Letter to the Editor,

We read with great interest the paper from Mattos et al[1] reporting that primary percutaneous transluminal coronary angioplasty (PTCA) caused higher clinical adverse events with the increase of death rate, longer delay until successful reperfusion, lower success rate in elderly patients, mainly after 69 years of age, than ages less than 69 underwent. Because of higher mortality rate of thrombolytic theraphy in the elderly population presented with acute myocardial infarction, there has been an increasingly trend toward primary PTCA[2]. Moreover, it was not exactly clear whether the result of primary PTCA in elderly population was different from that of younger age population or not. We thank the authors for their important contribution to the clarification of this subject. However, we have some concerns about the data as presented as well as the methodology.

In the introduction section of the paper, it was reported that the worldwide population over 70-year old was 21.1 millions in the year of 2000 and the estimation would be 27.3, 35.7, and 49.7 in 2010, 2020, and 2030, respectively[1]. But, these numbers are the numbers reported by the American Heart Association (AHA) for the USA, and these expectations are very low for the world without a doubt. Moreover, due to this data obtained from the AHA, 21.1 million is the number of people over 70-year-old living only in the USA in the year of 1990, and this number passed over 25 million in 1990[3].

In the methodology of the study, only two criteria, including chest pain and ECG changes with ST-T segment elevation, were used for the diagnosis of acute myocardial infarction. Did not the authors measure serum cardiac markers at admission and evaluate changes for the diagnosis of acute myocardial infarction?

It was noted from the paper that the authors measured ejection fraction by performing left ventriculography before primary PTCA. However, it has been advised not to perform ventriculography during primary PTCA[4]. It is known that left ventriculography can provoke acute left heart failure. Though, we could not consider how the authors could perform left ventriculography to the patients with acute MI, especially patients in functionally class III/IV as much as 11% of patients during primary PTCA.

We also wondered whether any adverse effect occurred in the elderly patients presented with acute MI after left ventriculography or not. The authors defined the length of time passing from pain onset to first balloon inflation. But, could it be more meaningful if the time could be divided into two parts, one interval is from pain onset to catheter laboratory, the other one is from catheter laboratory to first balloon inflation in order to determine exact procedure time?

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