Post thrombolytic ST segment resolution predict better outcome in MI patient

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Objectives: Comparison of two in-patient groups with myocardial infarction one having ST-resolution and other without ST-resolution.

Method: This prospective study was done at cardiology unit of Ayub Teaching Hospital, Abbottabad. Patients presented to emergency department with ST elevated Myocardial Infarction, who were not treated with primary angioplasty but thrombolysed with streptokinase, were recruited. ECG was acquired at baseline and at 90 minutes post streptokinase administration. Patients were divided into two groups: Group A having ST segment resolution after thrombolysis with streptokinase and the Group B having no resolution. These patients were followed up throughout the hospital stay for complications which were Arrhythmias, Cardiogenic Shock, Acquired VSD, Aneurysm and death.

Result: This prospective study of 115 patients contained 94 male and 21 female patients. In group A having ST resolution developed complication in 4 patients (3.92%) and in Group B 13 patients (100%) developed complications. Arrhythmias were the most common complication among MI patients 1% in Group A while Cardiogenic Shock was the commonest complication in group B accounting for 62% in patients. Arrhythmia developed in 38% patients in Group B.

Conclusions: ST segment resolution provides useful information about early clinical outcome in post-myocardial infarction patients. No ST segment resolution, indicating failed thrombolysis, predicts very high early morbidity and mortality, whereas complete resolution is associated with a small infarct area and low morbidity and mortality. Different extents of ST segment resolution may serve as a sensitive surrogate end point in clinical trials. This finding therefore establishes a direct correlation between ST resolution and the frequency of complications.

Biography
Syed Muhammad Salman Shah has completed his graduation from Khyber Medical College Peshawar in 2014 and joined Khyber Teaching Hospital in Sep 2014, working as a Senior House Officer in Khyber Teaching Hospital. Previously published one Research paper in “BMC Research Notes England” on “Addressing the impact of stroke risk factors in a case control study in tertiary care hospitals”: A case control study in Tertiary Care Hospitals of Peshawar, Khyber Pakhtoonkhwa (KPK) Pakistan”.

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