D-Dimer Elevation in Asymptomatic Vascular Disease After Venlafaxine Administration

To the Editors:

Venlafaxine is a serotonin-norepinephrine reuptake inhibitor. In addition to the antidepressant effect of venlafaxine, it also relieves nonorganic physical pain.1 D-dimer is a soluble fibrin degradation product that results from ordered breakdown of thrombi by the fibrinolytic system, and D-dimer serves as a valuable marker of activation of coagulation and fibrinolysis.2 Serum D-dimer testing can help diagnose deep vein thrombosis (DVT) or pulmonary embolism (PE).3 It is also associated with asymptomatic venous thromboembolism (VTE).5 The main reason for the increase of D-dimer, such as sepsis, cancer, surgery, and trauma, is considered a risk factor for VTE.6 In elderly people, the risk of VTE is twice that of women.7

Venlafaxine use is correlated to high serum D-dimer concentrations in many depressive patients on long-term antidepressants.1 D-dimer elevations again. The patient has never taken antidepressants or antipsychotics before. The patient was not taking other antidepressants after discontinuing venlafaxine during the illness. There are many reasons for the increase of D-dimer, such as sepsis, malignancy, trauma, cerebrovascular accident, and so on.14 In addition, being overweight, aging, and depression can also lead to elevated D-dimer. In this case report, the patient was an elderly depression patient with a BMI in the normal range, among which...
older age and depression were potential factors for elevated D-dimer. According to a study by Naranjo et al., the patient’s ADR score was 5. (The ADR was assigned to a probability category from the total score as follows: definite ≥ 9, probable 5–8, possible 1–4, doubtful ≤ 0.) Thus, we think that DVT or PE should be ruled out initially in patients taking long-term venlafaxine for mild depressive symptoms. Functional blood coagulation and D-dimer tests, as well as venous color Doppler ultrasonography, and enhanced pulmonary CT angiography should be routinely performed, whether in an outpatient or inpatient setting, to enhance the early detection and treatment of vascular disorders in patients taking venlafaxine for depression.

AUTHOR DISCLOSURE INFORMATION
The authors declare no conflicts of interest.

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