Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/ihj

Coronary Artery Disease

Short- and long-term follow-up with antithrombotic management patterns in patients hospitalized with acute coronary syndrome: Indian subgroup of EPICOR-Asia Study

J.P.S. Sawhney [1,*], B. Kotak [2], A. Raza [2], A. Kumar [2], A. Thakur [2], A. Vega [3]

[1] *Chairman, Department of Cardiology, Sir Ganga Ram Hospital, Delhi, India*

[2] *Medical Affairs, AstraZeneca Pharma India Ltd, Bangalore, India*

[3] *Global Medical Affairs, AstraZeneca, Madrid, Spain*

Background: Acute coronary syndrome (ACS) is associated with emergency hospitalizations, and there are limited real-world data on clinical outcomes in Asian post-ACS patients. This paper presents data on the Indian subgroup from the long term follow-up of antithrombotic management patterns In Acute CORonary Syndrome patients in Asia (EPICOR-Asia) study.

Methods: EPICOR included 12,922 patients with ACS (ST-segment elevation myocardial infarction [STEMI], non-ST-segment elevation myocardial infarction [NSTEMI], or unstable angina [UA]). The study had two phases: acute phase and follow-up phase. The primary objective was to describe short- and long-term antithrombotic management patterns (AMPs). Secondary objectives were to compare the association of AMPs with clinical outcomes of death and cardiovascular (CV) and bleeding events.

Results: EPICOR-India enrolled 2468 patients (STEMI – 1482; NSTEMI – 562; UA – 424). CV risk factors were present in 55% of the population. Pre-hospital care was received by 35% of patients, and the average time from symptom onset to first medical attention was approximately 7 h. Thrombolysis was initiated after admission in 29.1% of STEMI patients, whereas cardiac catheterization was performed in 74% of the overall population. The most common drug regimen prescribed during the acute phase was ≥2 antiplatelets + anticoagulants with no GP IIb/IIIa inhibitors and at discharge were aspirin + clopidogrel. Post-discharge outcomes at 2 years included death in 166 (6.7% [STEMI – 6.9%; NSTEMI – 9.6%; UA – 2.4%]), CV events in 177 (7.2% [STEMI – 7.9%; NSTEMI – 8.0%; UA – 3.5%]), composite events of death, MI, or ischemic stroke in 182 (7.4% [STEMI – 7.6%; NSTEMI – 10.9%; UA – 2.1%]), and bleeding events in 7 (0.3% [STEMI – 0.3%; NSTEMI – 0.2%; UA – 0.2%]).

Conclusion: This study has observed a gap between international recommendations and implementation for managing ACS in Indian patients. The poor pre-hospital care, delay in receiving medical attention, and fewer doctors opting for non-invasive interventions are some of the challenges in India. The mortality along with composite events of death, MI, or ischemic stroke was highest for NSTEMI patients. The reported CV events were similar in STEMI and NSTEMI groups. Going forward, steps need to be taken to improve identification, diagnosis, and management of ACS patients to improve patient outcomes.

Association of serum platelet-lymphocyte ratio (PLR), neutrophil-lymphocyte ratio (NLR), non-HDL cholesterol levels with severity of acute coronary syndrome

K. Goutham Reddy *, M. Jagadesh, K. Ranjan Shetty, Tom Devasia

Kasturba Medical College, Manipal, India

Background: Acute coronary syndrome (ACS) is one of the leading cause of cardiovascular morbidity and mortality worldwide. Various scoring systems are available for assessing the severity of ACS. Many serum markers are under investigation to assess the severity of ACS. Few of them are rather simple to assess such as platelet-lymphocyte ratio (PLR), neutrophil-lymphocyte ratio (NLR), and non-HDL cholesterol levels. Association between these markers and severity of ACS has been studied in the past and few studies have shown positive correlation between these markers and severity of ACS. However such association is not established in literature on Indian patients where there is increasing burden of morbidity and mortality due to ACS.

Aim: To assess serum PLR, NLR, and serum non-HDL cholesterol levels in patients with acute coronary syndrome (ACS).

Objective: To study the correlation between serum PLR, NLR, serum non-HDL cholesterol levels, and severity of ACS.

Methods: This is a prospective study on hospitalized patients with ACS. ACS was diagnosed based on clinical presentation, ECG, and cardiac biomarkers. Blood for hemogram and lipid levels was drawn at admission. Coronary angiography was performed through the femoral artery access and the angiograms were evaluated by two interventional cardiologists who were blinded to the study. The severity of ACS was assessed by Gensini score. A total of 86 patients who presented with ACS from February 2014 to April 2014 at Kasturba Hospital, Manipal were taken into the study.

Data analysis and interpretation was done with SPSS 20. A correlation between Gensini score and PLR, NLR, and non-HDL cholesterol was established using bivariate correlation analysis and Spearman's coefficients were calculated. The median Gensini score, median PLR, median NLR, and median non-HDL cholesterol levels were 56.5, 18.4, 4.94 and 133.67 respectively. Patients were divided into 3 equal groups based on Gensini score. Patients with Gensini score ≤40 were categorised as mild,