means using larger samples. Using the data from our research, we see that CPB time in our study was just a bit longer than that in the study of Velissaris et al. (2), but the AXC time was somewhat (maybe even considerably) longer in our patients. It was therefore our conclusion that the age of our patients was the primary key as to the percentage of them having experienced non-thyroidal illness syndrome (NTIS) after cardiac surgery in comparison to other investigators' papers on this subject. We have stated some study limitations in our paper: a larger sample with more details and parameters investigated and analyzed, as well as a sample with a wider age range, might reveal additional information about this interesting phenomenon.

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Renal dysfunction as a marker of increased mortality in patients with pulmonary thromboembolism

To the Editor,

We read with great interest the article entitled "Chronic kidney disease: Prognostic marker of nonfatal pulmonary thromboembolism" published in Anatol J Cardiol 2015; 15: 938-43 by Ouatu et al. (1) and congratulate the authors on carrying out research on such an important subject. The study identifies renal dysfunction, assessed by glomerular filtration rate, as a predictor of death in non-high-risk patients with pulmonary thromboembolism after a 2-year follow-up. The issue of mortality risk stratification in these patients is very important, because they represent a heterogeneous group with an early mortality risk between 1–15% (2) and could benefit from further risk stratification in order to identify patients at higher risk, who could require more aggressive therapy.

Research on risk stratification of patients with pulmonary thrombembolism is focused on early, 30-day mortality risk predictors, and this study, that extends follow-up to 2 years, offers us an interesting view in the evolution of these patients. An interesting analysis would be to examine the causes of death in the study population and their time of onset from the acute event, which were not mentioned in the paper. Given the fact that chronic kidney disease is a known risk factor for cardiovascular disease, identification of the causes of death could be useful in arguing a link between atherosclerosis and venous thrombosis, especially noting the high prevalence of coronary heart disease (64%), older age, and, surprisingly, no incidence of cancer, among the patients that did not survive.

The current European Society of Cardiology guidelines on diagnosis and management of acute pulmonary embolism (2) advocate the use of the Pulmonary Embolism Severity Index for evaluating the 30-day mortality risk. This prognostic score published by Aujesky et al. (3) is based on 11 clinical patient characteristics and is most useful in identifying low risk patients. Interestingly, the study identified a blood urea nitrogen level greater than 30 mg/dL (11 mmol/L) as an independent predictor of increased 30-day mortality and elaborated an extended 17-variable prediction model, which included renal dysfunction, that had a higher discriminatory power, but similar mortality rates, and was considered to add insufficient benefit to the simpler version.

In this regard, renal dysfunction is a predictor of both early and long-term increased mortality in patients with acute pulmonary thromboembolism. However, the significance of this risk prediction and its usefulness must be evaluated in further dedicated clinical studies.

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