



Marshfield Labs™

A division of Marshfield Clinic

Laboratory *News*

VOL. 33, NO. 6 - JULY 7, 2010

Lab Test Code: HEPDA

Requirements: 0.5 mL serum removed from clot.

Storage: Refrigerate up to 48 hours. Freeze for longer storage.

Rejection Criteria: Heparinized specimen or plasma.

Available: 7 days a week with 24 hour analytical time.

Reference Range: Interpretive report.

Please direct any questions or concerns regarding this test or any other laboratory tests for hemostasis to:

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Technical Director of
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715-221-6320

Or

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Medical Director
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Laboratory Testing for Heparin-Induced Thrombocytopenia

Michael J. Sanfelippo, MS, MT(ASCP)

Effective July 19, 2010 the test for heparin dependent antibody to platelet factor 4 (PF4) will be replaced with a more specific test, the PF4 IgG™ assay. The test code and specimen requirements for heparin dependent antibody, however, will remain the same.

The new PF4 IgG™ assay is more specific for the antibody that causes heparin induced thrombocytopenia (HIT) because it measures only IgG antibody. The prior assay measured IgG, IgM, and IgA class antibodies against PF4. Recent studies suggest that only the IgG antibodies cause HIT.

In the evaluation of the new PF4 IgG™ assay, 24 specimens that tested positive for PF4 antibodies with the existing assay were retested with the new PF4 IgG™ assay. Only two were positive for antibody to PF4 with the new assay; one of these was confirmed as HIT by the serotonin release assay while the other was not further tested. Only one of the other 22 specimens was confirmed as being a true case of HIT by the serotonin release assay. Repeat testing, in 24 to 48 hours, of patients with a high index of suspicion for HIT who are negative with the new assay may be advisable under some circumstances.

The use of the new PF4 IgG™ assay should significantly reduce the number of false positives that are being treated with expensive drugs such as argatroban. The serotonin release assay is still the gold standard and should be performed on all patients who are positive by PF4 IgG™. Therapeutic intervention may be appropriate until the results of the serotonin release assay are available.

Note: When ordering the serotonin release assay for confirmation, specify "serotonin release assay for HIT". Do not order a serum serotonin, as it provides no clinical value in this situation.



BEYOND numbers