which I started learning how to write manuscripts. me an opportunity to work on manuscripts of research projects due to Turkey Turkish Medical Program; İstanbul-Medical Student, İstanbul University, Cerrahpaşa Medical School, USA Medicine; Baltimore, MD-Visiting Medical Student, Johns Hopkins University School of

4. Bertrand M, Mullainathan S. Are Emily and Greg More Employable

3. Tajfel H, Billig MG, Bundy RP , Flament C. Social categorization and


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References


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Evaluation of renal dysfunction after ST-elevation myocardial infarction

To the Editor,

We have read with great interest the article entitled “Prognostic impact of renal dysfunction on long-term mortality in patients with preserved, moderately impaired, and severely impaired left ventricular systolic function following myocardial infarction” recently published in Anatol J Cardiol 2018; 20: 21-8 (1). In this study, the authors aimed to evaluate the prognostic impact of renal dysfunction (RD) on long-term overall mortality at admission to hospital in patients with STEMI.

The authors calculated GFR only at admission to hospital before performing PCI. There is no data on post-PCI GFR. All patients who were included in the study had PCI. Maybe, patients had acute kidney injury after PCI due to contrast injury or low cardiac output, and they did not require dialysis. Furthermore, it is possible that patients had better GFR levels after discharge from hospital compared with those at admission. Therefore, we think that there is a need to include more data on post-PCI creatinine levels. It would be better to add creatinine data obtained from a 6 year follow-up period. The investigation of RD and mortality according these results will increase the confidence of the study. We observed a similar lack of assessment of ejection fraction in the patients. Only one echocardiography examination was performed on patients during the study period. We think there is also a need to include standardized data on amount of contrast used during PCI between all ejection fraction groups. In table 1, we noted that there was significant difference between the three ejection fraction groups in terms of age and gender. Older patients had decreased GFR levels in all groups and patients who had GFR levels >60 mL/min were mostly male. RD is affected by age and gender differences, which is indicated in the GFR calculation formula. There is a need to standardize age and gender differences between all groups to exclude
these factors affecting the association between ejection fraction and RD during the first admission of patients with STEMI to the hospital. We think these lacks of the study may affect the results.

**Author’s Reply**

To the Editor,

We would like to thank the authors for their interest in our study (1). Renal dysfunction (RD) at admission can be an indicator of a chronic state or acute deterioration. We agree that the lack of information on renal function during a 6-year follow-up is a study limitation, as stated in the section “Study limitation.” The change in renal function over time (including acute kidney injury during hospitalization) can potentially add predictive information to the baseline measurement. However, in the literature, there are many studies that investigated the prognostic impact of renal function on long-term outcomes after ST-elevation myocardial infarction (STEMI) by analyzing only baseline estimated glomerular filtration rate (eGFR) (2-4). Left ventricular systolic function (and EF as one of its measures) in patients with STEMI can change after the acute phase, especially in the first few months. Despite that, many clinical trials so far have used only one measurement of EF (often baseline EF before primary PCI) to analyze long-term prognosis in patients with STEMI (2). Furthermore, baseline RD and baseline EF are parameters included in risk assessment scores for predicting mortality in patients with STEMI (e.g., CADILLAC score) (5). It is a well-known fact that aging leads to the decrease in the values of eGFR, and therefore, age of the patient one of the most important independent predictors for RD. Women with acute myocardial infarction are generally older than men; however, it is a common finding that the female gender is also an independent predictor of RD (6). The patient’s age and gender are included in the MDRD formula for GFR assessment. Regardless of that, in our study, age was included in the multiple Cox analysis, and age (years) remains to be a strong independent predictor of mortality in patients with preserved and moderately reduced EF but not in patients with severely reduced EF. When we analyzed predictors of mortality in the whole cohort (not shown in the paper) and in each group separately, gender was not a predictor of mortality (univariate analysis) and was not included in the multiple Cox analysis. Finally, our main objective was to show that strong and negative prognostic impact of baseline RD may differ in patients with STEMI depending on EF. Further investigations should be conducted to verify these findings.

**References**


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