Wrong Interpretation of Thrombophilia Test Causing Unnecessary Treatment

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Ordering a thrombophilia test is easy. To determine whom to test and how the result is used, is not. Thrombophilia is a state of increased risk of venous thromboembolism (VTE). A 24 years old lady with no family history of thrombophilia had first vaginal delivery in 2017. The delivery was eventfully complicated with third degree tear and required surgical repair. Three weeks post-partum she developed left lower limb swelling and due to having deep vein thrombosis (DVT). Thrombophilia screening was done at that time and was normal. She was started on warfarin since then. After a year on warfarin, repeated doppler ultrasound was done. It showed persistent thrombus at previous territories. Second thrombophilia screening was done after withholding warfarin for a few days (less 2 weeks) and showed Protein C deficiency. Since then she was labelled as Protein C deficiency with recurrent DVT and was advised for life long anticoagulation. Subsequently post second delivery patient defaulted her anticoagulant for a year. Third thrombophilia screening was done and it showed normal protein C level. Thus, protein c deficiency was ruled out and warfarin was discontinued. This case illustrated that indiscriminate thrombophilia testing can lead to wrong diagnosis and subject patients to unnecessary bleeding risk from anticoagulation. A residual clot in previous DVT sites is a common finding and should not be considered as recurrent DVT in an asymptomatic patient. Protein C level can be low due to warfarin therapy, disseminated intravascular coagulopathy, chronic liver disease, etc. This can lead to false positive thrombophilia test.

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