TEST ID: PSPTM
PHOSPHATIDYLSERINE / PROTHROMBIN ANTIBODY, IgM, SERUM

USEFUL FOR

- Evaluation of patients with suspected antiphospholipid syndrome
- Evaluation of patients with a strong suspicion of antiphospholipid syndrome for whom anticardiolipin/beta 2-glycoprotein I and anti-beta 2-glycoprotein I antibody testing was negative
- Evaluation of patients with evidence of a functional lupus anticoagulant
- Detection of IgM antibodies against phosphatidylserine/prothrombin

CLINICAL INFORMATION

A diagnosis of antiphospholipid syndrome (APS) is based on clinical and laboratory evaluation. The clinical manifestations associated with APS include arterial and venous thrombosis and recurrent pregnancy loss. The laboratory testing for APS focuses on assessment for autoantibodies specific for phospholipid/protein cofactor complexes. The current criteria require detection of anticardiolipin, anti-beta 2-glycoprotein I, or lupus anticoagulant (LAC) for classification of APS.

Cardiolipin is an anionic phospholipid that interacts with the protein cofactor beta 2-glycoprotein I. Anticardiolipin and anti-beta 2-glycoprotein I antibodies are detected by immunoassay using the antigen of cardiolipin/beta 2-glycoprotein I or purified beta 2-glycoprotein I, respectively. LAC is an indirect assessment for the presence of antiphospholipid antibodies, which is evident in the in vitro prolongation of phospholipid-dependent coagulation.

There is evidence to suggest that patients with APS may develop autoantibodies to other phospholipid/protein complexes, specifically phosphatidylserine/prothrombin (PS/PT). Similar to cardiolipin/ beta 2-glycoprotein I, PS/PT is a complex composed of the anionic phospholipid phosphatidylserine and the protein cofactor prothrombin. A recent systematic review has demonstrated that anti-PS/PT antibodies are a significant risk factor for arterial and venous thrombotic events, with an odds ratio of 5.11 (4.2–6.3). In addition, a separate study indicated that anti-PS/PT antibodies showed the highest correlation with LAC, compared to anticardiolipin or anti-beta 2-glycoprotein I antibodies (p=0.002). Anti-PS/PT antibodies may be a useful additional marker for evaluation of patients with suspected APS, particularly for those individuals with evidence of thrombosis or abnormal LAC testing.

MOBILE APPS FROM MAYO MEDICAL LABORATORIES

- Lab Catalog for iPad and
- Lab Reference for iPhone and iPod Touch

Requires iOS 5.1+

REFERENCE VALUES

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<th>Status</th>
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ANALYTIC TIME

Same day/1 day

CONTENT AND VALUES SUBJECT TO CHANGE. SEE THE MAYO MEDICAL LABORATORIES TEST CATALOG FOR CURRENT INFORMATION.
INTERPRETATION

A positive result is consistent with the presence of an antibody specific for the phosphatidylserine/prothrombin complex, and may be consistent with a diagnosis of antiphospholipid syndrome (APS) in patients with evidence of arterial or venous thrombosis or recurrent pregnancy loss.

A negative result is consistent with the absence of an antibody specific for the phosphatidylserine/prothrombin complex. However, this does not exclude the diagnosis of APS, as other phospholipid/protein antibodies are also associated with this disorder.

CLINICAL REFERENCE


