
Practitioner Update

1 September 2010

TNI Update

New Units for High Sensitivity Troponin I

A change has been made to the way we report our high sensitivity, cardiac specific Troponin I results.

In July 2010 we changed the reporting units from ug/L to ng/L. The effect of this change means that we now report in whole numbers. Our reference interval is now <40ng/L. All results >40ng/L will be phoned to the requesting doctor. This conversion was required by the Auckland Regional Quality Assurance Group for consistent reporting and coincided with similar changes made by all Auckland laboratories.

Please note our assay has not changed. Troponin I is cardiac specific, not myocardial ischaemia specific. Elevations in troponin usually signify acute ischaemic injury or infarction, but may also be due to a variety of mechanisms e.g. myocarditis, LVF, PE, CVA, SAH. It is not possible to reliably discriminate ischaemic from nonischaemic cause by simply raising the cut-off value. For every 100 patients with an elevated high sensitivity Troponin level, 77 will have a final diagnosis of MI.

EBV testing – CHANGES SINCE 20 August 2010

Background

Epstein Barr virus (EBV) is a gammaherpesvirus that causes a number of clinical symptoms including acute mononucleosis and post-transplant lymphoproliferative disease. It has also been linked to a number of malignancies. Most people are exposed to EBV in early adulthood. After the initial infection, the virus establishes latency in B lymphocytes.

Diagnosis of EBV infection

EBV serology is the most commonly performed test. There are two standard approaches to EBV serology:

1. Measure viral capsid antigen (VCA) IgM and IgG first, followed by EBV nuclear antigen (EBNA) IgG if VCA IgM is positive.
2. Measure EBNA first and only do VCA IgM/IgG if EBNA is negative.

In response to recommendations from external auditors, on 20th August 2010 we changed from the first approach to the second. Below are possible combinations of results and their interpretations.

EBNA IgG	VCA IgG	VCA IgM	Comment
Reactive	-	-	Consistent with past (> 6 weeks) EBV infection.
Reactive	Reactive	Non-reactive	Consistent with past (> 6 weeks) EBV infection.
Reactive	Non-reactive	Reactive	The lack of EBV VCA IgG is atypical. Please consult clinical microbiologist on 0508 LABTESTS for further information.
Reactive	Reactive	Reactive	Consistent with EBV infection at some time. IgM reactivity may persist for several months following acute infection, or may be due to nonspecific reactivity; however recent acute infection cannot be ruled out. Suggest repeat in 2 – 6 weeks.
Non-reactive	Reactive	Reactive	Consistent with probable recent acute EBV infection. Interpret in clinical context; IgM reactivity may also be non-specific, associated with EBV reactivation, or due to persistence for several months following acute infection.
Non-reactive	Reactive	Non-reactive	Consistent with fairly recent or past EBV infection. As no anti-EBNA is detectable, please repeat testing in 4 – 6 weeks.
Non-reactive	Non-reactive	Reactive	This may represent acute EBV infection. However, non-specific IgM reactivity cannot be ruled out. Suggest repeat test in 2 – 6 weeks.
Non-reactive	Non-reactive	Non-reactive	No serological evidence of past EBV infection. If result inconsistent with clinical findings, suggest repeat in 2-3 weeks.