

Anticardiolipin

Anticardiolipin is an antibody against cardiolipin - a phospholipid found in cell membranes and platelets. Cardiolipin plays an important role in regulating blood clotting process, so when anticardiolipin antibodies are present in the blood, they may affect this process and cause forming thrombi.

Anticardiolipin antibodies (ACA) are often found with other antiphospholipid antibodies: lupus anticoagulant(LA) and anti-beta2 glycoprotein 1. All these antibodies can be detected when a person has Antiphospholipid Syndrome.

Antocardioliipin antibodies are usually associated with recurrent miscarriages, excessive clotting, thrombocytopenia and preeclampsia.

Sometimes anticardiolipin is detected temporarily in patients who receive penicillin, or patients with infections, HIV/AIDS or cancers.

Why the Anticardiolipin test is performed

The anticardiolipin test is performed:

- When a patient has thrombotic episodes or signs of excessive clotting
- If a woman has had recurrent miscarriages
- If antiphospholipid syndrome(APS) is suspected
- If a patient is diagnosed with an autoimmune disorder

Anticardiolipin test is sometimes performed along with other tests: PTT, lupus anticoagulant test, anti-beta2 glycoprotein 1.

Three classes of cardiolipin antibodies can be detected in blood: IgG, IgM and IgA, however IgA anticardiolipin test is rarely performed.

If anticardiolipin is found in the blood, the test is repeated several weeks later to determine whether the presence of antibodies was persistent or temporary.

How the test is performed and how to prepare for the test

A blood sample is drawn from a vein. No special preparation is needed.

What do the abnormal results mean?

Negative tests results mean that anticardiolipin antibodies were not detected in blood.

Low to moderate levels of anticardiolipin are usually not significant. It is important to interpret the test results in conjunction with the clinical symptoms. If the presence of anticardiolipin antibodies is not accompanied with excessive clotting or other symptoms, then APS is less likely.

If after repeated testing, anticardiolipin levels are moderate to high and if the antibodies continue to persist, it is a strong indicator of APS.

Alternative names

Anticardiolipin antibodies(ACA), aCL antibody.

Useful information

- Anticardiolipin test has high sensitivity, but low specificity.
- Very rarely, anticardiolipin test may be performed to validate a positive VDRL/RPR test for syphilis, since the presence of anticardiolipin antibodies can cause false positive syphilis test results.
- In addition to APS, there are also other conditions which are associated with presence of anticardiolipin antibodies: hepatitis C, tuberculosis, Q fever, infections, HIV/AIDS.
- Presence of IgM rheumatoid factor can cause false positive IgM anticardiolipin tests results.