LETTER TO THE EDITOR
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Predictors of mortality in patients with abdominal aortic aneurysm

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Dear Editor;

We have read with great interest the article by Aksoy and Uysal[1] entitled "A simple risk scoring systems to evaluate the presence of aneurysm and one-year mortality in patients with abdominal aortic aneurysm using CHA2DS2-VASc and ATRIA". First of all, we congratulate the authors for their invaluable contribution to the literature. However, we would like to add some very important factors affecting mortality in patients with abdominal aortic aneurysm (AAA).

In their article, the authors aimed to investigate the effect of two scoring systems on the diagnosis of AAA and mortality in patients diagnosed with AAA. A total of 120 patients were included in the study. Firstly, patients were divided into two groups as those with AAA (n=60) and those without AAA (n=60), and then mortality analysis was performed on patients diagnosed with AAA. Mortality was observed in 20 (33.3%) patients diagnosed with AAA as a result of one-year follow-up. In the multivariate analysis, in addition to a scoring system that was the subject of the study, and high blood glucose levels were determined as an independent predictors of mortality[1]. However, we could not obtain clear data on whether surgical or endovascular treatment was applied to patients with AAA. In the method part, we determined an exclusion criterion such as "need for preoperative resuscitation". Have surgical or endovascular procedures been applied to patients with diagnosis of AAA? If they were operated, how many patients have you performed endovascular procedures?

We agree with the authors about the usability of these scoring systems in diagnosing AAA. Studies have shown that they play a role in the prognosis of cardiovascular diseases[2]. However, we think that the case of whether surgical or endovascular procedures were applied to the patients should be added to the multivariate analysis when performing the mortality analysis. Otherwise, the data obtained may be misleading.

In a recent study involving a large number of patients (38,008 patients), in-hospital mortality was found to be 1.07% in patients who underwent elective endovascular procedures. Also in this study, the overall survival rates were 96.2% at 6 months, 93.5% at 1 year, 88.3% at 2 years, 82.8% at 3 years, 76.2% at 4 years, 69.4% at 5 years, 63.7% at 6 years, 54.4% at 7 years, and 38.8% at 8 years. In addition, approximately 70% of the patients included in the study had an AAA diameter of 50 mm and more[3]. In the study of Aksoy and Uysal, AAA diameters were given as 53.8±7.5 mm versus 53.2±6.8 in patients with a diagnosis of AAA with and without mortality, respectively, and the mortality rate was found to be 33.3% in one-year follow-up[1]. In a meta-analysis including 15,475 patients, the annual rupture rate was found to be a maximum of 8.2% in AAA patients with a diameter of 3–5.4 cm[4].

As a result, it would be useful to discuss whether any intervention was applied while revealing the predictors of one-year mortality in patients with a diagnosis of infrarenal AAA. Knowing the causes of death in patients with a diagnosis of AAA who did not undergo any intervention would be useful in terms of revealing the effects of the risk factors investigated in the article.

AUTHORS' CONTRIBUTIONS

TT: Conceptualization, Methodology, Writing – original draft, Writing – review & editing. **MS:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing. **ME:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

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