

Letter to the Editor

Editöre Mektup

Association of neutrophil/lymphocyte ratio and CHA₂DS₂-VASc score with left atrial thrombus in patients who are candidates for percutaneous mitral balloon valvuloplasty

Dear Editor,

I read the article “Association of neutrophil/lymphocyte ratio and CHA₂DS₂-VASc score with left atrial thrombus in patients who are candidates for percutaneous mitral balloon valvuloplasty” written by Orhan Maden et al.^[1] with great interest. Although the sample size was small in this trial, which was acknowledged by the authors in the limitations section, it added significant value to the understanding of the neutrophil/lymphocyte ratio (NLR) relationship to left atrial (LA) thrombus formation in patients with mitral stenosis (MS).

Left atrial stasis and increased pressure due to mitral valve obstruction cause LA thrombus and spontaneous echo contrast (SEC) formation independent of CHADS₂-VASc score. NLR, which is a systemic inflammation marker, was found to be a low-cost and easily repeated parameter in the prediction of LA thrombus formation in patients with rheumatic mitral valve stenosis.^[2] Nevertheless, there are a lot of variables, such as increased LA diameter, high D-dimer or uric acid level, and mitral annular systolic velocity, which increase SEC/LA thrombus formation.^[3,4] Because of the increased thrombus risk in patients with MS, accurate and in-time coagulation is very important to prevent ischemic stroke and peripheral embolism.

I want to point out the lack of medical treatment information for SEC/LA thrombus in this trial. Warfarin is the only drug that can be used in patients with valvular heart diseases like MS to prevent embolism in case of anticoagulation indication. The 2012 European Society of Cardiology guidelines on the management of valvular heart disease recommend anticoagulation for all patients with atrial fibrillation in MS and if LA diameter is >50 mm, LA volume is >60 mL/m², there has been prior embolism, or thrombus is present in the LA with sinus rhythm.^[5]

If international normalized ratio (INR) is outside the therapeutic range in patients who are oral anticoagu-

lant-indicated, thromboembolic events increase, as do hemorrhagic complications. So regular use of warfarin targeting the therapeutic range is very important for effective prophylaxis. In this trial, though all other parameters affecting SEC/LA thrombus formation were explained, there were no data about warfarin use or effective dose adjustment. We certainly know its effect on thrombus prevention. I wonder if the authors can say how many patients were under warfarin treatment and if there was a significant difference in INR level before and during the transesophageal echocardiographic procedure. It would be useful to learn this information to be able to better interpret the results.

I want to thank the authors for this valuable contribution to the literature.

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doi: 10.5543/tkda.2017.91535

Conflict-of-interest: None declared

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