Author`s Reply

To the Editor,

We thank the authors for the interest they have shown in our article entitled "Successful treatment of a pulmonary embolism with low-dose prolonged infusion of tissue-type plasminogen activator in a 37-year-old female in the early postoperative period," published in Anatolian J Cardiol 2014; 14: 400-2. (1).

Current guidelines suggest using thrombolytic therapy as the first-line treatment modality (2). The approved protocol is 100 mg t-PA during a 2-hour infusion (2). However, it is associated with an increased rate of major bleeding and mobilization of the thrombus. Therefore, many clinicians hesitate in ordering thrombolytic therapy. Recently, Özkan et al. (3) reported that prolonged low-dose prolonged administration t-PA was effective and safe in the treatment of prosthetic valve thrombosis, which significantly decreased major and minor bleeding complications compared to full-dose and accelerated regimens. They suggested that increasing the time of administration and decreasing the thrombolytic dosage provided safety advantages without decreasing the effectiveness (3). Catheter-directed ultrasound-accelerated thrombolysis is a promising treatment alternative, but low-dose ultra-prolonged infusion of t-pa was used in this approach, as well (4). The question is whether low-dose prolonged infusion of t-PA or the ultrasound beam is the key element of the treatment success and safety. Currently, we are conducting research about the effectiveness and safety of low-dose prolonged infusion of t-PA in the treatment of massive pulmonary embolism. This study is registered with Clinical Trials with the number NCT02029456. The initial results of this interventional study were presented in the 2014 ESC Congress (5). In this study, we have also shown that a low-dose prolonged infusion protocol restored right ventricular function in the immediate and medium term, evaluated with echocardiography. Further randomized studies will enlighten us on the safety and efficacy of these protocols.

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