

59. Global test for thrombophilia

Last Updated: 2/15/2004

Q: "Is there is a diagnostic test to see if your blood is thick and therefore more likely to clot? I know that people on Coumadin® have to have their INR checked regularly but can FVLs not on Coumadin® (like me) benefit from the same tests?"

A: There is presently no global test to assess what the overall tendency of an individual's blood is to clot. The INR is not helpful - it is normal, i.e. approximately 0.8-1.2 even in individuals with relatively strong clotting tendency (such as antithrombin III deficiency, homozygous factor V Leiden, etc.).

A patient's baseline INR (prothrombin time) is not influenced by the known clotting tendencies (= thrombophilias), such as factor V Leiden, prothrombin 20210 mutation and deficiencies of protein C, protein S, antithrombin III, homocysteine. Researchers from a company producing the lab reagents used for prothrombin time (INR) determination (Biomerieux) are presently examining, whether a more detailed look at the prothrombin time (by wavelength analysis) can predict who is at increased tendency to clot. Other research suggests that a test called "thrombin generation potential" may also be useful to predict who is at increased risk for clotting. However, these examinations are still in the research stages.

Other research suggests that the D-dimer test (see also [Q/A 19](#)) in some situations may tell whether a patient's blood is "too thick", i.e. whether the individual is at increased risk for clotting. I sometimes use the D-dimer test for that purpose.