundle branch block (LBBB) in the context of SC. The criteria included in the study were all patients suffering from cardiogenic shock. Patients with acute myocardial infarction are diagnosed with two beings according to the following criteria.

a) Headache pain compatible with AMI.

b) electrocardiographic changes, eg, ST elevation ≥ 0.2 adjacent chest at least two potentials or at least two contiguous ends ≤ 0.1 mV mV segment.

c) A new or possibly new left branch block on the electrocardiogram.

d) High cardiac enzymes.

2. Patients treated conservatively in the wards. Exclusion criteria were CS for reasons other than AMI. CS patients managed by interventional therapy were excluded. Cardiogenic shock was defined as sustained hypotension (systolic blood pressure under 90 mm Hg), 30 min with evidence of tissue hypopurfusion (cooler core elements) to a suitable filling press VI.

DATA COLLECTION AND FOLLOW-UP

This work was carried out in the Emergency Service, Coronary Care Units at the Ch. Parvaiz Elahi Institute of cardiology (CPEIC), Multan. In particular, a complete history was taken, such as age, gender, smoking history, diabetes mellitus, hypertension, ischemic heart disease and ischemic heart disease. Acute MI was defined according to the criteria of the World Health Organization and classified as related or unrelated to ST segment elevation depending on the presence or absence of two or more ST segment elevations of at least 1 mm. the first leads to the adjacent electrocardiogram. radiograph. The location of acute MI was classified as STEMI, STEMI and acute LBBB. The initial presentation time was defined as the arrival time to the hospital. Primary reperfusion therapy was defined as the use of intravenous fibrinolytic therapy. The use of adjuvant therapy was recorded during hospitalization. The smoking status (present or no tobacco) was also identified. Death was classified as in-hospital (death before discharge of a patient during intensive care unit admission). All patients were treated according to the treatment protocol of the Cardiology Unit. Patients were monitored daily and were monitored for heart rate, blood pressure, respiration rate; The ECG changes were checked until 04 days until the patient's death or discharge.

STATISTICAL ANALYSIS

All data were analyzed with SPSS (Statistical Social Science Package) Version 11.0 for Windows. The mean age and standard deviation of the patients were calculated. Gender and research (pulse, blood pressure, temperature, respiratory rate, electrocardiographic changes, thrombolysis) were expressed as frequency distribution on days 1, 2, 3 and 4. At the end of the fourth day, survival and death were calculated and calculated by calculating the incidence and percentages of diabetes mellitus, hypertension, smoking, ischemic heart disease, dyslipidemia, and family history of ischemic heart disease. regulators.

RESULTS:

Main characteristics: The mean age of the studied population was 57.5 ± 27.5. The mean age of Group I patients was 70 ± 10 in Group III patients, 62.5 ± 22.5 in patients in Group II, and 50 ± 20. The total number of males in the study population was 161 (70%) and 69 (30%). Group I consisted of 70 (63.67), male and 40 (36.36%) women, group II 80 (80%)

men and 20 (20%) women, group III 11 (55%) men and 9 (45%) women. (Table 2). In the study group, the number of diabetes patients in group II was 120 Group I (52%), 30 (25%), 80 (66.66%) and 10 (8.33%). The total number of hypertensive patients in the study population was 100 (43.47%). Of these, 30 (30%) were 55 in Group I, 55 (55%) in Group II and 15 (15%) in Group III. In the survey, smokers 140 (60%); Group I, II and III had 70 (50%, 60%, 42.85%) and 10 (7.14%, respectively) patients with hyperlipidemic 200 (86.95%

Table 1.Presentations of Study Population

Variables	Numbers(Percentages) n=230
CS+STEMI	110(47.82%)
CS+Non-STEMI	100(43.47%)
CS+Acute LBBB	20(8.69%)

LBBB=left bundle branch block; CS=cardiogenic shock; STEMI=ST segment elevation myocardial infarction.

Treatment Strategies: Streptokinase treatment STYME'li (35%) and 10 (5%), respectively, a family history of IHD 69 (30% Inotropic support, diuretics, and other necessary measures were taken according to the protocol unit: cardiology

Outcome Data: In general, 165 (71.73%) died and 65 (28.26%) outcomes were used in patients with STEMI and acute LBBB survived in the hospital mortality rate 70 (42,42%) patients in Group I, 80 (48.48%) in Group I and 15 (9%) in Group II.

Table 2. Baseline Characteristics of Study Population

Characteristics	Numbers (Percentages) n=230
Age	30-85Years
Sex	
Male	161(70%)
Female	69(30%)
DM	120(52%)
Hypertension	100(43.47%)
Smokers	140(60.86%)
Hyperlipidemias	200(86.95%)
Previous H/O IHD	115(50%)

DM=Diabetes Mellitus; H/O IHD=History of ischemic heart disease

Predictors of Survival: In-hospital mortality determinants were often reduced with older age, very low blood pressure, highest Killip class, and widespread MI.

DISCUSSION:

Coronary artery disease is the leading cause of death worldwide. Approximately 13.2 million Americans have CAD. Anyone who has a heart attack will not develop CS. In fact, 10% of people with heart attacks develop CS. But when it does, it's too dangerous. The most common cause for people who die from a heart attack in a hospital is CS. In our present work we have seen CS go wrong. Acute myocardial infarction is a major cause of death in the modern world. CS is more common as a complication of AMI. Patients with CS have increased risk of death and cardiovascular morbidity during AMI. Compared to other diseases without AMI CS, patients with inotropic support with other supportive measures increased CS significant mortality. The work done by Beattie et al. 10 shows that the CS AMI leads to death cause, present report observations consistent with previously published reports, showing an increased mortality rate of cardiogenic shock after acute myocardial miocardio.9,10. Death rate 70-90% Previous studies have shown that age, sex, congestive heart failure and diabetes influence as important factors in survival in patients with cardiogenic shock with acute myocardial miocardio.5,6 We confirmed these observations and also reduced conservative treatment mortality it is not enough to show that another life circumstances of the other ko is a relationship. In the past, almost no one survived from CS. Our findings emphasize the need to understand the causes of less aggressive treatment in these patients and to develop improved treatment for acute myocardial infarction or better primary and secondary coronary prevention strategies.

Smoking, dyslipidemia and obesity are important risk factors for STEMI. Infarction of the previous site is more common. Among diabetes patients, STEMI's chances are almost equal in males and females, while the ratio between males and females is 1: 6 among non-diabetics. A recent study has been shown among surviving patients with CS for 30 days. After ST segment elevation and myocardial infarction, the annual mortality rates between 2% and 4% are approximately the same as those of untreated patients. Better prevention of coronary events may affect the overall burden of CS and mortality associated with CS.

CONCLUSION:

The intravasital results of cardiogenic shock after acute myocardial infarction are high when these patients are treated conservatively. We have also seen

a strong association of comorbid conditions with cardiogenic shock after acute myocardial infarction.

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