Antiphospholipid Syndrome and Pregnancy

Antiphospholipid syndrome (APS) is an autoimmune disorder characterized by the presence of significant levels of Antiphospholipid antibodies and one or more clinical features, among which are recurrent pregnancy loss, fetal death, and thrombosis. APS may occur as a primary condition in women with no other recognizable autoimmune disease, or as a secondary condition in women with underlying autoimmune disease (e.g., systemic lupus erythematosus). Despite the prevalence and clinical significance of APS, there is controversy about the indication for screening for APS.

The accepted obstetric obstetrical clinical criteria for diagnosis of APS are 1) one or more unexplained deaths of a morphologically normal fetus at or beyond the 10^{th} week of gestation, 2) one or more premature births of morphologically normal neonate at or before the 34^{th} week of gestation resulting from preeclampsia, eclampsia, or placental insufficiency, or 3) three or more unexplained consecutive spontaneous abortions before the 10^{th} week of gestation. Unexplained venous or arterial thrombosis, or a small-vessel thrombosis (in the absence of inflammation of the vessel wall), are considered to be non-obstetrical clinical criteria of APS.

The initial diagnosis of APS requires testing for anticardiolipin antibodies and the lupus anticoagulant. A lupus anticoagulant is interpreted as present or absent. Anticardiolipin antibodies must be present in moderate to high (>20 GPL or >20 MPL) titers to be considered clinically significant. Positive results require a repeat test after 12 weeks to exclude a transient, clinically unimportant antibody.

The most common and serious complications associated with APS are venous and arterial thrombosis. Approximately 2% of all patients with venous thrombosis will test positive for antiphospholipid antibodies. A large portion of pregnancy losses related to antiphospholipid antibodies are second- or third-trimester fetal deaths.

Preeclampsia is associated with APS. Between 11-17% of women with preeclampsia will test positive for antiphospholipid antibodies. The association is strongest in women with severe, early onset (< 34 weeks of gestation) preeclampsia.

Fetal growth restriction (FGR) occurs in 15-30% of women with APS. The risk in greatest in women with high titers of antiphospholipid antibodies who meet strict criteria for APS. Testing should be considered after 32 weeks of gestation, or earlier, if there are signs of FGR.

Treatment of women with APS without a thrombotic event is controversial, but most experts recommend prophylactic anticoagulation with heparin and low-dose aspirin during pregnancy and up to 6-8 weeks postpartum. For women with APS who have had a thrombotic event, most experts recommend therapeutic anticoagulation during pregnancy and continued for a least 6-8 weeks postpartum.

Long-term risks for women with APS include thrombosis and stroke. For long-term management, women with APS should be referred postpartum to a physician with expertise in treatment of the syndrome. Estrogen-containing oral contraceptives appear to increase the risk for thrombosis in women with APS and should be avoided.

Key Points

- Women suspected of having APS should be tested on at least two occasions, 12 weeks apart.
- Women with APS and no thrombotic history should receive prophylactic doses of heparin and low-dose aspirin during pregnancy and the postpartum period (6-8 weeks)
- Women with APS and previous history of thrombosis should receive full anticoagulation throughout pregnancy and the postpartum period (6-8 weeks)
- Women with APS should avoid estrogen-containing oral contraceptives and have long-term follow-up.