

Abstract

Introduction:

Cardiovascular disease (CVD) is the leading cause of death in Egypt and worldwide, placing great strain on the world's health systems. High-quality treatment of CVD requires a valid, reliable measurement for ensuring evidence-based care. Clinical outcomes registries have been used to support quality improvement activities in some countries, but there are few examples of their implementation in resource-limited settings.

Objective:

It is one of the few Egyptian registries dealing with patients with acute coronary syndrome admitted in critical care department ,Cairo University We tried to determine our performance in comparison to other registries, and to find out risk factors associated with poor outcomes especially in our Egyptian patient population.

Methods:

This is a retrospective non-controlled cohort study of patients with acute coronary syndrome admitted from January 2010 to December 2012. Retrospective analysis of these patients data were retrieved through reviewing written paper and electronic database.

Results:

A total number of 503 patients were enrolled in our study. The study included 381 males (75.7%), with mean age 57.2 ± 10.4 years. Their pain duration was 14 ± 24.4 hours. Average length of stay was (7 ± 4.4) days).

Hypertension was the most prevalent risk factor for our patients(57.3%), followed by smoking (52.1%), diabetes(45.9%) and dyslipidemia(23.7%).

Primary PCI was done to 154 patients (28.8%), while we had 105 elective PCI procedures (20.9%). There were 905 vessels with 1216 affected segments in our patients.

MACCE was higher in patients with higher age (60 yrs vs 56.7 yrs P value 0.021),STEMI on presentation (25.7% vs 18% in UA/NSTEMI P value 0.002),higher CKMB levels (157 iu/l vs 89 iu/l P value 0.019),higher Killip class upon presentation (class III-IV 64.9% vs 2.2% class I-II p value <0.001).

Patients with UA/NSTEMI who treated conservatively developed statistically significant higher incidence of MACCE as compared to those treated interventionaly (23.4% vs 13.5% P value 0.031)

Patients with STEMI who treated without intervention have statistically significant higher incidence of MACCE than those who treated interventionaly (15.4% vs 5.5% P value 0.46) .

Conclusion:

1. Patients with STEMI represent a majority of ACS presentation, this was reflected on the outcome in the form of higher incidence of MACCE in higher age group, higher levels of cardiac biomarkers ,higher Killip class.
2. The outcome was affected by early interventional treatment in all patient groups.
3. Our clinical event rates were comparable with other international registries outcomes, inspite of being different in our demographics.

Key Words : Acute Coronary Syndrome - Cardiovascular Disease