Is atrial fibrillation a preoperative risk factor in elderly patients without heart failure after hip fracture surgery?

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Dear Editor,

We read with great interest the study by Ahmet Lütfullah Orhan¹. It revealed that the incidence of atrial fibrillation (AF) was significantly higher in the non-surviving group after long-term postoperative follow-up. Using multivariate Cox regression analysis, the authors found that AF, advanced age, and blood urea levels were identified as independent predictors of all-cause long-term mortality. The authors concluded that AF was an independent predictor for long-term death in hip fracture cases above 65 years of age who were free from heart failure. This has important implications for improving the safety of hip surgery and reducing mortality in elderly patients with atrial fibrillation. However, in our opinion, more factors should be taken into consideration for drawing this conclusion.

Firstly, some laboratory parameters and echocardiographic parameters were included to measure cardiac functional status, but laboratory indicators only included blood routine indicators. Adding some myocardial infarction indicators such as troponin, BNP, pro-BNP, etc. and activity tolerance were

more conducive to evaluating the cardiac function in elderly patients. Additionally, the author claimed to include patients over 65 years of age, but Table 1 indicated that the mean age of the patients included was over 80 years. Finally, the authors did not state the inclusion and exclusion criteria.

Atrial fibrillation may be associated with high or low blood pressure, fast or slow heart rate, and unknown thrombosis in the perioperative period. However, the effect of these factors on survival was not investigated in this study. Therefore, more clinical data should be collected to exclude the effect of AF in elderly patients with hip fracture so that a conclusion can be reached.

AUTHORS' CONTRIBUTIONS

DL: Investigation, Methodology, Resources, Software, Writing – original draft, Writing – review & editing. **JS:** Conceptualization, Project administration, Resources, Writing – original draft, Writing – review & editing.

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