



L a b o r a t o r y *News*

VOL. 36, NO. 5 - APRIL 8, 2013

Inside This Issue

A TEST FOR ANTIBODIES TO PHOSPHATIDYLSERINE PROTHROMBIN COMPLEX IS NOW AVAILABLE AT MARSHFIELD LABS1

A TEST FOR ANTIBODIES TO PHOSPHATIDYLSERINE PROTHROMBIN COMPLEX IS NOW AVAILABLE AT MARSHFIELD LABS

Michael J. Sanfelippo, MS, MT(ASCP)

Antiphospholipid syndrome (APS) is an autoimmune disorder associated with a high incidence of thrombotic disease and obstetrical complications. This condition is identified by demonstration of the persistent presence of either the lupus anticoagulant or antibodies to cardiolipin or β_2 -glycoprotein I.

Recently, antibodies to the complex of phosphatidylserine and prothrombin (aPS/PT) have been identified in patients with systemic lupus erythematosus (SLE) and well characterized APS. In order to determine if the demonstration of aPS/PT would be helpful in the identification of APS, a study was performed at Marshfield Labs. Specimens submitted for identification of antibodies to cardiolipin and β_2 -glycoprotein I that had normal levels of these antibodies were retested for antibodies to PS/PT. Over 700 specimens were tested. Forty-one (41) specimens (6%) were found to have elevated levels of antibodies to PT/PS. Nineteen of the specimens with elevated antibodies to PS/PT were from patients without accessible medical records. The other 22 specimens were from patients with histories of pulmonary emboli, deep venous thrombosis, neurologic disorders, SLE, and other autoimmune or connective tissue disorders.

While the measurement of aPS/PT will identify patients with antiphospholipid syndrome who have normal levels of antibody to cardiolipin and β_2 -glycoprotein I, the measurement of antibodies



to cardiolipin and β_2 -glycoprotein I is still the most efficient way to begin the evaluation for antiphospholipid syndrome. Testing for aPS/PT is best utilized as follow-up testing in patients without demonstrable antibodies to cardiolipin, β_2 -glycoprotein I, or the lupus anticoagulant. When the comprehensive antiphospholipid panel is negative, a comment will be included in the report suggesting consideration of aPS/PT testing.

The test used for the measurement of aPS/PT is FDA cleared and will report both IgG and IgM class antibodies. The reference range for the IgG and IgM class antibodies is 30 units or less. Patients having levels greater than 30 units for either IgG or IgM antibodies have a level of antibody that has been associated with autoimmune disease including the antiphospholipid syndrome.

The test will be performed in the special hematology department one day per week. It will be available beginning April 10, 2013. The preferred specimen for this test is serum.

For further information, please contact:
Michael J. Sanfelippo, MS, MT(ASCP)
Technical Director of Coagulation Services
Marshfield Labs
715-221-6320

REFERENCES:

1. Zigon P, et al. Clin Chem Lab Med, 2011. 49:1011-8.
2. Atsumi T, Koike T. Lupus, 2010. 19:436-39.
3. Hoxha A, et al. Lupus, 2012. 21:787-9. 