

# Guidance of oral anticoagulation after thromboembolic venous disease

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The optimal duration of oral anticoagulation after the first episode of venous thrombembolism (VTE) is unknown. The risk of hemorrhagic complications associated with oral anticoagulation must be weight against the risk of recurrence of VTE, which is at its high 6 to 12 months after the first episode. A high D-Dimer level is known to predict the risk of recurrence of VTE after the initial episode, but the benefit of resuming oral anticoagulation solely on this issue is unknown.

The PROLONG study tried to assess this issue. The study included 608 patients with a history of VTE (pulmonary thrombembolism or proximal venous thrombembolism) and evaluated the utility of the D-Dimer level after 1 month after stopping the treatment with oral anticoagulation treatment. If the D-Dimer level was normal (485 patients, 63,3%), the anticoagulation was not resume. If the D-Dimer level was high, the patients were randomly assigned either to resume oral anticoagulation (103 patients), either not to receive anticoagulation (120 patients). The patients were followed for

an average 1.4 years; the primary objective was recurrent VTE and major hemorrhage. Recurrent VTE developed in 6,2% of the patients with a normal level of D-Dimers, in 2,9% of the patients with high level of D-dimers who resumed oral anticoagulation, and in 15% of the patients who had a high level of VTE but did not resume oral anticoagulation. These figures corresponded to an adjusted hazard ratio for recurrent VTE of 4.26 ( $p = 0,02$ ) for patients with high d-Dimer level who did not resume oral anticoagulation as compared with patients with high D-dimer level who resumed oral anticoagulation. In patients who did not received oral anticoagulation, the adjusted hazard ratio between patients with high D-Dimer level and patients with normal D-Dimer level was 2,27 ( $p = 0,02$ ).

**In conclusion**, the level of D-Dimer found 1 month after stopping oral anticoagulation in patients with a history of VTE can point to a subgroup of patients which will benefit for resuming oral anticoagulation. The duration of resuming oral anticoagulation remains unknown.

## Comment on the paper:

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