Reviewer's report

Title: Management and outcomes of acute ST segment elevation Myocardial infarction at a tertiary care hospital in Sri Lanka; an observational study.

Version: 2  Date: 29 November 2014

Reviewer: Sebastiano Gili

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Bandara and colleagues performed this observational, single center, prospective study with the aim to analyze the current practice in the treatment of ST-segment elevation myocardial infarction (STEMI) in a tertiary center in Sri Lanka. Eighty-one consecutive patients were enrolled over a 6 months time-span, of whom 72.8% underwent thrombolysis and no one underwent primary PCI. At one year, 10 patients (12.3%), with a median door-to-needle time of 92 minutes, were dead.

This study is of importance in its field as it analyze the critical issues implied in the management of STEMI in a public tertiary center of a developing country still relying heavily on thrombolysis.

MINOR ESSENTIAL REVISIONS:

1. A high door-to-needle time (median 92 minutes) was found in patients dead at 1 year follow up. What was the door-to-needle time in patients alive at 1 year? Was the difference statistically significant? What was the time from symptom onset to admission in these two groups?

More generally, it would be extremely helpful to have a statistical analysis performed to evaluate which factors may predict a fatal outcome at one year (age at presentation, baseline clinical features, time from symptom onset to admission, door-to-needle time, direct admission to tertiary center vs. re-direction from other centers, cardiogenic shock, left ventricular dysfunction, etc...)

2. Data on medical therapy administered during hospital stay are reported in the manuscript, while data on medical therapy at discharge are less clearly provided and should be reported in the Results section of the manuscript. Moreover, no data pertaining long term prescription and compliance with medical therapy are provided. Are these data available? Did they relate with one-year outcome?

3. Reasons explaining why a high rate of patients (17%) didn’t undergo thrombolysis even if eligible are reported as "not clear". As this represent a critical issue in the management of STEMI, any data possibly related to this issue, if available, should be showed and discussed; if no data are available, it should be expressed in the limitations section.

4. How was echocardiographic left ventricular dysfunction defined?
5. No data on thrombolysis complications are provided: did any occur?
6. Did any re-infarction occur during the 1 year follow up?
7. Grammatical errors:
   a. “have have” (line 140)
   b. “mayocardial” (line 166)
   c. “Follwing” (line 184)
   d. “meadian” (line 254)

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests