



16th May 2011

Dear colleague

Over recent months Wellington Public Hospital has been reviewing its testing policy for Thrombophilia screening. This has been prompted by very few of the patients screened returning positive results, raising the likelihood that the right patients are not being screened. This is also supported by incomplete or inappropriate clinical details accompanying a large proportion of requests for thrombophilia screening. As a result of their review, Wellington Public Hospital has introduced a triaging process for hospital requested thrombophilia screens.

As we rely on Wellington Public Hospital for some aspects of our thrombophilia testing, and see the majority of requests in the region, it seems an appropriate time for us to also review our testing guidelines. Our review of testing patterns, current guidelines and best practice supports the findings of Wellington Public Hospital, and as a result we propose to also triage thrombophilia screen requests, by clinical indication, with a view to providing a consistent regional approach to these investigations.

During our evaluation of testing patterns, we observed that of the samples we received, only 63% had any clinical information, and that 9% were clinical situations where thrombophilia testing was not contributing to patient care. Testing has likely had a negative impact on some patients because of the lack of sensitivity and specificity of the results in many clinical settings. Rather than maintaining the widespread use of this test we have reviewed the indications for testing with thrombophilia screens and encourage its use only in appropriate clinical settings. Recent clinical guidelines for thrombophilia testing state that population screening is of little value. A history of a first-degree relative with venous thrombosis is a contra-indication to taking an oestrogen containing hormonal preparation (OC or HRT). Testing for heritable thrombophilia in this situation is also not recommended. [Baglin et al, Clinical guidelines for testing for heritable thrombophilia, British Journal Haematology 2010; 149: 209-20].

Essentially, thrombophilia testing is indicated in the conditions listed on the protocol over the page. **From 30 May 2011** all requests for thrombophilia testing must be in line with the Aotea Pathology test request protocol. Please provide the clinical indication for thrombophilia testing whenever a Thrombophilia screen is required.

Request with appropriate clinical details	Thrombophilia testing to proceed including: CBC, INR, APTT, DRVVT Antithrombin, Protein C & S, APCR Anticardiolipin antibodies, Factor V Leiden & Prothrombin gene mutation.
Request without clinical details, or clinical details that indicate thrombophilia testing would not be helpful	Specimen will be held for 14 days and a comment will be sent to the referrer inviting appropriate clinical information to be faxed to the lab. (see www.apath.co.nz)
Request with clinical details appropriate for Lupus screen testing only	Lupus screen to proceed only. This will be confirmed by a comment sent to the referring doctor. (see www.apath.co.nz)

If the request is outside the protocol and good clinical information is provided supporting thrombophilia testing, then testing will proceed. Where there is no clinical information provided, or testing is not clinically indicated, testing will be declined and referrers will be notified by way of a comment.

Thank you for your cooperation, if you have questions about the thrombophilia request protocol please contact by e-mail, either myself kwood@apath.co.nz, Dr Ken Romeril kromeril@apath.co.nz or Dr Alwyn D'Souza adsouza@apath.co.nz.

Regards

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Thrombophilia test request protocol

Implemented 30 May 2011

Clinical indications for which full thrombophilia testing will be performed are:

- Idiopathic venous thrombo-embolism in young patients (<45 years)
- Recurrent VTE
- Recurrent VTE despite adequate therapeutic anticoagulation
- VTE in context of family history of unprovoked VTE in a first degree relative.
- Thrombosis in unusual sites (e.g. cerebral, mesenteric, portal)
- VTE in association with a history of thrombophlebitis
- Warfarin-induced skin necrosis
- Stillbirth
- Pregnancy complications such as pre-eclampsia, IUGR, placental abruption or recurrent miscarriage.*

Thrombophilia screen will not be performed in the following clinical settings:

- Prior to prescription of COC in patients with a personal history of VTE †
- Prior to prescription of COC in patients with a family history of VTE †
- Arterial thrombosis (**Lupus testing is indicated in this setting**)

* There is no evidence currently to support anticoagulation in women with pregnancy complications and a positive hereditary thrombophilia. Trials are ongoing in this area. However, it is recognised that in routine practice management decisions are currently made in conjunction with thrombophilia testing.

† Current British guidelines recommend avoidance of the COC in this setting regardless of the thrombophilia results.

A comment will appear on the test report when thrombophilia testing is not performed.

For specific requests for thrombophilia testing beyond those clinical indications in the list above please consult with a haematologist at either Aotea Pathology or Wellington Public Hospital.